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About Consumer and User Issues of Digital Rights Management Solutions

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The **IN**formed **DI**alogue about **C**onsumer **A**ceptability of **DRM** Solutions in **E**urope



Editorial: Mobile Music is Hot

By: Thorsten Wichmann, Berlecon, Berlin, Germany

Abstract: The first INDICARE workshop on “Business Models for Mobile Music and DRM”, took place in Berlin on September 30, 2004. There was huge interest in the event, which indicates that mobile music is currently an important topic in the industry. The workshop provided some interesting insights into the role of DRM and business model issues for the development of the mobile music market and into the understanding of consumer wants and needs by industry players.

Keywords: business models, conference report, consumer needs, mobile content, music, standards

Introduction

Mobile music is hot. We figured that out pretty fast, when we started organising the first INDICARE workshop on the topic of „Business Models for Mobile Music and DRM“. The workshop took place in Berlin on September 30, 2004 at the same time as the Popkomm music fair (Dufft 2004). Almost everybody we approached immediately agreed to come and to present his or her ideas on this topic. In the end around 70 experts from industry, academia and policy spent a whole day packed with presentations and discussions in the stimulating atmosphere of an 18th century palais in the centre of Berlin. Fitting the workshop topic, the last fierce DRM discussions ended around 4 o'clock in the morning in a well-known Berlin music club.

We have chosen this workshop topic, because mobile music is a more limited field than DRM in general. This enabled us to discuss very specific DRM and business model issues without running into the danger of simply exchanging general positions. What we wanted to know were basically two things: What is the role of business models and DRM for the development of a mobile music market? And second, what does the industry know about consumer wants and needs and how do the players involved treat these?

The workshop was organized in four sections focusing on “mobile music standards and DRM”, “content protection beyond technology”, “mobile operator strategies”, as well as “chances and challenges for the music indus-

try”. The following selection of issues raised and insights gained is a rather personal “best-of” list. Depending on personal background and professional role, each participant took home a different set of insights.

Mobile Music Standards and DRM

The first block of presentations discussed the role of standards for the development of the mobile music market. As in most emerging technology markets, several open and proprietary standards compete in the field of mobile music distribution. Things are even more complicated here than in other markets because different technologies overlap: there are competing operating systems for mobile devices, competing standards for DRM systems, and even competing standards for such simple music formats as ringtones. This situation was generally seen as an obstacle to market development. It raises costs – somebody has to transform each piece of digital music into all the different formats necessary – and it slows down investment – nobody wants to invest in a DRM system that might not survive the standards competition.

Although it is well understood that this current situation is not satisfactory, it might not improve soon. Quite on the contrary, it was pointed out, there might be further trouble ahead: There exists the threat of lengthy intellectual property disputes involving the rights expression language chosen by the Open Mobile Alliance, since the company ContentGuard claims to have rather broad patents on rights expression languages in general. As one participant put it, this might be “a bomb waiting for an explosion”.

If the industry is unable to solve these issues, one discussant pointed out, the outcome might be that consumers decide to stick with MP3 and other unprotected formats for digital music. As mobile devices become more powerful, and as it becomes easier to transfer music from a PC onto a mobile phone or between mobile phones, consumers are able to obtain many of the benefits of mobile music consumption without the help of mobile operators. While there was much debate on this conclusion, it was not generally rejected as being unrealistic.

Content protection beyond technology

The second block of presentations dealt with legal and economic aspects of content protection. One very basic question turned up at the workshop: Where should the line between illegal and legal activities be drawn and who should be able to draw it? Obviously, there are different approaches to answer this question. One approach is to discuss the issues in principle. For example, one position, often heard in the public discussion on DRM and also presented at the workshop, is that copyright owners should be able to draw this line wherever they want to draw it. After all, so the argument, intellectual property should be treated just like any other form of property. There do exist a variety of equally fundamental arguments against this position, and these are exchanged intensively in the public discussion on DRM. However, in the end it is very difficult to reconcile the opposing world views behind the different positions.

Luckily, much of the industry already seems to be beyond this fundamental discussion. At least this was an impression from the INDICARE workshop as well as from discussions on the Popkomm, where a pragmatic view prevailed. This pragmatic view is to a large extent a business view: On the one hand, there has to be some form of protection, otherwise there is no viable business model, but on the other hand the protection does not have to be perfect for a business model to be viable. One presenter pointed out Apple's Fairplay DRM as a good example for such a design: The line between disabled and allowed activities is the line between scalable and non-scalable copying. Copying that does

not scale, such as making copies on a limited number of machines or burning playlists to a limited number of CD-ROMs is OK, but sharing files with an unlimited number of other users is not.

This pragmatic view goes along with a blurring of the lines between commercial distribution of digital music and P2P networks. Some presentations at the workshop showed elements of P2P networks moving into commercial music distribution. For example, a restricted form of music sharing among peers forms the basis for the concept of superdistribution, where mobile phone users can transfer music files from phone to phone, can listen to them a few times but then have to purchase the right for unlimited usage. Another P2P element in commercial services can be personal playlists or a restricted access to the digital music collected by friends. Such P2P elements help users to discover new artists and may be a rather efficient recommender system. In such services DRM systems are understood as enablers of new service offers, not any more as "Digital Restriction Management".

Mobile Operator Strategies

In the third block of the workshop, mobile operators from Europe presented their mobile music strategies. Of all industry players, mobile operators are probably those mostly concerned with consumer preferences, although more in the sense of Hayek's "competition as a discovery procedure". Since they have spent billions on 3G licenses, mobile operators are under strong pressure to offer additional valuable services to consumers that provide additional revenue streams. Mobile music is seen as one of these.

Consequently, operators have spent quite some effort on understanding the wants and needs of consumers to get it right this time – after a disappointing success record of WAP, MMS and a variety of mobile content ventures. One could probably say that mobile operators understand digital content distribution much better than they did a couple of years ago.

One belief coming from this research and shared by most workshop participants is the

necessity to enable transferability of digital music. It is generally assumed that buyers of mobile music want music to be transferable between different devices, not only mobile devices (including future generations), but also including home and car stereos, for example. Obviously this has significant implications for DRM systems: It requires that DRM systems work across different types of devices and be in some way upward compatible. Establishing such systems will be difficult and will also pose a variety of challenges for competition policy.

Chances and challenges for the music industry

The final session discussed mobile music from the point of view of the music industry. The presentations showed that mobile music is much more than simply selling digital music files.

One presenter showed that mobile music can also be used as an additional marketing instrument. For example, by making available new songs as mobile music downloads right before the release of new records, mobile music can help to create additional buzz and push songs quicker and higher into the charts, which in turn leads to additional purchases.

Another presenter showed that the mobile phone can also be used for streaming music. Such streaming services pose fewer problems in terms of copy protection, and they might be an interesting alternative to mobile music downloads. This newly launched service also coincided with a variety of new streaming services announced at the Popkomm music fair. It may well be the case that the success of iTunes and everybody's familiarity with downloading digital content have made people to overlook the opportunities of streaming music onto a mobile device.

Bottom line

Overall, my general impression of the workshop discussions was that of an industry that tries hard to understand what type of mobile music products and services consumers want. While the success is far from guaranteed, business models and understanding of consumer behaviour seem to be much better than

in the mobile euphoria era around the year 2000.

However, in addition to understanding consumers' demand for mobile music, there do exist a variety of challenges involving DRM issues as well as consumer acceptance of DRM. Missing standards, intellectual property issues and the task of creating device-independent DRM systems are only some of these challenges. What this workshop showed, however, was that most of these DRM issues can be analysed and discussed in a pragmatic way without too much ideological ballast. This is in stark contrast to the fundamentalism often found in other public DRM discussions.

My conclusion would be that workshops like this one, where participants from an industry can meet on neutral ground to exchange their views and to learn from each other, are a good tool to come to a common understanding about crucial DRM-related issues. It probably helped much that the topic of the workshop was rather specific.

About this issue

As the INIDICARE workshop has shown, digital music distribution is intensely discussed by the representatives of industry, policy and academia alike. Therefore the INIDICARE Monitor Vol 1, No 5 is dedicated to digital music as an important issue within the DRM debate. In order to raise 'hot discussions' as well, the articles are dealing with digital music distribution not only scientifically but also historically and personally.

Starting with an article on "Net Music the Danish way", where Kurt Westh Nielsen from the magazine *Ingeniøren* describes the choice of DRM protection the Danish project Netmusik made as well as the implications this choice had for users. The Danish case of Net Music shows well the different interests of players within the process of implementing DRM. Marc Fetscherin from UC Berkeley and Cristina Vlietstra from the University of Bern present the results from an empirical analysis on the relationship between different usage rights and prices for online music.

Based on personal experiences with digital music Ulrich Riehm, ITAS, describes his

attempts to find the music of Greg Koch online. More optimistic are in contrary the results of the Popcomm music fair in Berlin. Nicole Dufft, Berlecon, who organized the first INDICARE workshop, also spent quite some time on the Popkomm and summarizes her insights.

Natali Helberger from the University of Amsterdam, IViR makes one thing clear about the “right” to make private copies of digital products: It’s not a right, silly! Michael Rader, ITAS, continues this topic and asks “What is ever a right?”. He has examined record labels from the last decades for information about the rights granted to consumers.

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Net Music the Danish way: Locked down and easily cracked

By: Kurt Westh Nielsen, Ingeniøren, Copenhagen, Denmark

Abstract: The ambitious Danish project Netmusik, which intends to make music available online for users of public Danish Libraries was launched September on 1st, 2004. However a week after the launch it was discovered, that the Digital Rights Management system could easily be circumvented. More importantly in the wake of that breach both the Danish Consumer Council and politicians expressed concerns regarding the chosen technical solution. It was criticised for being biased and leaving consumers with no choice.

Keywords: audio format, consumer, Denmark, infringement, interoperability, library, music, musician

Introduction

The Netmusik project launched September 1st 2004 by the public libraries in Denmark is financed by the Danish Ministry of Culture with approx. 4 million Danish kroner (550.000 Euro). The intention of the project is to make a large part of mostly Danish music freely available to citizens by launching an internet portal called Bibliotekernes Netmusik (Net Music of the Libraries). From the

Last but not least Frederick J. Friend, consultant for the Joint Information Systems Committee (JISC) and OSI (Open Society Institute), UK, comes to the interesting conclusion that open access publication, e.g. freely available academic content on the web, needs DRM to protect the interests of the authors. Related to this subject, Ulrich Riehm, ITAS, reviews the DRM study by Intrallect on behalf of the JISC, which analyses DRM needs of the educational system in the UK.

start most local libraries participated in the project making some 35.000 music tracks available for public download. The collection of tracks primarily contains popular Danish music but also includes classical music as well as foreign artists. The selection available reflects what could be negotiated as downloadable with the involved record companies. It is expected, that during its trial phase of two years the project will cover all

public libraries as well as the selection of music will increase. Access to the system allows users to download music that can be played on one computer for a limited period of 24 hours or one week. The system is based on download quotas allowing the local public library to set up individual quotas for its users (see Bisbjerg 2004, and the Netmusik website).

The musical content is based on a digitalisation project previously carried out by Statsbiblioteket i Århus (State Library of Århus) where most of the music published since 1982 in Denmark was digitally stored retaining full quality. Close to 400.000 tracks were stored and a portion of the tracks consequently used in the Netmusik system.

The project team behind Netmusik consists of two parties: Statsbiblioteket in Århus, who designed the user interface and implemented the access control, that makes the system available for citizens through the public libraries who participate; the other party is Phonofile a consortium of record companies and owners of the rights to the music, who reused an existing system for sale of online music and its digital rights management system in the Netmusik solution. The Danish minister of Culture, Brian Mikkelsen, in a press release at the launch, characterized the project as an ambitious effort to legally and freely make music available online for citizens. However the launch of the system was not to be without its troubles.

Breaking the copy protection

A week after the introduction of the system it became apparent that the copy protection scheme behind Netmusik was not immune to circumvention. The project team had themselves described the DRM system as the "most secure in the world" making use of the Microsoft sound format WMA implementing DRM key-based protection, that locks a downloaded tune to the target PC, where the time limit and PC identification and verification is obtained by an online exchange of security keys the first time a track is to be played. Though this system relied on and required users to access the music through a combination of the Windows operating system and the Windows Media Player it was

possible to access the music with a combination of another media player Winamp and a special plug-in obtained through the internet. This allowed for saving the musical content in an unprotected sound file.

The technical solution chosen is in contrast to an online sale system which has been on the market for a year in Denmark. It is also originates from Phonofile. Here users are able to download mp3-files which are digitally watermarked making illegal copies traceable. However this solution was not chosen for Netmusik, presumably because the time limitation for listening to the tracks in Netmusik was a vital feature that could only be implemented with a DRM enabled system.

The news of this security breach caused surprised reactions from the project team behind Netmusik. Said Jens Thorhauge, director of the Danish Library Department under the Ministry of Culture: "That's really disappointing to hear. It has never been an item of debate that the music industry was to deliver the secure solution. We have not had any influence on the choice of the protection scheme. The music industry demanded that the distribution should take place using Microsoft's copy protection. As far as I understand that decision has been taken by major multinational record companies"(Nielsen 2004a).

The reaction from Phonofile, representing the music industry, was brief. Simon Munch-Andersen, head of IT operations commented: "It surprises me that it can be done. Windows WMA is the most secure format and I have never heard of this before. But it doesn't really make any impression on me, we're just using technology approved by the record companies" (Nielsen 2004a).

Meanwhile a Danish grass roots organisation advocating strongly against the use of copy protection, Piratgruppen.org, issued a detailed explanation on their website to be used by anybody wanting to circumvent the copy protection. One of the driving forces behind the Netmusik project, section leader Ole Bisbjerg, Statsbiblioteket I Århus, stressed that the circumvention of the protection was be considered as an illegal action infringing

the Danish copyright legislation. He also stated, that the techniques involved would not be possible for the ordinary user (Nielsen 2004b).

Still, the breaking of the copy protection did not lead to any swift changes in the protection scheme nor did it result in closing down the system. But the use of a proprietary DRM solution was to meet criticism from other sides.

The limitation of choice for costumers

The Danish Consumer Council, Forbrugerstyrelsen, commented the proprietary nature of the Netmusik project in a very direct way, stating that choice of Microsoft technology was a serious impediment of the free choice for costumers and citizens. Said Grit Munk of the Danish Consumer Council:

“It is an obvious problem, that the Netmusik solution demands the use of a particular operating system and media player software. Public libraries serve the population as a very important point of access to culture. Consequently libraries have at least the same obligation as other public bodies to deliver solutions that don’t require particular software or operating systems of the users” (Nielsen 2004b).

Member of the Danish Parliament, Morten Helveg Petersen of the centre party Det Radikale Venstre stated his intent to confront the Minister of Culture, Brian Mikkelsen, from the right wing party Venstre with the content of the publicly funded Netmusik project: “Publicly funded information technology projects must contain freedom of choice, so citizens are not forced into a specific software solution” (Nielsen 2004b).

EU demands for open standards

Presently the EU Commission is trying to develop a European policy on DRM. The work is taking place in the “High Level Group on DRM”, a working group consisting of participants mainly from the European consumer electronics sector but also joined by BEUC, the European Consumer Union

(regarding the BEUC position see Böhle 2004, Kutterer 2004). In contrast to the Danish project, the preliminary recommendations from the working group advocate the development of open standards for DRM solutions. A work that should ideally be left to international standardisation bodies, the working group stresses in a recent report (High Level Group on DRM 2004, see also Orwat 2004).

Bottom line

The Danish project Netmusik exemplifies the present challenges involved in moving musical content online while maintaining a proper balance between the users’ right to consume music and respecting the rights of the owner of the artistic work. The technical solution chosen by the participants in the project was a given fact. The solution was insisted on by the international music industry, the participants confirm. However the practical evolution of the project has clearly revealed that the technical implementation does not work. It has flaws that make undesired copying possible. Additionally, and more important, it imposes a series of demands and restrictions for the legal users. They are tied to playing the music on a single computer; they are forced to use a specific operating system and media player software. Users that for various reasons don’t adhere to the technical requirements are left out in the cold. The use of proprietary technology is also in conflict with guidelines issued for information technology projects by the Danish Ministry of Science Technology and Innovation, as the independent think tank Cedi confirms (Nielsen 2004b). Furthermore the model for compensating the artists economically is tied to the number of downloads. Popular artists receive compensation based on use whereas artists whose work is not being downloaded are not compensated. Though this may sound fair, it leads to a partial departure from earlier practices where public libraries also invested in cultural items that were not of popular but of cultural significance.

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DRM and music: How do rights affect the download price?

By: Marc Fetscherin, University of California (UC) Berkeley, United States; Cristina Vlietstra, University of Bern, Switzerland

Abstract: The aim of this article is to better understand the business models of online music providers by specifically focusing on the factors determining the download price for music and the role of rights in the price determination. For that purpose an empirical study was conducted. The results show that there is a huge price range for music downloads. Furthermore, the authors developed a regression model which can explain 88% of the download price. The study also shows that the downloading price is not only impacted by user rights such as the right to copy, burn and move to portable players, but also by other factors, such as the market segment of consumers in terms of geographical location or the music label of the song. Finally, the article provides possible indications for the success of iTunes, the most known and successful music provider so far.

Keywords: business model, consumer, copyright, online music market, survey

Introduction

From a consumer's perspective the price of a product is one of the key buying factors. This is also true for music downloads. However, it seems that another important one might be what a consumer can do with the song once

acquired. In that respect, an empirical study was conducted taking into account the 19 best known and widely used music providers. The authors evaluated their business models with a focus on the price per download and the user rights granted to the download. In

order to gather empirical data, the authors took the Top 20 World Charts and gathered various data for each song at each music provider's site. In total, there were more than 3400 data points collected and analysed in this study (19 music providers x 20 songs x 9 data points per song).

Huge Price Differences

Table 1 illustrates the different prices demanded by the different music providers.

Title	min	max
Amazing	0.99	3.57
Behind Blue Eyes	0.79	2.67
F**k It (I Don't Want You Back)	0.79	2.99
Hey Mama	0.79	2.67
Hey Yal	0.99	2.99
I'm Still In Love With You	0.79	2.67
It's My Life	0.79	2.67
Just A Little While	0.99	2.67
Left Outside Alone	0.99	3.57
My Immortal n/a n/a Not In Love	0.99	2.67
Red Blooded Woman	0.99	2.67
Shu Up	0.99	2.67
Slow Jamz	0.99	0.99
Superstar	0.99	2.67
The Way You Move	0.99	2.99
This Love	0.79	1.04
Toxic	0.79	2.99
Turn Me On	0.99	2.63
Yeah!	2.38	2.99

Table 1: Price differences of the Top 20 of the World Charts between 19 online music provider (US-Dollars)

Table 1 outlines for each of the 20 songs the minimum and maximum price demanded by the various music providers. This study does not take into account the download price in the case of a subscription or the download price in the case of pre-payment.

In the first column of Table 1 is the name of the song, where column two shows the minimum and column three the maximum price demanded by one of the music providers. Taking the example of the song "Red Blooded Woman" by Kylie Minogue: The song was available from 75% of all music providers analysed. It can be observed that the price ranges from USD 0.99 cents at iTunes and MusicMatch to USD 2.67 at Freeserve and HMV. The price difference

between the cheapest and the most expensive is almost three times as high (i.e., 260%). There are even some music providers which did not offer this song as a download at the time the study was conducted. Examples of this are the music providers Bymusic, Liquid, MSN, Skynet, and Virgin.

Impact of Rights on Download Price

One of the main arguments the music industry uses is that download prices depend on the rights granted to the consumer. User rights are most of the time controlled and executed by so called Digital Rights Management Systems (DRMS) which not only control the access to digital music, but also its usage. In order to achieve their goals, they employ a variety of technologies such as password, encryption, watermarking and digital fingerprint. DRMS not only define which rights are granted to a consumer for a specific digital content, but also the limitation to these rights. In that respect, we collected the artist's name, the title of song, the label, the download price as well as the rights granted to the song and its limitations.

Through multiple regression analysis, the authors developed a model which explains 88% of the download price (R-Square 0.885) and shows that the rights granted to the consumer, such as the right to burn the song onto a CD or the right to move the song to a portable player, have an impact on the download price. On average, a music download from a US music provider costs 70 cents, giving the user the right of unlimited playing. A music download costs 15 cents more if the unlimited right to burn the song onto a CD is given to the consumer. Furthermore, the right to move the song an unlimited number of times to a portable player is valued at 24 cents on average per download.

However, the study also shows that there are other factors which explain the downloading price such as the market segment served in terms of geographical location. European music providers are on average USD 1.60 per song more expensive than their American counterparts. Furthermore, the study shows that the music label also plays a significant role in determining the download price. For example, songs from BMG and Sony are 12

cents, respectively 40 cents on average more expensive than those from Universal. Finally, the study shows that on average iTunes is one of the music providers restricting the consumer the least in terms of copying, moving and burning songs.

Conclusion

The aim of this article was to look at the business models of the various music providers with a special emphasis on the prices and the user rights of music downloads. The provided results are based on an extensive data set, taking into account 19 of the biggest and best known music providers, 20 Top world charts, 9 data points for each song resulting in total of more than 3400 data points. Our results have shown that the price range demanded is huge between the various music providers where some are between three and nearly four time more expensive than their competitors. Through multiple regression analysis the authors developed a model which explains 88% of the download price. They have shown that the download price is not only impacted by user rights, but said

price is also influenced by other factors such as the market segment served or the label of the song.

Bottom line

Consumers have various methods and channels through which to access digital music. They can either illegally download music from peer-to-peer networks or legally access music through legal music providers. This article has shown that there might be possible explanations why consumers seem to prefer iTunes music store over other legal music websites. iTunes not only demands the lowest price per download on average but also least restricts the consumer. Thus price and user rights seem to be key buying factors for consumers. Or would you subscribe or revisit a music provider's website which demands a higher price than its competitors and restricts you more in the usage than other music providers? However, further analyses are required in order to better understand consumer purchasing behaviour for digital content such as music.

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In search of Greg Koch. A hands-on iTunes experience

By: Ulrich Riehm, ITAS, Karlsruhe, Germany

Abstract: This is a personal exploration of the online music service iTunes and some of its digital and tangible competitors. It deals mainly with the up-to-dateness and variety of products offered, in principal one of the key benefits of online music stores. The conclusion is, that iTunes is not as good as it could or should be, and in this case the surprising winner is a local branch of a big German media chain. These results are based on personal experiences. But a comprehensive test, done by German consumer journal "Test", confirmed them quite well.

Keywords: consumer, file sharing, Germany, music, online music market, P2P network

This is a story about Greg Koch

You don't know him? Nor did I, until a hot evening at the end of July this year, when I was driving my car from the office back home. Thanks to German public broadcast I listened to one of the rare programmes not only playing music, but also introducing music in an informative and critical manner. This programme, called "Blues Live", offered its audience a live recording of a concert by the versatile, US-American musician and guitar player Greg Koch. Sounds very good, what a intensive feeling, what a weeping guitar, what a sweeping drive. Maybe it's music for the 50-something, persons who know from their youth the Almond Brothers, Johnny Winter and, last but not least, Jimi Hendrix.

This is a story about iTunes too

The iTunes service came to Germany on 15 June 2004. The hype about its excellent service and new horizons for legal music downloading was amazing (see Dufft 2004). I'm at an age where I have lost most of my hair and I feel no longer so enthusiastic about every new technology coming to the market. I have seen too many flops. But I'm still enquiring and curious. So I became member of iTunes in Germany. In fact I've paid money to Apple for music I'm interested in, burnt CDs, shared the music with colleagues and had some good and some bad experiences.

Looking for Greg Koch at iTunes and other online music stores

After listening to Greg Koch on the car radio I wanted to hear more of his music. So I

started my iTunes software, linked to the German iTunes store, and searched for "Koch" – and got 155 tunes. But looking somewhat closer at this list, there was no "Greg", but "Fred" (children's songs), "Jil" (easy listening), "Lisa" (jazzy pop), and "Thomas" (German Schlager), and above all "Der Hölle Rache kocht in meinem Herzen" (The revenge of hell boils in my heart) an aria from Mozart's opera "Zauberflöte". Nice to hear, but at that time in July I wasn't in the mood for all this stuff.

But I've learned not to give up immediately. So I turned my mouse from the German to the American iTunes store, searched again for "Greg", and I really found two of his most recent albums "The Grip" and "Radio Free Gristle". Really enjoyable music, I thought, after hearing some of the 30 sec samples. Let's buy some of them. The answer was as follows:



(Besides the strange German the meaning of this message in English could be: "Invalid store. You are registered with an account, which is not valid for use of the US store. With this account you can only buy in the music store for German music.")

Only German music? Is it forbidden to buy in the USA? Hey, I thought we are living in the 21st century, in the era of globalisation and

not in the 18th century with sectionalism, we call it “Kleinstaaterei”.

To heck with Apple, there are competitors. Let’s try there. I must admit, that at that moment, I didn’t know where to go. (“It’s just a mouse-click away”, I heard a little demon singing). What are the names and the addresses of those online competitors? Hm. Google didn’t help me, but I remembered a famous music portal from former times: mp3.com. Yes they are still alive, provided a little informative textual entry on Greg Koch, a list of his key albums, and their availability for download. That was what I was looking for. Mp3.com showed me, that Greg’s tunes are available at iTunes USA, and from RealPlayer (downloads) and RealPlayer-Rhapsody (streaming). Why not go to RealPlayer? Same sectionalism: “Currently, we are only able to offer RealRhapsody to customers within the US”.

There is a life outside the Internet

It was getting Autumn. The leaves were falling and I still missed Greg Koch. Forget downloading and try to get a tangible CD, I thought. At German Amazon they offered four albums. But every time I want to order an item at Amazon, I don’t know my password. So I remembered, there is a life outside the Internet. A friend of mine told me that in his town, there is a really good CD store, with a huge rock, blues, and jazz department. I phoned them, and the answer was disappointing. No Greg Koch, but they can order it for me. Next day I had some business in my home town. We had a really good media ware house with an excellent CD department and competent salesmen. But they went bankrupt some years ago. So I was not very optimistic when I entered the branch of one of the big electronic media chains in Germany. I headed directly for the information desk. What a surprise! The salesman looked in his computer and told me, there must be two albums from Greg Koch. OK, he found one of them, and I bought it. Good end to a long story, isn’t it?

Please forgive me music industry, I also tiptoed to the dark side of the Internet

Some days ago we had an INDICARE meeting. The younger colleagues argued, that you

can not discuss DRM and copyright issues in the age of digital media if you have never used a P2P network. I had to confess, that I never had done this precarious thing. I have to try it. But how to do this? And what happens, if I install such illegal (?) software on my office computer? Would I risk losing my job or going to jail? So one morning I visited a good friend of mine, took an espresso and a croissant for breakfast and searched one of the P2P networks for Greg Koch. Yes we found “Heute ein König” by Hans-Uwe Koch, we got Tim Koch, and some titles, which sound similar to tunes from Greg Koch’s albums. But after 45 Minutes we gave up.

Is the whole story only of anecdotal relevance?

This is a very personal story. I have not done a systematic and scientific exploration on the up-to-dateness and comprehensiveness of iTunes offers. Such a systematic test has been undertaken by the German consumer journal “Test”. They support my results: From a pool of 100 current music titles, they only found 47 at iTunes (Test 2004).

Bottom line

Although usage of iTunes isn’t as self evident as some tell us, all in all, iTunes give you the feeling, that you can become familiar with it. But user friendliness is only an essential not a sufficient condition. There are two typical benefits of legal online music stores in comparison to street stores: The offerings could be more up-to-date, because some stages of the production process are no more necessary (like pressing the CD, doing printing work). The offerings could be more complete and more comprehensive, because there are no real space limits.

This opinion article presented a single story in which these expectations were frustrated. Is this the case, user friendliness alone will not bring this service to a success. Consumers have a lot of other choices. They can use P2P-networks - this is not in every case a successful and convenient way -, they can use CD stores on the Internet, mail order or street stores. The new online distribution channels will only win with better service and content.

p.s. At the end of September iTunes Germany added to its assortment two albums by Greg Koch. Yes, now you can buy "The Grip" (not the album for €9,99 but the 17 tunes each for €0,99) and "Radio Free Gristle" (the whole album for €9,99 and the 27

tunes each for €0,99 - some last only a few seconds). But it's too late. I have made my choice. And for those who interested in Greg's music: He offers on his web site some free goodies like Jimi Hendrix's "Red House".

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The music came to Berlin: Popkomm 2004

By: Nicole Dufft, Berlecon, Berlin, Germany

Abstract: The Popkomm music fair took place in Berlin this year from September 29 to October 1. In previous years, the ailing music industry had used the Popkomm to whine about decreasing music sales and to blame Internet piracy for its bad health. Which direction did the discussion about consumer's acceptance of DRM, standardization, privacy concerns or DRM-related legal developments take at this year's Popkomm? This article gives a summary of the discussions.

Keywords: conference report, consumer, legal aspects, music industry, privacy, standard

Introduction

From September 29 to October 1 2004 the music came to Berlin: "Popkomm", an international music fair and congress, which had formerly taken place in Cologne, opened its doors in Berlin to 663 exhibitors and more than 1.600 participating companies from 41 countries. For 16 years now, Popkomm has been an important meeting point for the music industry. In previous years, the ailing music industry had used the Popkomm to whine about decreasing music sales and to blame Internet piracy for its bad health.

This year, Gerd Gebhard, chairman of the German Phonographic Association, announced that the worst is over for the music

industry: sales of music DVDs continue to grow, sales of online music services are on the rise, sales of ring tones are mounting, and overall music sales are decreasing at a slower pace than over the last three years (Gebhard 2004). And what about piracy? Which role did the discussion about copyright infringements, DRM and the consumers' acceptance of DRM play at this year's Popkomm?

DRM was an important topic in several ways: DRM was present wherever the digitisation of music was at the agenda – and this was very often the case in the booths of the exhibition hall as well as on the congress. In addition, two of the 42 panels of the Popkomm congress explicitly dealt with DRM and consumer acceptance of DRM. And last

but not least, the reform of German copyright law, and with it “the right to private copying”, was intensely discussed during the Popkomm congress.

DRM acceptance: “No consumer wants a DRM”

Keynote speaker of the congress was Eddie Cue, Apple’s Vice President Applications. He claimed that iTunes is so successful, because it was designed from a consumer’s perspective. He regards seamless integration and good user experience as the key reasons for iTunes’ success, because they allow iTunes to effectively compete with Internet piracy. “iTunes offers better user experience than Kazaa” said Cue.

According to Cue, the consumer’s perspective on DRM is very simple: “No consumer wants a DRM,” he stated. “Most people are honest, if you give them a great product”. Apple’s official approach to the problem of digital piracy is to give consumers good products they are willing to buy. However, as we all know, the result is not that Apple doesn’t make use of DRM systems. Rather, Apple doesn’t talk about DRM as much as others. They call it “Personal User Rights”. And, as Alex Luke, Director of Music Programming and Label Relations at Apple, added, “consumers shouldn’t recognize that a DRM system is working in the background”.

DRM standards: private party or open house?

On the panel “DRM: private party or open house? Proprietary systems vs. open standards” the importance of DRM standardisation was discussed. Pierre Emmanuel Struyven, Senior Vice President at Universal Mobile International, stressed that the lack of standardisation in DRM systems implies higher costs for content distributors, because it makes encoding in many different formats necessary. Opinions differed, though, about how to achieve better standardisation. While Willms Buhse, Vice Chair of the Open Mobile Alliance, sees open DRM standards as the ways and also as an absolute necessity to enable innovative content services such as superdistribution, Cyrill Glockner, Senior Business Manager at Microsoft, believes that

proprietary systems should form the basis of DRM systems. In his ideal world, different proprietary DRM systems should be able to talk to each other to enable interoperability and ease of use for consumers.

The issue of using DRM for CRM (Customer Relationship Management) was raised from the audience. It was stated that for the first time, DRM enables the music industry to get to know their customers and their usage behaviour in detail, without spending significant sums on market research. However, it was pointed out that this could raise significant privacy concerns for consumers. Therefore, DRM issues should strictly be separated from CRM issues to not further weaken customer acceptance of DRM.

DRM acceptance: Control phobia vs. megalomania?

The panel “Hot potato rights management – control phobia vs. megalomania?” explicitly discussed how far consumers accept DRM systems. It became clear that DRM needs to impose as few restrictions as possible in order to be accepted by consumers. However, simple watermarking techniques, which allow the tracking of content files back to the original user, cannot replace far-reaching DRM solutions the panellists from Microsoft, Musicnet and Apple agreed. Most large content providers would not accept such solutions to protect their content. Only some smaller, independent labels would be willing to rely solely on watermarking or fingerprinting for their digital music offerings.

All panellists agreed, though, that DRM is not only about copy protection, encryption and usage tracking. Rather DRM should be used as a new marketing tool, to offer new features, new products, and invent new ways to offer content.

A basket full of questions: The new copyright law

On the panel „A basket full of questions: The new copyright law – politics and music biz in harmony?” politicians from all larger political parties in Germany discussed the recently published draft of the second basket of the German copyright law. Special focus was given to the question of private copying. The

new law intends to allow private copying, given that copies are not made from illegal sources and that the copied content is not copy-protected by technology.

The representatives of the SPD (Social Democratic Party), Dirk Manzewski, and of the FDP (Free Democratic Party), Hans-Joachim Otto, supported the recent draft and the private copying exemption. The representative of the Green party, Jerzy Montag, even regarded private copying as a consumers' "right" that needs to be protected against technical limitations. On the contrary, the representative of the CDU (Christian Democratic Party), Günter Krings, stated that consumers do not have a right to private copying and that the law needs further modifications in order to fully respect the interests of copyright holders. In his view, there even needs to be an obligation for ISPs to make personal data of clients accessible to copyright holders, to enable prosecution of copyright infringements under civil law.

However, Germany's economics minister, Wolfgang Clement already stated in his opening speech that meeting their clients in the courtroom would not really help the recording industry. Rather the industry has to understand that new technologies are changing the usage behaviour of consumers and has to pick up consumers from there. Accordingly, copyright law has to respect not only the interests of the music industry, but also those of consumers and technology manufacturers (Bundesministerium für Arbeit und Wirtschaft 2004).

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Bottom line

Popkomm showed once again: The music business is not only about music anymore. In the digital world, technology is playing an ever increasing role for the creative and cultural "industries". Accordingly, technology providers were more present at this year's music fair than in previous years. Downloading platforms, music search engines, ringtone providers and particularly various mobile technology providers did not only have a strong presence in the exhibition hall. They also dominated the discussions and panels of the Popkomm congress.

In parallel to this trend towards an ever increasing role of technology, a rather pragmatic view of DRM and content protection could be found in presentations and discussions. This view, which puts the consumers and their wants back into focus, was in striking contrast to the strongly expressed positions characterising many previous discussions about DRM. It seems that many technology and music firms have accepted that consumers want to buy good, integrated music products and services that respect new usage habits resulting from the digitisation of music. And only if technology providers and the music industry work together to fulfil these expectations, will the future of the music industry look bright again.

As Germany's economics minister Wolfgang Clement stated: "I ask the music industry to win back music lovers, by offering an attractive and broad range of legal products to them!"

It's not a right, silly! The private copying exception in practice

By: Natali Helberger, IViR, University of Amsterdam, The Netherlands

Abstract: Not all consumers are willing to accept DRMs. This article tells the story of two consumers who were not, and who went before the courts to claim what they thought was their good right - the "right to private copying". It tells the story of their cruel awakening, and why it had to come like this.

Keywords: private copy, court decision, Copyright Directive, France, Belgium

The case of Stéphane P.

Mr Stéphane P. in France bought the DVD of Mulholland Drive. As he realized later, it was a purchase with consequences. Mr. Stéphane P. was about to make a copy of the DVD for his personal use, perhaps he wished to copy the DVD on to his computer hard-drive so that he could watch the film the next time he was on the train. But then, suddenly, he realized that this time the copying did not work. What he did not know when he bought the DVD was that it was electronically protected against copying. He could not have known either – the fact that electronic copy protection was employed was not mentioned anywhere on the DVD.

Mr. Stéphane P was annoyed. Understandably, one may add. In fact, he was so annoyed that he decided to sue both the production companies and the distributor in France. He found an ally in the French consumer organization L'Union fédérale des consommateurs "Que Choisir" (UFC). Together, they started proceedings before the Tribunal de grande instance de Paris 3ème chambre (Tribunal Paris 2004). The plaintiffs claimed, among others, a violation of Mr. Stéphane P.'s "right to personal copy" under the French copyright act. In addition, they also claimed that according to French consumer protection law there was a duty for the seller of the product to inform the consumer about the substantial characteristics of a product.

The court's decision

The court was not impressed. It took one sentence to correct an error that Stéphane P., and, together with him, probably the majority

of consumers had maintained all these years: there is no right to personal copying. The personal copying exception in French copyright law, so the court says, has not the quality of a "right". Instead, the personal copying exception describes the (exceptional) case that consumers who want to make a copy for personal use are not obliged to acquire the rightsholder's permission before doing so. The court went further and argued that nothing different could apply once France had implemented the European Copyright Directive. The Directive left it to member states whether they would provide for a personal copying exception. But even if France decided to do so, the personal copying exception must, according to the Directive, not conflict with the normal exploitation of a work or unreasonably prejudice the legitimate interests of rightsholders. The court then decided that the selling of copies of DVDs was a case of normal exploitation, and rightsholders had a legitimate interest to recoup the investments made. Voila. But it got even worse. Not content to reject the claim, the court ordered Stéphane P. and UFC to pay damages of 9,000 Euro to the defendants.

The case of Michel D.

A decision in Belgium before the Tribunal de Première Instance de Bruxelles went in a similar direction (Tribunal Bruxelles 2004). This time, it was Michel D. who bought a CD that could not be copied, again because electronic copy protection was in place. And similar to the court in France, the Belgian court concluded that the personal copying exception is not a right that can be invoked

by consumers. Instead, the court called the personal copying exception a "legally granted immunity against prosecution". From the perspective of the consumers, the most significant difference between both decisions was that this conclusion turned out to be less costly in Belgium – less than 1,000 Euros.

Discussion

These two (rough) sketches of recent pieces of case law in France and in Belgium may illustrate a particular feature of copyright law: copyright law defines rights of the rightsholder with respect to the use of her work. It does not define rights of users in relation to rightsholders. Insofar, copyright differs from other property orders that have carved out clear rights to protect the interests of the public (e.g. rights of way, rights of inhabitants of rental flats, access rights in information and telecommunications law, etc.). On the contrary, consumers have no clear legal standing under copyright law. This might sound at first surprising: scholars, policy makers and legislators emphasised often enough not only the need for adequate copyright protection, but also the importance to limit ownership in intellectual resources where the interest in free use of such resources has precedence. And, after all, copyright law does define limits to what rightsholders are entitled to do, respectively the duration of exclusive rights, the sorts of uses of intellectual works that are considered desirable where exclusive rights are granted or the kind of intellectual resources that shall not be made subject to copyright protection at all. Once a right has expired or an exception applies, consumers are entitled to use that piece of film, music, literature etc. The rightsholder has no legal standing to prevent this. And the concept worked – until DRMs entered the scene.

Copyright exceptions and electronic fences

DRMs are a technology to manage and enforce rights and interests in digital works. This can be copyrights. But it can also be more generally economic interests to recoup investments, or to control forms of usage that, so far, could not be easily controlled. Copying for personal purposes is such an example. Whether or not users of DRMs may

override existing limitations and exceptions in copyright law is one of the prominent questions in the recent copyright law discussion. An introduction to this controversial discussion would lead too far (for an overview of the discussion see Helberger 2004; see also Lambers 2004). But let's assume for one moment that the following was true (needless to say that the matter is far more complicated (see Guibault 2002): If someone was to fence in a piece of land (or information) that does not belong to him, or if someone was to exercise control to which he is not entitled, he would be acting contrary to the law, and therefore such behaviour would be simply not permissible. Provided, thus, an electronic fence would prevent a consumer from benefiting from a personal copying exception, such a behaviour cannot be permissible. Or would it?

Why the Copyright Directive does not solve the problem

Article 6 (4) of the Copyright Directive addresses the case that DRMs overrule exceptions and limitations of copyright law. In simple words, the Directive does not declare explicitly if such behaviour is permissible or not. It only suggests that rightsholders should take – voluntarily – measures to make sure that consumers could benefit also in the future from exceptions. And maybe the makers of the directive already suspected that DRM controllers might have few incentives to do so, because if rightsholders fail, member states are to take appropriate measures to make rightsholders do so. Meanwhile, member states had to implement the Directive, and with it, Article 6 (4) of the Copyright Directive (for an overview see <http://www.euro-copyrights.org/index/14/49>). What is interesting to notice for the given context, is that, generally, a tendency can be observed to pass on the difficult decision further to courts and/or specialized arbitration bodies. In other words, if a consumer cannot benefit from a national personal copying exception, he is often expected to seek agreement first. If negotiations fail, the next step would be to initiate proceedings and let a third party, a specialized arbitration body or court, decide.

How will the concept work out in practice? A first hurdle is the decision with whom to negotiate. The shop assistant? David Lynch? Studio Canal? Universal Pictures? Note that the rightholder is not always identical to the user of the DRM (for example, DRMs can be used by the production company, even against the will of the rightholder). Provided that the consumer found somebody to negotiate with and negotiations failed, will the consumer initiate proceedings? Cases such as the case of Stéphane P. are not very encouraging. Who else would be willing to risk paying almost 10,000 Euro because of one film? And in some countries consumer organizations do not even have a right of action. Will the consumer know that he can complain, or where? And as if the "happy end" was not unlikely enough, provided a consumer managed to take all the previous obstacles: was that not exactly what Stephan P. and Michel M. did, with so little success?

Bottom line

A property order is not static but develops together with societal, economic and technological developments. With the introduction of Article 6 of the Copyright Directive (protection of technological measures), copyright law has taken a step into a new direction. Before, it was up to the rightholders to initiate proceedings against consumers who did not respect the rightholder's rights. Since the implementation of Article 6 Copyright Directive into national law, it is up to consumers to start proceedings against rightholders who do not respect copyright exceptions. But, unlike rightholders, consumers, so far, have no legal standing. Unless there is a provision such as in the German Copyright law, saying that the beneficiary of an exception can compel the DRM controller to make available the means to benefit from that exception (Article 95b (2) German Copyright Act). In all other countries consumers risk a similar answer as Stéphane P. or Michel M.: It's not a right, silly!

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Was it ever a right? What record labels tell us about consumer rights

By: Michael Rader, ITAS, Karlsruhe, Germany

Abstract: The right to private copy has recently been denied in two court cases initiated by the music industry. In both cases, the consumer believed he had the right to this copy which is at least suggested by the acknowledgement of similar rights related to computer software. The article examines information to consumers provided with respect to their rights on record labels. Copying has only really become an issue since the widespread availability of suitable devices. Even then, it has at times been tolerated and only seriously been prosecuted when the economic health of the industry has waned. More systematic research is needed to explore the hypotheses based on visual evidence.

Keywords: consumer rights, copyright, first sale doctrine, legal aspects, music industry, technical aspects

Introduction

This article was inspired by Natali Helberger's article on two court cases in different European countries denying purchasers of recordings (CDs or DVDs) the right to private copy (Helberger 2004). While certain popular magazines have been arguing that consumers have such a right and urge purchasers to return copy-protected recordings to the stores, the industry is arguing that it is not actually selling copies of recordings for consumers to do what they want with them, but only the right to listen to or view the recordings under terms usually determined by the industrial partner in a contract concluded through a purchase. A question which readily comes to mind is whether this position really represents a change. For this purpose, it is instructive to read the information provided to customers on record labels (See the gallery of record labels from 1920 until the present). This information does obviously not completely tell us about the real legal situations – laws, the frequency of copyright-related law suits etc. – but it does provide leads which could be explored at greater length by legal specialists. The critical variables seem to be available technology for copying and the overall state (health) of the music industry at any time.

Early days – fights over technological patents

The very earliest recording physically inspected for this purpose was a one-sided recording by the Italian tenor Enrico Caruso,

published in the early days of the twentieth century. This has no information regarding consumer rights at all. While there were machines for home recording available, these were costly and the results of dubbing a professionally recorded performance on such a machine were likely to be highly unsatisfactory since they were designed mainly for recording speech (Dictaphones) and the costs were prohibitive.

Most information on things not related to the performance contained on early records was on the manufacturer and any patents on the technology applied to make the recordings or to produce the records themselves. This to some extent reflects on the situation in the courts, where rival manufacturers sued each other over such things as material, types of recording (e.g. double-sided recordings, vertical vs. lateral grooves, cylinders vs. flat discs) etc..

The First Real Challenge – Wireless

A major challenge to the recording industry as a whole first came from wireless broadcasting in the 1920s. The initial reaction of the industry was to draw up contracts with their major artists forbidding these to work in the rival medium. Even so, as the fidelity of broadcasting improved, record sales declined, forcing the industry to improve its own audio standards. This resulted in the introduction of electronic recording and playback. While this revived the fortunes of the record companies for a while, the eco-

nomic depression following the 1929 stock market crash put sound recordings in the luxury category so that sales again plummeted, causing a major crisis in the industry.

In this situation, radio gained popularity as a means of entertainment – from the nineteen thirties until the mid-fifties, radio was perhaps the major domestic source of entertainment until it was replaced by television. The music industry reacted by offering resistance to such things as sound quality improvement, by delaying the introduction of FM radio and imposing restrictions on its outreach. Recordings from the 1930s (and possibly the late 1920s) bear the caption “Not licensed for broadcast”. Broadcasting licenses were the subject of a separate agreement between the broadcasters and performing rights organizations, such as ASCAP (American Society of Composers, Authors and Publishers) or BMI, although it has also been pointed out that licenses were sometimes given free of charge once it was realised that broadcasting was also advertising and boosted sales of recordings.

While home recording technology was available, it was not widespread and probably chiefly used to make so-called airshots – off-the-air recordings of live performances. Of greater concern to the industry during this period would seem to have been the re-sale of records (the second-hand market). Recordings from the later 1930s and thereafter bear the statement “Manufacturer (or some abbreviation thereof) and original purchaser have agreed this record shall not be resold or used for any other purpose”. Presumably this restriction was introduced because the music industry felt it could boost sales by forcing people to buy new records if they wished to hear them. Some records also prohibit selling “below price fixed by the patentee” (meaning the record company). The “first sale doctrine” in the US and parallel rights in other countries, such as the “exhaustion of rights” in the UK, now acknowledge the right of owners of legally purchased copies of recordings to re-sell these. Keeping a private copy is forbidden under this doctrine.

Another common restriction prohibits “public performance” without license, indicating

that there were such things for record recitals or dances to recorded (rather than live) music. Towards the end of the Second World War, some recordings bear the simple message “Licensed by manufacturer only for non-commercial use for phonograms in homes”.

Enter the tape recorder

After the end of the Second World War also, tape recording achieved sufficient maturity to be used at first within the industry itself to make recordings and significantly later for home use. Some time in the late 1950s or early 1960s, long playing records, which had emerged by this time, included in their message to buyers a ban on unlicensed copying.

Strangely, many records from the 1960s or 1970s had no information on restrictions at all. Information on labels and sleeves usually advertised the virtues of recording technologies employed, although one sample inspected ruled out copying, public performance and, additionally, hiring.

The 60s and 70s in retrospect seem to have been the heyday of the recording industry with claims by artists (Crosby, 2004 – yes the David Crosby of CSNY and Byrds fame) that they had great freedom at the time, and that the record companies were run by people who loved the music and not just the money. It was during this period that the cassette tape and a range of devices suitable for its recording and reproduction entered the scene, making home copying a viable proposition for virtually anyone. In 1971, there was a “sound Recording Amendment” to the 1909 US Copyright Statute. While this was aimed mainly at curbing bootlegging of vinyl LPs, it also applied to cassette recordings. A tax on blank cassette tapes was proposed by industry at this time, but not granted until the 1980s. The reason for lack of pressure was a period of continued growth of music sales. What is seldom remembered now is that the economic situation of the industry was actually boosted by sales of cassette recordings: for a brief time sales of music on pre-recorded cassettes exceeded those of vinyl LPs. At around this time, LPs sometimes included the information that copying for personal use was tolerated. This is probably

the origin of the perceived right to private copying. It was possibly a concession to habit (so-called “party mix” tapes compiled from personal collections) and also due to reservations about criminalising the customer in an otherwise healthy climate, apart from the problems in seriously prosecuting infringements.

However, a 1980 Amendment to Section 117 of the US Copyright Act of 1976 acknowledges the right to make backup copies of computer programs for use in the case of destruction. It is this right which forms the basis for recent claims to the right to personal copies.

The advent of the standardised compact disc in the early 1980s stopped a beginning downward trend in sales by the music industry since many consumers made a complete switch to the new medium. Cassette machines were still used for copies, which were now clearly inferior to the original recordings. Digital Audio Tape would have provided the means for quality copying but never achieved any breakthrough due to built in “serial copy management” and lack of backing from the industry as an alternative medium for sale of pre-recorded music.

Digital technology brings the issue to a head

CDs from the 1990s until the present bear the legend, “All rights of the producer and owner of the recorded work reserved. Unauthorised public performance, broadcasting, copying and hiring of this record prohibited.” With the advent of cheap CD burners and even cheaper blank CDs, it became possible to produce virtually identical copies of the original recordings. Digital compression techniques have even made this unnecessary, since the vast majority of listeners is completely satisfied with good compressed versions.

Sources:

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- ▶ Helberger, N. (2004): It’s not a right, silly! The private copying exception in practice. INDICARE Monitor Vol. 1, No 4, 29 October 2004 http://indicare.berlecon.de/tiki-read_article.php?articleId=48

The reaction of industry has been the introduction of restrictions to use programmed into the media themselves. Instead of describing conditions of use, the media bear warnings that they are copy controlled and might not function in certain devices. There is certainly no acknowledgement of any right to make copies for personal use or as “back ups” in case the medium itself is damaged or destroyed.

Restrictions on use throughout the history of recorded sound thus appear to reflect technological developments posing alternatives to commercial recordings to copy recordings bought by others, or to provide the opportunity to listen without prior purchase (public performance, hiring, to some extent also resale). With the industry arguing that buyers do not actually own recordings, it could be argued that sales of used sound recordings has never been legal. While consumer information indicates that this is contentious, the first-sale doctrine has acknowledged the right to resale. The general situation also seems to have been no different in the US than it is throughout Europe. These are obviously hypotheses based on the information provided to customers of the recordings. Only serious legal research can provide the facts.

Bottom line

Apart from a brief period of tolerance starting in the mid-1970s, copying always seems to have been prohibited, or at best subject to some kind of authorisation. There is also some doubt on whether consumers have actually ever “owned” the physical recordings or whether these were simply a means to transmit rights for a limited period. The restrictions on public performance and resale would seem to imply this position on the part of industry, which is perhaps entirely encapsulated in the statement “Licensed by manufacturer only for non-commercial use for phonograms in homes”.

- ▶ Taintor, C. (2004): Chronology: Technology and the Music Industry. Background material to the “Frontline” Broadcast “The Way the Music Died”.
<http://www.pbs.org/wgbh/pages/frontline/shows/music/inside/cron.html>
- ▶ Gallery of record labels from 1920 to the present



Figure 1: A c. 1920 recording only referring to the trade mark on the (long defunct) label's name. (The rights are probably still claimed by BMG-Sony, Time-Warner or someone else).



Figure 2: A record issued by a subsidiary of the well-known independent label, Blue Note. This only states that the record may not be broadcasted on the radio.



Figure 3: This US recording contains a lot of information including patents going on to state that it is licensed only for non-commercial use for phonographs in homes. The second line tells us that “Mfr. & original purchaser have agreed this record shall not be resold nor used for any other purpose...” (Making flower bowls of unwanted records was popular in the 1950s).



Figure 4: This 1952 British recording prohibits unauthorised public performance, broadcasting and copying.

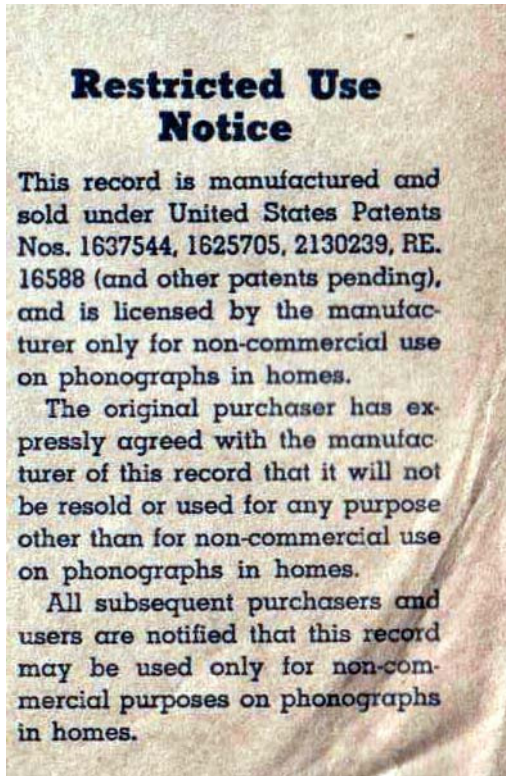


Figure 5: Record bags sometimes contained information to consumers. This 1950s sample tells us all.



Figure 6: Now we're in the LP era. This German release on the then independent Atlantic label has no restrictions at all. There is also no information on the cover or inner sleeve. The 1960s and early 1970s were regarded by many as the heyday of the recording industry. American records bore no different information.



Figure 7: This early British recording (1970) by Superstar Elton John prohibits copying.



Figure 8: A 1975 German issue states that copying (except for personal use) is prohibited. This kind of information is included on recordings from other labels in Germany around this period. Polydor labels are more boring than this one.



Figure 9: In the CD era now, this German recording makes no exception to the ban on copying. This one states that copying without permission is prohibited. An innocent customer might assume (s)that he has to ask for permission. Otherwise the record company assumes that customers know which rights they have. .



Figure 10: A new, copy controlled CD. Not only is unauthorised copying, public performance, hiring or rental prohibited, but the label contents are also copyrighted. In addition the medium is copy-controlled and the label at the top of the picture bears the warning: "On some equipment, for example car CD players, playback problems may be encountered". The album from which the single CD is taken contains a compressed version of the music and a special player which installs itself when the CD is inserted in a computer drive. It didn't work when I made an attempt to play it on my Sony computer and there is a rumour that HMV's player contains a virus. At any rate, Blue Note is no longer independent (see figure 2) but belongs to EMI.

About the author: Michael Rader studied sociology, psychology, political science and economics. He joined ITAS' forerunner AFAS in 1979 and has since worked mainly on the impacts of information and communication technologies. He has led several ITAS projects and is currently involved as workpackage leader in FISTERA (Foresight on Information Society Technologies in the European Research Area). In INDICARE, he mainly plays the role of an unobtrusive copy-editor. His own record collection, accumulated over almost 40 years and including items from the beginning of the 20th century to the latest copy protected CDs, forms the basis for this article.

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Who protects the un-protected? Open access publication needs DRM!

By: Frederick J. Friend, Consultant, High Wycombe, UK

Abstract: Increasingly copies of journal articles and other academic content are made freely available on the Web under an open access publication model. The benefits to readers, to authors and to society from toll-free access to research publications are being realised. Protection

measures are still required to prevent abuse of authors' rights through plagiarism or unauthorised changes to the content, even though such abuse may only occur infrequently.

Keywords: open access, scholarly publishing

Introduction

A revolution is taking place in scholarly publishing, particular in academic journal publishing. The availability of the Internet and of common access to word processors has made possible a radical change in the way in which research reports can be read. The change is not simply one of technology – although search engines do open up a new world of information for many students – but alongside the technical changes authors, funding agencies and governmental bodies are taking a new look at the structures within which taxpayer-funded research is made available. Why should publicly-funded libraries have to buy back the journal articles authored by academic staff in their own university? Why should academic authors have to sign away all rights to a publisher and have to ask for permission to make multiple copies of their own work for teaching? Asking such questions has led many in the academic community to realise that better ways of making research available are feasible in an Internet environment.

The Budapest open access initiative

Freely-available journal articles have been published for many decades, but much of the recent interest in the possibilities of open access publication derives from a meeting in Budapest in December 2001. This meeting, sponsored by the Open Society Institute, resulted in the Budapest Open Access Initiative (see BOAI). The BOAI manifesto describes the benefits to humankind from toll-free access to research results and sets out two strategies to achieve open access to journal literature. The first strategy is to encourage the deposit by authors of preprints or postprints of journal articles into websites known as “repositories”, managed either by a university or by a research organization. Many publishers now permit authors to make such “selfarchiving” deposits (see SHERPA). The second BOAI strategy is to encourage the development of new journals on an open

access business model or the conversion of existing journals to such a model. The open access business model moves the cost of publication from libraries and users to authors and funding agencies, treating publication as part of the research process. High subscription costs imposed by publishers to protect their income have restricted access to the results of publicly-funded research for people across the world, and the new open access model allows unlimited barrier-free use. It is also good for authors, leading to higher use and more citations of an author's work.

Both BOAI strategies are proving successful, with many universities and funding agencies across the world setting up repositories and encouraging their authors to deposit preprints or postprints, and around 1220 peer-reviewed journals are now available on an open access business model (see DOAJ). Most of these new journals are being managed on a smaller budget, at less cost to the academic community than subscription journals, without sacrificing quality. Much remains to be achieved, however, before it can be said that access to the world's research output is able to generate the benefits to human personal, medical and economic development it has the potential to do. The political move towards open access to UK research has been given an impetus through the publication of a Report of the House of Commons Science and Technology Committee (Committee on Science and Technology 2004) and in the USA the National Institutes of Health is seeking political approval to require authors to deposit articles based upon the research it funds in the PubMed Central database. Both these initiatives are being watched closely by authorities in other countries.

Copyright and open access

Over the past few decades copyright ownership has been used by publishers of scientific journals to protect their revenue, as they have required authors to assign copyright. Con-

structive dialogue between authors, publishers and academic leaders has taken place, for example through the work of the Zwolle Group, looking at the rights each group of stakeholders might need (see Zwolle Group). The publishers of open access journals have adopted a very different approach, encouraging authors to retain copyright. For users of open access content, whether in repositories or in open access journals, there have been no limits on the number of copies they can make, so that to the user copyright has ceased to be a restriction upon their academic work. This is not to say, however, that copyright is unimportant in an open access publishing environment. When users of journal articles no longer have to register to read or to copy the content, the protection given by copyright legislation *appears* to disappear. In reality the protection is still there. The author still owns copyright and the copyright legislation in force in the author's country still protects her or his copyright, but the protection is less visible to the reader, who may think that because the content is available without charge, anything can be done to change the content.

The risk authors run under an open access publishing system is that a reader will plagiarise their work to the extent of claiming that it is their own, or change the content electronically to the extent that the research results appear very different to those results the author recorded. The risk of such malicious

abuse is very low, and the risk exists with subscription content as with open access content. Nevertheless the managers of repositories containing selfarchived content and the publishers of open access journals need to take the risk seriously and put in place copyright management procedures to minimize the risk. Copyright cannot be ignored in an open access environment. The means adopted to protect authors' rights can be a mix of legal and technical measures. The most important measure is to give the reader a clear indication of what can or cannot be done with the content, e.g. that any number of copies may be made but that the author must be acknowledged and the text not changed. The Creative Commons Licence is used by some open access publishers, and the responsibility to respect the rights of the author identified in that Licence must be made clear to the reader of the journal article. The Digital Rights Management approach has been used under the subscription model but equally it will be very useful under an open access publishing model, not to restrict the reader unduly but to set the limit to readers' privileges at the prevention of abuse. This is not so much a question of technical protection measures as of good management of open access sites. Open access content could be described as unprotected by copyright. It is not unprotected, but measures need to be put in place to ensure that it is seen to be protected.

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- ▶ Zwolle Group: The "Zwolle Principles" and examples of good copyright practice can be found at <http://www.surf.nl/copyright>

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Approaching the DRM needs of the educational system in the UK. A review of Intrallect's DRM study on behalf of JISC

By: Ulrich Riehm, ITAS, Karlsruhe, Germany

Abstract: DRM issues are increasingly reaching attention in the educational system and decision makers have started thinking about the strategy to adopt. In the UK the study carried out by Intrallect on behalf of the Joint Information Systems Committee is an interesting piece in this process. We will briefly describe the structure of the report and its main assumptions before we turn to the "use case methodology" applied to gain insights into the goals and actions of the different stakeholders in the educational sector - independent of technology matters. Knowing what people want is then the basis to define what the technical requirements are – in this case of DRM systems for the educational system. We regard the approach as very interesting, do however have mixed feelings with respect to the presentation of the outcome.

Keywords: higher education, library, science sector, review, United Kingdom, user needs

Background

On its website JISC, the Joint Information Systems Committee of the United Kingdom, describes its role as follows: it “supports further and higher education by providing strategic guidance, advice and opportunities to use Information and Communications Technology (ICT) to support teaching, learning, research and administration. JISC is funded by all the UK post-16 and higher education funding councils.” Recently a study on DRM was commissioned by JISC to Intrallect Ltd, Linlithgow, Scotland (Duncan et al. 2004). The objective of the study was “to make recommendations on the best approach for JISC and the UK education and research communities to adopt in relation to Digital Rights Management“ (p. 5). The study started in February 2004. An interim report was presented in June and three months later the present final report was published. The work consisted of a literature survey, a series of workshops and interviews as part of the use case methodology, and finally an analysis of requirements and an assessment of options for DRM in UK's higher and further education system.

The structure of the report is straightforward: a first chapter gives a short introduction to how DRM is understood and an overview on “Digital rights in UK Higher and Further Education”. The “use case methodology” is explained then in the next chapter. The largest chapter deals with the “Outputs” includ-

ing a discussion of the results from the “use cases” and the requirements derived from them. The report finishes with “Conclusions” and “Implications”.

DRM in the context of teaching, research, and libraries

There are three main sectors the report dealing with: teaching, research, libraries. What does DRM promise for these sectors? According to the authors DRM could be a key factor in the teaching and learning communities for the development of a learning object economy, for the developing practice of self-archiving of research-publications, and for the licence agreements between commercial publishers and libraries (p. 5). So DRM is needed 1) to allow staff and students in the education sector to make use of digital resources in the confidence that they are complying with law and respect the right-holders' policy, 2) to enable self-publication by the declaration of permitted uses, 3) to enable users to work within the confines of copyright, and 4) to ensure that all of the above can operate in an internationally connected, digital environment (p. 6).

In general, as Duncan et al. stated, DRM should be an “enabler” and not a “preventer”: “Its purpose is to let people work as freely as possible in the knowledge that they are both working within the bounds of the law of copyright and respecting the rights of others” (p. 8-9).

Defining and modelling DRM

Duncan et al. develop a definition of DRM inspired by LaMacchia (2002). The definition is as follows: "The ultimate goal of a distributed DRM system is for content authors to be able to project policies governing their content into remote environments with confidence that those policies will be respected by the remote nodes" (Duncan et al., p. 6). The perspective of this DRM definition is an interesting one. The main actor is the author. He or she should be able "to project policies governing their content". The kind of "policies" is open. DRM is not in a first instance about "control", "watermarking", and "tracking", but about confidence, "that those policies will be respected". The focus is not on achieving (technical) total security, which, in my opinion, we will never get.

It is interesting to note that Duncan et al. interpret this definition in a quite non technical manner. The policies about the objects over which rights exist, what those rights are, and who owns them could be done in the form of a legal license (p. 6).

In preparation of the use cases (see below) the project team has developed a model of six DRM stages within two main parts. The *creation part* is composed of the stages: *recognition*, *assertion*, and *expression* of rights. The *projection part* consists of the stages *dissemination*, *exposure*, and *enforcement* of rights (p. 9-10).

Use case methodology

The "use case" methodology (derived from Cockburn 2001) is a way of defining what people want to achieve, abstaining from any assumptions about technology, architectures, or systems (p. 22). And although this methodology derives from the discipline of software engineering it is also used to develop business processes or in this case digital rights policies.

We will just give a short impression how the "use cases" are developed without going into much detail. A use case is a description of a piece of work in the mentioned environments. To give an example of an use case summary: "A researcher wants to compare and criticize the approaches of two other

researchers on personality development by publishing an eprint that hyperlinks to papers by these researchers that are published in the e-journal collections of two commercial publishers" (p. 24). The use case is based on the goals of the key participants (or actors) and the authors of the use case develop main success and alternative scenarios. Such use cases were the sources for Intrallect's research group to analyse the requirements on DRM.

Results

The results are presented for each of the six DRM stages: *recognition*, *assertion*, *expression*, *dissemination*, *exposure*, and *enforcement* (see "Defining and modelling DRM" above). Each of these sections is organised in a similar way: First the requirements derived from the use cases are described, second, options to fulfil the requirements are discussed, then a "cost-benefit-risk analysis" on these options is added. To give a rough impression of the outputs, the first and last section on *recognition* and *enforcement* will be sketched.

The first stage of the management of digital rights, *recognition*, is divided into five requirements: define ownership, control of own material, control of third party material, plan use, and record clearance information (p. 28-35). Derived from the use cases examples of concrete requirements to define ownership are the clarification of the ownership of resources by academic employees or the resolution of a conflict between an employment contract and individual rights. Options discussed by the authors to meet these requirements are, for example, that in the employment contract there should be explicit clarification that the higher education institutions have ownership of lecture notes. Several model contractual clauses exist which could be used. The authors consider in the cost-benefit-risk analysis that the cost of establishing ownership has to be related to the value of the resources to be protected (p. 63).

In the *enforcement* stage of digital rights management three requirements are distinguished: authentication, authorisation, and tracking/accounting (p. 60-62). While tracking seems not to be a core requirement, au-

thentication and authorisation are well established in the UK higher education community, according to the report. Beyond these measures, the authors state that technical enforcements are not a priority.

Concluding their study, the authors argue that to *define* a DRM policy (the first three stages of the DRM stage model) established procedures and good recommendations exist. There is a substantial base of licence information available and the use of digital rights expression languages is increasing. Only the processes for clearing digital rights and for creating and quality controlling rights metadata are not well recognised (p. 69). Regarding the *projection* of DRM policy (the last three stages of the used DRM model) dissemination and enforcement methods, particularly authentication, are becoming well established. For exposing rights information recommendations are available but good practice is not yet established (p. 70).

Bottom line

The use case methodology applied in this study has the advantage of not following a technology driven approach. To implement

DRM, so the study argues, does not automatically have the implication of implementing a complex piece of software called DRM system. To manage digital rights in the sector of teaching, research and libraries there are in many cases contracts and organisational and technical procedures available which are and could be used.

I very appreciate the view of the authors that different subject areas have different codes of practice (p. 34). This has to be reflected in different requirements and solutions. Detailed analysis must be carried out in the context of a specific organisation and its priorities (p. 62). There is no overall solution.

Sometimes the discussion of requirements and options along the DRM stages seems a bit schematic. In some instances the reader's interest could be better served if main results were more focused and clustered. A revised version of the report, scheduled for November, will account for this criticism, which was also expressed in a public review process in the UK. But nevertheless these detailed results deliver a wealth of information for the interested reader in the aforementioned communities.

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Masthead

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