

The Club model of cultural consumption and distribution

Working paper

P2P Fusion

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Contents

Introduction	3
An economics warm-up	4
The clubs	7
Fraternity goods: a subset of clubs	8
Clubs of copiable goods.....	10
Beyond the textual universe: music and movie clubs.....	11
The difference between renting and clubs	13
The optimal setup of a club from an economic perspective	14
Online rental services of information goods	16
The online video rental market.....	17
The online music market.....	20
Alternative content distribution schemes – copynorms.....	24
Law and norms	25
The online culture consumption club in practice	29
Technology protection measures	29
Legal framework.....	30
Economic framework.....	31
Conclusion	33
Bibliography	34
Economics of copyright and piracy	34
Copynorms	39
History of copyright.....	39

Introduction

When it comes to the market of digital goods, clubs –buyers teaming up to buy a single item and share it among themselves– seem to have little or no economic significance. Digital files are either perfectly controlled, thus the producer can appropriate all of the consumer surplus that could have arose by forming a club, or there is no way to control unauthorized copying thus there is no price at which it would be reasonable to sell a good on the market.

But if we include other, noneconomic aspects of clubs, notably their ability to negotiate and enforce norms on how a given good is accessed and used, clubs can have a significant effect on markets. So far we have seen that technological protection measures and copyright laws cannot effectively curb unauthorized uses of digital content. User communities around jambands can be an exception from this general trend as together with the artists they have created a normative environment that is able to police and enforce undesirable actions.

Is there a way to propagate the emergence of such communities through adequate technologies designed to connect artists and fans? What can we do to help fans and artists to negotiate rules they are both are happy with?

An economics warm-up

The economics of information production and consumption struggles with the basic conceptual problem of where to place information in the range of purely private (users are perfectly excludable and the use is rivalrous) and purely public goods (users are non-excludable and the use is perfectly non-rivalrous). As long as there was a physical embodiment of information (e.g. a book, a cd, a dvd), it was not too difficult to argue that information is a private good, whose consumption is rivalrous, and the material form of the good itself is excludable. The consumption of one person diminished the chances of consumption of the other, and the very nature of physical distribution made it sure that no free-riders could participate in consumption. But even in these cases there was a serious debate on the nature of the ideas and the knowledge which took the form of the physical object, as those ideas (and the forms they are expressed in) are neither rivalrous, nor easily excludable.

The debate seems to be solved by the advent of the digital media, where the non-rivalrous and non-excludable substance takes a non-rivalrous and non-excludable form as digital files can be copied with zero cost. Though there were and still are serious attempts to re-create the scarcity experienced in the physical world by Digital Rights Management solutions, and other Technological Protection Measures, it seems, that the unrestricted zero-cost form of digital information will stay with us in the long run.

Why is this question interesting for us beyond a theoretical curiosity? The answer is simple: the production of public goods looks very different from the production of private goods. In case of the latter, normal market mechanisms will solve the problem of finding the optimum level of production and the minimum price of the goods. The price will be at the marginal cost of production and at that price supply will meet demand. But the production of public goods looks perfectly different. There, because no free-rider can be excluded from the consumption, no one will have an interest in supplying the good. In such cases the state intervenes and collects taxes to finance the cost of production, and produces the public good itself, or orders it from the market.

Because of the hybrid nature of pre-digital information we do not traditionally see these solutions on the cultural markets. Though there are proposals to treat some types of information as public goods and finance their production through public mechanisms¹, information (in forms of books, etc) is more often a privately produced public good, meaning that with some legal help, private companies were able to set up a system where information was made excludable and rivalrous.

This legal help took the form of copyright protection granted to authors and through them to publishers, outlawing first pirate printers, later pirate copying that would have drove down the price of the information good to the cost of mere reproduction, to a price that necessarily would not contain the initial, fixed cost of creating the good. One can argue that such protection is vital for building well-functioning cultural markets as the production of information requires large up-front fixed costs, but the marginal cost of reproduction is close to zero. The cost of making an extra copy of book is negligible to the upfront cost of writing it. If producers –due to competition– can only charge the cost of reproduction, the economic incentive for production is lost, thus the level of production will fall below the optimum level.

It is clear, that the economic incentive, that is the monetary reward is not the sole, and many argue, the least important factor in production. A significant part of all cultural production originates from such authors who work for their love of their work or some kind of internal deliberation. These authors are the archetypical “starving authors” who create *despite of* “starving”² and do not give up creation for a more lucrative option³ – a natural assumption of economists. Other authors are aiming for fame, respect or name recognition made possible by the wide distribution of their works⁴.

¹ See Stiglitz arguing for such a solution in case of medical patents: Stiglitz, J E: Scrooge and intellectual property rights, *BMJ* 2006;333:1279-1280 (23 December)

² Starving in economic terms means the high risk or the fact of failure to recoup the costs of production or the competitive disadvantage of producing information to doing something else.

³ “In the world of art moments abound where issues of costs and price are suppressed and avoided. The suspicion shows in the lack of interest in, or outright hostility to, my own discipline, that of economics, in the circle of artists, as I have found. It often seems as if a taboo rests on the subject of money and money making. The term is not meant to sneer: I call those who hold out for a separate sacred place for the arts, where money does not interfere, the *romantics*. Just as Jesus chased the money changers from the Temple the romantics close out anyone who carries the smell of money. They passionately ignore the *realists* - again, I do not use the word to either praise or blame - who stress that money plays an important role in the arts anyway, and that the economic realm is an integral part of the world of the arts.” Klammer, Arjo (1996): Introduction, in: Klammer, A. (Ed.) *The value of culture*. Amsterdam: Amsterdam University Press

⁴ A selected bibliography on the revenues of authors in case of wide-scale piracy can be found at the end of this paper.

It is also clear that though a zero-price market (providing cultural goods for free [as free beer]) in itself is not able to cover the cost of production, there are several other ways for an author to turn the free-riders of one market paying customers on another. There are several complementary markets⁵ where for various reasons free-riding is not an issue. Popularity expressed in high online traffic can be turned to ad-revenues. Popularity expressed in the high demand for live performances can be turned into easily excludable tours. Voluntary donation, or tipping is probable if post-consumption user valuation of the cultural good is positive (fandom effect). Freely available goods can serve as loss leaders to other goods and services where excludability is not a problem.⁶ Free access can help building reputation faster, this reputation can be turned to higher salaries, higher paid commissions on secondary markets. The fact that there are some authors who are even willing to pay for publication is not only a sign of over-inflated egos, but also hints that there is a significant and very diverse secondary market, where individuals can have hefty returns on their freely (meaning: at the cost of reproduction) accessible works.⁷

The future of these options is very uncertain. The amount of economic incentives they can provide is unknown compared to revenues derived from the traditional markets. But even though it is highly probable that in the long run authors do not have a choice –at least if digital piracy is here to stay for good–, we are yet to reach a point where we do not have to offer authors the possibility to make money from the primary markets if they choose to do so. And who would question the right of authors to decide –while they can– how they wish to take remuneration for their work?

⁵ Markets of complementary goods, the demand of which is positively correlated with the demand of the primary good. Such complementary markets are for example that of the printer and the printer cartridge, cars and spare parts, CDs and live performances.

⁶ See the trade-off between CD sales and live performance revenues in case of a Vietnamese performer here: Domon Koji (2006): Unauthorized File-Sharing and Pirated CDs without Effective Copyright Enforcement: A Vietnam Case Study. Available on the internet at: <http://www.serci.org/>

⁷ Beyond the social rewards, one of the most important secondary markets where sharing can be converted to living is the job-market, especially the academic jobs where there is a strong direct correlation between publishing activity, salary and position. (Tuckman Howard P. and Leahey Jack (Oct., 1975), What Is an Article Worth?, *The Journal of Political Economy*, Vol. 83, No. 5., pp. 951-968.; Hamermesh Daniel S.; Johnson George E.; Weisbrod Burton A. (Oct., 1982), Scholarship, Citations and Salaries: Economic Rewards in Economics, *Southern Economic Journal*, Vol. 49, No. 2., pp. 472-481). This group of authors who create works as part of their employment is responsible for producing much of the scientific knowledge.

The clubs

In economic terms club goods fall between private and public goods. They are characterized by the fact that in clubs the “goods available to the membership unit” and the “goods finally consumed”⁸ are not equal. By these terms private goods translate to a club with a membership of one: one good is consumed of the one available. But there are several examples where this equation does not hold. The most obvious example of club is a household, where one copy of the daily newspaper or a book purchase is read by several members of the family: one good available for the family is consumed several times. Any time we rent a car, borrow a DVD from the store on the corner, go to the library, buy the monthly pass for the public transportation, or play tennis at the club we are joining and using the resources of a club.

The most important characteristic of the club good is that its use is excludable, but –within reasonable limits– non-rivalrous. This means, that the access to the good can be limited to the members of the club, but for these members the good cannot be exhausted. Several examples can be found for such goods within the household (with the necessary constraints): the family home, the family car, the cable-TV or the internet subscription are non-rivalrously consumed by many or all of the family members while they seem to be a single unit of consumption inaccessible from the outside.

In a wider social context we find clubs as gentleman’s associations, health and recreation facilities, sometimes political groups all of which provide a public good for their members and exclude non-members. To avoid crowding (overgrazing) of the common resource these clubs erect barriers to entry in forms of membership fees and/or selection procedures.

⁸ James M. Buchanan "An Economic Theory of Clubs." *Economica* 32 (February 1965): 1-14.

Fraternity goods: a subset of clubs

Sunstein and Ullmann-Margalit identify two notable subsets of club goods they call partnership and fraternity goods:

“Sometimes people care not only about the sheer number of consumers but also and perhaps more importantly about their identity, about who they actually are. Six, or sixty, relevant people may be the critical ones for you; the act that those people, in particular, are enjoying the relevant good (or not enjoying it) is what makes you especially like it. When the relevant group is relatively small, the choice may help establish or signal a partnership, and people may be said to be enjoying partnership goods. In the limiting case, consider a close friendship or a marriage, where the fact of joint consumption may be crucial to the underlying choice (of restaurants, or movies, or vacation resorts). If more than the two people are also enjoying it, consumption by others may be irrelevant and value may stay constant.

An important feature of some goods is that value increases when a certain number of relevant people enjoy them, but consumption by others reduces value. We have seen that this is true for some clubs; it can also be true in friendships and fraternities, and also in neighbourhoods, teams, clubs, ethnic groups, and nations. People may like a good more when it is enjoyed by a large number of people thought to be relevantly like them; advertisers often try to exploit this fact and consumers may react accordingly whether or not they do. But once people in another category start enjoying the good, value decreases, sometimes dramatically.

In the case of “pure” solidarity goods [classical club goods in our terms], people care about the sheer number of consumers, and in the case of partnership goods people care about who the consumers are. But the preceding points suggest an additional class of goods, call them fraternity goods, where people care about fellow consumers falling under a certain description or belonging to a particular category (for example, students, Catholics, athletes, gays). Fraternity goods have a discriminatory aspect: not only do you enjoy the party more to the extent that more Catholics come, but your enjoyment decreases if non-Catholics participate too. Here we are generalizing the idea of discriminatory clubs groups self-consciously formed to create club goods that include the local public good of exclusion (subject perhaps to legal controls, themselves subject in turn to constitutional constraints). Ordinary consumer products can have the same feature, with more informal rules of inclusion and exclusion, as, for example, when people of a certain type wear certain clothing, perhaps displaying signals (consider the Harley Davidson motorcyclists) that outsiders fear, reject, or do not entirely understand.”⁹

⁹ Sunstein Cass R, Ullmann-Margalit Edna: Solidarity Goods, Journal of Political Philosophy Volume 9, June 2001Page 135-136

It is clear, that a good accessed through a club and a private good have different values in the eye of the consumer. But it would be oversimplistic to assume that a club good necessarily has a lower value than a private good. It is true that there is no competition for the use of a private tennis court in the backyard, so by simple economic terms it might seem more valuable than the common resource of a tennis club, but if we count in the value of social interactions and the network of club members, these implicit factors can easily change the choices of the consumer. The same principle applies to many of the club goods. In the library the value is not only in the availability book itself, but in the chance of serendipity of finding items we have never thought of as something that can be interesting.

Clubs of copiable goods

A special subset of clubs arises when the non-rivalrous nature of the club good is not a result of the good's inherent non-rivalrous nature (like in the case of a swimming pool), but because it is possible to make cheap copies of a rivalrous good. To present this case let us see the case of libraries. Libraries (especially the so called for-profit lending, or subscription libraries¹⁰) are typical clubs, where library patrons finance the purchase of books creating a common resource pool which each member has an equal right to use. Of course books in themselves are somewhat rivalrous: if two members wish to borrow the same title in the same time, one needs to have two copies of the book. Rivalry is less an issue over time.

With the advent of Xerox machines a new possibility has emerged to reduce rivalrous consumption. If it is cheaper for members of the club to copy the good than to buy it on the market, it is logical for individuals to form clubs to consume goods whose consumption is rivalrous in their nature, but can be copied easily. This was the case of academic publishing as described by Liebowitz 1985¹¹ and Breyer 1970¹². From the late fifties Xerox machines have become the integral part of US libraries. Photocopying whole books was (and still is) a burden, but this is not the case with journal articles, where the few of the easily copiable 20-30 pages long articles contained in a single issue are interesting for any potential subscriber. In the US a long and bitter legal battle between Williams and Wilkins Company, a publishing firm specializing in journal publishing and the National Library of Medicine¹³ was fought over the economic and legal frameworks of this new practice. Though the US Supreme Court ruled that the Library's practice of photocopying in lieu of a loan single articles at the request of other libraries was in fact fair use, thus rejected the publishers claim for a per page royalty, the economic impact of this practice could not be ignored. Though it was never proved convincingly, that Xerox machines and photocopying caused a decline in journal

¹⁰ A subscription library allowed individuals to buy "shares." The money raised from the sale of shares went into buying more books. A member or shareholder then had rights to use the library. Before the wide scale adoption of tax-financed public libraries subscription libraries played an important role especially in the USA. On the other hand, we can think of the public library as a subscription library, where everyone (every taxpayer) takes part in financing the library, and in return, everyone has an access.

¹¹ S. J. Liebowitz: Copying and Indirect Appropriability: Photocopying of Journals, *The Journal of Political Economy*, Vol. 93, No. 5. (Oct., 1985), pp. 945-957.

¹² Stephen Breyer (1970). "The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs". *Harvard Law Review* 84 (2): 281-355.

¹³ *Williams & Wilkins Co. v. United States*, 487 F.2d 1345

subscriptions¹⁴, it was true, that on the consumer side a significant amount of consumer surplus was created¹⁵, and the publishers were looking for new ways to appropriate that surplus. One way of this appropriation was to raise the price of library subscriptions, for which Liebowitz finds empirical evidence.

Beyond the textual universe: music and movie clubs

In certain cases music and the audiovisual content are also good candidates for club consumption scenarios. In these cases the formation of clubs providing temporally limited access to an original, or providing cheap copies of the original is rarely caused by the small difference between the value of the original and the values of a copy. Music and movie clubs in the past appeared when (1) there was a strong market failure limiting access to originals, (2) there was no other way to sample a cultural good to reduce uncertainty of the valuation of

¹⁴ Excerpt from the United States Court Of Claims opinion on WILLIAMS & WILKINS COMPANY v. THE UNITED STATES (487 F.2d 1345, 1973): "Plaintiff insists that it has been financially hurt by the photocopying practices of NLM and NIH, and of other libraries. The trial judge thought that it was reasonable to infer that the extensive photocopying has resulted in some loss of revenue to plaintiff and that plaintiff has lost, or failed to get, "some undetermined and indeterminable number of journal subscriptions (perhaps small)" by virtue of the photocopying. He thought that the persons requesting photocopies constituted plaintiff's market and that each photocopy user is a potential subscriber "or at least a potential source of royalty income for licensed copying." n19 Studies rejecting as "fair use" the kind of photocopying involved here have also assumed, without real proof, that the journal publishers have been and will be injured. See, e.g., Project -- New Technology and the Law of Copyright: Reprography and Computers, 15 U.C.L.A. L. Rev. 931 (1968); Sophor & Heilprin, "The Determination of Legal Facts and Economic Guideposts with Respect to the Dissemination of Scientific and Educational Information as It Is Affected by Copyright -- A Status Report" (1967).

The record made in this case does not sustain that assumption. Defendant made a thorough effort to try to ascertain, so far as possible, the effect of photoduplication on plaintiff's business, including the presentation of an expert witness. The unrefuted evidence shows that (a) between 1958 and 1969 annual subscriptions to the four medical journals involved increased substantially (for three of them, very much so), annual subscription sales likewise increased substantially, and total annual income also grew; (b) between 1959 and 1966, plaintiff's annual taxable income increased from \$ 272,000 to \$ 726,000, fell to \$ 589,000 in 1967, and in 1968 to \$ 451,000; (c) but the four journals in suit account for a relatively small percentage of plaintiff's total business and over the years each has been profitable (though 3 of them show losses in particular years and in all years the profits have not been large, varying from less than \$ 1,000 to about \$ 15,000, some of which has been shared with the sponsoring medical societies); n20 and (d) plaintiff's business appears to have been growing faster than the gross national product or of the rate of growth of manpower working in the field of science. Defendant's expert concluded that the photocopying shown here had not damaged plaintiff, and may actually have helped it. n21 The record is also barren of solid evidence that photocopying has caused economic harm to any other publisher of medical journals."

¹⁵ Academic journals are typical bundled goods. For any individual reader only a handful of all the published in any give journal will be valuable thus useful. By bundling articles together the publisher was able to sell those articles, for which there was no direct demand by selling these articles bundled to valuable ones. Photocopying allowed users to cherrypick the valuable articles, thus they did not need to subscribe for the whole journal. By this they have realized the consumer surplus, the difference between their valuation of the article and the price they have paid.

a cultural good before purchase, or (3) where clubs provided the dominant way to discover new works.

Here are some examples: in the pre-1989 Hungary access to western sound recordings was extremely limited as the hard currency dependent official imports were subject to the country's negative trade balance. In such a case most of the original records were private imports. To circumvent this market failure record and tape clubs were organized around the country which drew fans and provided them the opportunity to make copies of the few originals that have existed. Tape clubs were not only the source of already familiar music, but served as an important channel to discover new music as well. Where other sampling opportunities –commercial radio, record stores– were non-existent, or very limited, specialized clubs provided the best chance to meet new music. Less open and formal clubs around private collections also provided a rare chance to get access to cultural goods not available on the market.

The Hungarian public media was also aware of the unsatisfied demand for western music and tried to do its best to supply fans with the latest releases. Programs like “Attention, Tapers” played songs in their full length, with special announcements before each song when to start the tape recorder. One curious offshoot of this approach was the TV show called home computer club on the public television which broadcasted computer programs through the air when the backup media for home computers (like the ZX Spectrum and the Commodore computers) was still the standard audio tape¹⁶.

In a mature media sphere listener supported community radios with specialized musical taste also act as clubs: listeners are willing to finance the existence of a medium through which they have access to that part of the music world that is not carried by the mainstream media. The Budapest based Tilos Radio is such a radio. A pioneer in playing electronic music, more than 50% of its annual budget comes from its listeners who are willing to pay for a continuing access to the latest developments in non-mainstream electronic music and other marginal genres.

¹⁶ As one can guess a computer software recorded from broadcast television hardly worked due to the quality loss of the signal, but it shows how desperate the situation on the software market was.

On the audiovisual market movie clubs were the dominant channels to access non-mainstream films. Small in size, with close ties to the organizers movie club members have a say in programming, making such clubs more like a pull medium compared to the traditional push distribution model of cinemas. With the advent of the VHS and the DVD (buy and rent) markets the role of movie clubs has changed: they act more like a sampling channel where members who trust their guide discover new works.

Consumer clubs can fundamentally alter prices, profits and number of works sold on a market, so in the following section we try to understand the basics of the economics of clubs.

The difference between renting and clubs

We have to note a subtle detail in the ownership of club goods as it might turn out to be more important for our discussion than it looks now. We have to identify/differentiate clubs according to the ownership rules of the shared resources. We can talk about a rental model if the goods rented by the club members are owned by a third party, independent of the club. In this case when a member uses the resource he enjoys no transfer of ownership, only usually heavily limited right to temporal usage. On the other hand a pure club good is owned by the members of the good, and that (partial) ownership is independent of the actual usage of the good. Why is this issue important? As we will see in later chapters the consumer valuation of individual, or collective ownership versus simple rent can be substantially different when it comes to a cultural good relevant to any specific individual.

The optimal setup of a club from an economic perspective

Varian¹⁷ sums up the economic models of information sharing, renting, buying clubs. We do not wish to reproduce his statements in this paper, but we will follow his line of thought to trace all the important factors of club formation.

Let us imagine a producer, who produces a good with a fix cost F and a marginal cost c . He faces a demand by y consumers, who differ in their valuation (willingness-to-pay) $r(y)$. Consumers are able to form clubs of k members, where each member pays the same contribution to the club, and that contribution is in turn used to purchase the good. The sharing of the purchased copy within club members has a transaction cost t .

The ideal group size, the price and profit of the producer thus the contribution of the club member is depending on:

- **The transaction costs** – The higher the transaction costs are, the lower is the incentive for consumers to form clubs.
- **The marginal cost of production** – The higher the marginal cost of production is, the likelier is that the club consumption model can provide significant value to members.
- **On the method how we calculate the group's willingness to pay** – it can be k times the willingness to pay of its lowest valuation member, or it can be the sum of the willingness to pay of its members.
- **On whether the consumers have the same or different valuations for an original and a shared copy**, and on the size of the difference, and

¹⁷ Varian, H. R., 2000 , “Buying, Sharing and Renting Information Goods”, Journal of Industrial Economics 48, 473-488.

- though Varian does not include this variable in his paper, **the value of belonging to the club in social terms.**

Varian draws several conclusions at the end of his paper:

“I have argued that markets for sharing can easily lead to increased profits for the producer. There are three ways that this can happen. The first is when the transactions cost of sharing is cheaper than the marginal cost of production. An example of this is the market for rental cars. It is certainly much cheaper to rent a car for a short period than to produce a new car [...] The second is when the user only wants to view the item once so that the utility of ownership is not much larger than the net benefit of cost of sharing. In this case, the firm would like to sell the product at a high price, but the possibility of renting caps the sales price at a low enough point that renting turns out to be preferred to sales. The third path by which the presence of a rental market can increase profits is when there are heterogeneous tastes. In this case the “rich” consumers buy and the “poor” consumers rent. This allows the producer to serve a market that would otherwise go unserved. Examples of this would be the for-profit lending libraries in eighteenth century England. Prior to the formation of these libraries, only the wealthy purchased books. After the circulating libraries were formed, middle class consumers could afford to read book via the lending libraries, which dramatically increased the demand for books.”

These findings hold for the markets of physical goods, where there is a clear line between owning –individually or collectively– an ‘original’, renting one, or owning a ‘copy’. These distinctions blur when we step into the domain of pure information goods, the digital market of cultural goods. Information in digital form is non-exhaustible and its consumption is non-rivalrous. There is no difference between copies, and it is hard to say what differentiates in technical terms for example individual or collective ownership.

Classic economics teach us though that in case of pure information goods, and digital files are such goods, where both the transaction costs and the marginal costs are (close to) zero, things turn out to be less favorable for clubs. In an ideal setting, where unauthorized copying and arbitrage opportunities can be effectively curbed, the producer can easily price discriminate between the different buyers, setting the right price for each of them, resulting in no demand left unserved. Models have shown the market can tolerate, or in some cases can profit from unauthorized copying if the producer can somehow appropriate the resulting consumer surplus.

“Note, however, that it is difficult to indirectly appropriate revenues from copies when one can not exactly assess the amount of copying that will be done from a single original. Indirect appropriation requires a homogenous population of buyers of the original or effective price-discrimination devices. Suppose that it is possible to price-discriminate as a function of the potential number of copies that will be made. Then the copyright owner can charge a higher price to those who are expected to copy more. Of course, it must be possible to prevent arbitrage; in the case of a library, this is possible since libraries are easy to identify.”¹⁸

But, and this makes the whole issue very difficult, where transaction costs are zero, marginal cost is zero, one cannot prevent arbitrage, and it is hard to identify users who copy, clubs and/or models that allow unauthorized copying do not have any apparent economic advantage over the two traditional strategies of producers in such a case: setting the price to crowd pirates out, or –if piracy cannot be contained– setting the price for the highest valuation consumer segment.

Online rental services of information goods

The producers and the distributors who are currently on the market of selling cultural goods in digital format do not follow either economic strategy. As it is apparent from the tables below, they neither price the online goods well under their physical versions, nor do they price-discriminate or raise the price for that consumer segment who values these goods the highest. What do we see then? It is hard to draw a coherent picture from the existing services. Some producers hope that by using Digital Rights Management technologies they can recreate the necessary scarcity on the market of pure information goods, or at least can retain some control over the distribution and usage of digital goods. These services – at least those who pass major content owners definition of legality– offer little variation in price and apply heavy DRM restrictions. Other services offer lower prices and fewer restrictions, but their legal status is questioned by many producers. And finally there are several online music and movies retailers who experiment with one form of club-consumption: online rentals.

¹⁸ Martin Peitz, Patrick Waelbroeck: Piracy of Digital Products: A Critical Review of the Theoretical Literature http://papers.ssrn.com/sol3/papers.cfm?abstract_id=889128, p 14.

These rental services fall into two categories. In the case of online video rentals the dominant strategy is to let users watch the rented movie for no more than 24 hours. We do not see this approach in music rental services, where rental means unlimited access to a vast online music library for a monthly fee. The difference between the two models is the result of the different user valuations concerning music and movies. Buying music has a rich history starting with the sale of sheet music, but there is no real tradition of music rental -most probably because the limited access to music was and is provided by radio instead of rentals– and as a result, we see that users reject services that do not offer ‘ownership’ of music. This is not the case for movies, where ‘owning’ an audiovisual work is a relatively new development compared to the long tradition of cinemas.

The online video rental market

In the following table we have compared the most important online movie rental services.

	<i>CinemaNow</i>	<i>MovieLink</i>	<i>GUBA</i>	<i>Amazon</i>	<i>iTunes</i>	<i>BitTorrent</i>	<i>WalMart</i>	<i>Netflix</i>
Product Launch	<i>Jul-99</i>	<i>Nov-02</i>	<i>Jun-06</i>	<i>Sep-06</i>	<i>Aug-06</i>	<i>Feb-07</i>	<i>Feb-07</i>	<i>Jan-07</i>
Movie Purchases	<i>Y</i>	<i>Y</i>	<i>Y</i>	<i>Y</i>	<i>Y</i>	<i>Y</i>	<i>Y</i>	<i>N</i>
Movie Rentals?	<i>Y</i>	<i>Y</i>	<i>Y</i>	<i>Y</i>	<i>N</i>	<i>Y</i>	<i>N</i>	<i>Y</i>
Prices								
New releases	<i>14.99-19.99</i>	<i>19.99</i>	<i>9.99</i>	<i>14.95</i>	<i>14.99</i>	<i>12.99</i>	<i>12.88-19.88</i>	<i>N/A</i>
Catalog	<i>9.99</i>	<i>9.99</i>	<i>4.99</i>	<i>9.99</i>	<i>9.99</i>	<i>9.99</i>	<i>7.50-9.88</i>	<i>N/A</i>
New Rental	<i>3.99</i>	<i>3.99</i>	<i>0.99</i>	<i>3.99</i>	<i>N/A</i>	<i>3.99</i>	<i>N/A</i>	<i>1/hour</i>
Catalog rental	<i>2.99</i>	<i>2.99</i>	<i>0.99</i>	<i>2.99</i>	<i>N/A</i>	<i>2.99</i>	<i>N/A</i>	<i>1/hour</i>
Burn-to-DVD (new)	<i>14.99-19.99</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
Burn-to-DVD(catalog)	<i>9.99</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>
Catalog								
# Movies	<i>1242 (840)</i>	<i>1912 (2000)</i>	<i>751 (500)</i>	<i>2356 (1220)</i>	<i>273 (82)</i>	<i>5000</i> <i>(movies, music, games +tv)</i>	<i>1034</i>	<i>N/A</i>
#Rentals	<i>805 (560)</i>	<i>1439 (1400)</i>	<i>N/A</i>	<i>1218 (637)</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>1000</i>
Misc								
Bitrate	<i>700-1500</i>	<i>1500</i>	<i>1299</i>	<i>2500</i>	<i>1586</i>			
Mobile optimized	<i>Y</i>	<i>N</i>	<i>N</i>	<i>Y</i>	<i>Y</i>	<i>N</i>	<i>N</i>	<i>N</i>
File Type	<i>wmv</i>	<i>Wmv / rm</i>	<i>wmv</i>	<i>wmv</i>	<i>M4v</i>	<i>Wmv</i>	<i>Wmv</i>	<i>Wmv</i>
Mac	<i>N</i>	<i>N</i>	<i>N</i>	<i>N</i>	<i>Y</i>	<i>N</i>	<i>N</i>	<i>N</i>
# of computers	<i>3</i>	<i>1-3</i>	<i>N/A</i>	<i>2</i>	<i>5</i>	<i>2</i>	<i>N/A</i>	<i>1</i>

Source: Techcrunch¹⁹, own research

¹⁹ <http://www.techcrunch.com/2006/10/15/itunes-movies-v-the-rest/>

The common characteristics of these services are:

- **The lack of significant price advantage compared to physical rentals**

*“Renting from the other services just didn’t seem a fair deal at \$2.99 or \$3.99 with Blockbuster down the street and Netflix in my mailbox. I can’t believe that most of these services expect me to pay the DVD price for a movie that hogs my hard drive, comes with a highly restrictive license, and sucks up my bandwidth for 1-2 hours of downloading.”*²⁰ Also worth noting that buying a movie online is only marginally cheaper than buying it in DVD format. In some cases – most notably where the physical distribution network is scarce enough to make the transaction costs of physical rental high– this lack of price difference can be justified, but if this was the real reason, one would find lower online prices in densely populated urban areas where the physical transaction costs are low, and higher online prices in places where there is no rental shop in the corner.

- **Heavy use of DRM technologies that limit interoperability**

Most services use Windows Media format, that lock users into the Microsoft platform. There are few services that offer viewing on a TV set or a portable device.

- **The lack of a free-access-to-the catalog-for-a-monthly-fee service**

Apart from the notable exception of Netflix, which offers to its approximately 1 hour of free online viewing for every dollar they spend on their regular Netflix subscription, we do not find all-you-can-eat schemes, something that is more or less a default option at the brick-and-mortar or click-and-mortar rental stores²¹.

- **Very limited selection**

It is evident from the chart that content owners are reluctant to release more than a tiny fraction of their current movies and most importantly their back catalog even though that most of these movies are accessible both legally on physical formats and on

²⁰ Ibid.

²¹ Netflix offers unlimited, 4 dvd/rental scheme from little more than 20 USD/month, which in ideal circumstances adds up to .25 USD/dvd/day.

illegal p2p networks. The amount of non-US, non-major movies legally available online is infinitesimal.

- **Burn-to-DVD is hardly an option**

Preserving a purchased movie in DVD format, that is not subject to changes in license terms is hardly an option.

At the end of the day it seems that studios are yet to adapt to illegal competition. Though **Disney Co-Chair Anne Sweeney** has noted that:

*“We understand now that piracy is a business model. It exists to serve a need in the market for consumers who want TV content on demand. Pirates compete the same way we do – through quality, price and availability. We don’t like the model but we realize it’s competitive enough to make it a major competitor going forward.”*²²

There seems to be little effort to put these observations into practice.

The online music market

The online music rental market is much less tumultuous than the online video rental market. The reason behind this strange phenomenon might be that consumers are less used to not owning a piece of music than renting movies.

However, those two rental services, Napster and Rhapsody, that are on the market are true rental services, that offer an unlimited access to the whole of their 1.000.000+ library²³ as long as the flat-fee subscription is active. These services also allow the transfer to CD option, allowing the users to keep their collection on a CD format after their subscription has ended. The question arises, why do Napster and Rhapsody allow their rental users to burn track on CD, thus circumvent the listen-as-long-as-you-subscribe scheme? The most probable explanation is that these services are aware that burning the tracks on a CD has additional costs most notably terms of time and effort on the users side, that raise the price for most users above the legally available purchase options.

²² <http://www.paidcontent.org/entry/mipcom-piracy-is-a-business-model-says-disney-co-chair-anne-sweeney>

²³ To put this number in perspective: the online service Last.fm, which monitors what music is being played on its members’ computers has “scrobbled” 65 million tracks by 8 million artists, while the CDDB database (aka Gracenote) contains information about more than 3.8 million CDs and over 48 million tracks.

Catalogue	540,000 songs 40,000 albums	1,000,000+ songs	2,000,000+ songs	53,999 songs 3,511 albums	350,000 songs 31,000 albums	1,000,000+ songs	800,000 songs 60,000 albums	exact number is not known	1,000,000+ songs	1,000,000+ songs
Labels	all labels	independent labels only	all big labels and some independents	all big labels and many minor	all labels	all big labels and some independents	all big labels and some independents	all labels	all big labels and some independents	all big labels and some independents
Max number of downloads	n/a	40/90 per month	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Subscriptions	n/a	EMusic Basic: \$9.99/month maximum 40 downloads EMusic Plus: \$14.99/month maximum 65 downloads EMusic Premium: \$19.99/month maximum 90 downloads	n/a	n/a	n/a	n/a	MusicMatch On Demand unlimited streaming for \$4.99/month.	n/a	Napster membership: unlimited downloading for \$9.95/month. Napster To Go: unlimited downloading for \$14.95/month. Downloads can be transferred to specific portable players	Unlimited: unlimited downloading for \$8.33/month. To Go: unlimited downloading for \$14.99/month. Downloads can be transferred to specific portable players
Price per song	about \$.15 (\$0.03 per Mb)	\$.22	\$.99	\$.49	\$.15	\$.99	\$.99	\$.12	\$.99	\$.99
Price per album	about \$2.20 (\$0.3 per Mb)	n/a	\$9.99	\$4.49	about \$1.80 (\$0.15 per track)	\$9.90	\$9.99	about \$ 1.50 (\$0.12 per track)	\$9.99	\$9.99
File format	MP3, WMA, OGG, MP4, MPC, FLAC, WAV and Monkeys audio	MP3 VBR	AAC 128 kbps	MP3 VBR	MP3 192 kbps	WMA 160 kbps	WMA 160 kbps	MP3 192 kbps und up	WMA 128 kbps	WMA 160 kbps
DRM	No	no	Yes	no	No	yes	Yes	no	yes	Yes
Audio CD burning	Unlimited	unlimited	Unlimited	unlimited	Unlimited	7 burns per playlist	7 burns per playlist	unlimited	7 burns per playlist	7 burns per playlist
Burning program	any	any	iTunes only	any	Any	WMP only	MusicMatch Jukebox only	any	Napster only	Rhapsody only
Audio player	any	any	iTunes only	any	Any	WMP only	MusicMatch Jukebox only	any	secure WMA	Rhapsody only
Required portable digital music player	none, you can use any player	none, you can use any player	iPod only	none, you can use any player	none, you can use any player	player must be WMA DRM compliant	player must be WMA DRM compliant	none, you can use any player	player must be WMA DRM compliant	player must be WMA DRM compliant
What's special?	Online encoding in practically any format and bit rate. Legality is controversial	Most mp3's encoded with Lame alt preset standard (cd quality!)		No per Mb charges. Legality is controversial	Recommending the service to friends gives free download credit . Legality is controversial			Website contains album reviews Legality is controversial	Napster To Go provides unlimited downloads and transfers to portable players.	
Price level	++	+		+	+++			+++	+	+
Sound quality	++++	+++	+	+++	++	++	++	++	+	++
Catalogue	+++	+	+++	++	++	+++	+	++	+++	+++

What we can observe from the comparison is that there is a heavy competition among online music services. Unlike movie studios, music publishers have released a small chunk of their catalog online – most probably because they had no chance competing with illegal alternatives-, but try to control usage through the heavy use of DRM technologies, and offer little flexibility in pricing. Tony Vaughan, the managing director of CAV Warner Home Entertainment Co, Warner Bros' joint venture distribution company in China has stated that

“The reason why piracy’s come along is that there weren’t enough products at the right price soon enough.”²⁴

It seems, that one out of three of the conditions above is met by the recording industry, the popularity of services that are legally contested suggest that price and catalog size is still an issue, and will continue to be so as long as the recording industry continues to release the bulk of its content on unprotected CDs. That step alone questions the application of DRMs trying to limit the number of copies, the temporal limitations of use, the devices, etc, and dooms these technologies to a total and utter failure when it comes to curbing piracy.

²⁴ "Companies Join Anti-Piracy War in China" Associated Press 7/2

Alternative content distribution schemes – copynorms

It is evident from the issues mentioned above that we need to rethink the consumer clubs of digital cultural goods in a unique and delicate context. Users have a very low cost alternative to buying any cultural good in the illegal p2p networks. Neither the legal framework nor the architectural gates can effectively prevent wide scale unauthorized use of cultural goods. As a result of this, producers lack the necessary incentives to put their goods out to the market, and even if such incentives exist, the fear of losing control is in many cases greater than the perceived benefit of entering to the digital market.

Discouraging this picture may look, there is a market to turn to for a positive experience: jambands.

“The original jamband was the Grateful Dead, but the label now applies to bands from many genres—rock, jazz, country, folk, bluegrass, and even gospel—and includes major acts like Phish, Widespread Panic, and the String Cheese Incident. What defines a jamband more than anything else is its policy regarding intellectual property: jambands allow their fans to record live shows and to copy and distribute the recordings freely. Jam-bands have enjoyed great commercial success in distributing music via the internet in forms that other bands have not dared to try. They explicitly attribute their success to the bond of trust they have with their fans.”²⁵

This bond of trust creates an environment where the lack of unauthorized copying is perfectly a natural. What creates this environment? The norms users and producers negotiated among themselves and the social mechanisms that enforce those norms. The literature call these norms **copynorms**.

The most obvious question is why people feel OK to share copyrighted materials in general, and why others stick to strict rules voluntarily in other circumstances. What is the source of different behavior?

²⁵ Schultz, Mark F., “Fear and Norms and Rock & Roll: What Jambands Can Teach Us about Persuading People to Obey Copyright Law”. Berkeley Technology Law Journal, Vol. 21, p. 651, 2006 Available at SSRN: <http://ssrn.com/abstract=864624>, p 653.

Law and norms

The interaction between copyright laws and norms governing the actions of individual users is a rich field to explore.

“Laws can influence the content of social norms. Scholars describe this as law’s “expressive function,” indicating to people what is right or socially acceptable. Mere existence or passage of a law can change people’s behavior. Enforcement of the law, aside from having a direct impact, can further serve to indicate that a particular value should be taken seriously. Social norms can encourage compliance with law. In fact, research indicates that norms have a far greater effect in securing compliance than official enforcement. [...] Social norms can discourage compliance with law. Norms are so influential that people will often choose to conform with a norm rather than to the law. Social norms can substitute for law, either in law’s absence or in lieu of the default rules created by law. People may be influenced by a norm to forego assertion of a legal right. Or, as Ellickson found, a norm may influence parties to arrange their affairs differently from default rules.”²⁶

It is clear from other sources²⁷ that the aggressive legal push for compliance with the copyright laws have very mixed results despite of its massive scale:

“Our analysis indicates mixed success for RIAA’s strategy. On the positive side, before– and after-event comparisons suggest that over the course of the four events, the majority of substantial sharers decreased the number of files shared, typically by more than 90 percent. During this period, a majority of nonsubstantial sharers reduced sharing activity, typically to a third of their original levels. Further, a substantial number of sharers exhibited some risk mitigation behavior. On the other hand, some findings pose concern for the recording industry. We found an upsurge in the frequency of usage after event 3 from the sharers who continue to use the file-sharing network. These individuals are continuing to find value in accessing and using P2P networks. Next, although our analysis identified RIAA-intended behavioral changes following RIAA’s legal threats and legal actions, there remain fairly wide downloading options. That is, after the four events, we still found a fairly wide choice for anyone seeking to download music files. Another cause for concern is that even if the individual behavioral changes we observed are linked to an actual lessening of piracy, there is still the fact that the legal action did not come without a price to RIAA itself.”²⁸

²⁶ Schultz, Mark F., “Copynorms: Copyright and Social Norms” (September 27, 2006). Available at SSRN: <http://ssrn.com/abstract=933656>, p 11.

²⁷ Bhattacharjee Sudip, Gopal Ram D, Lertwachara Kaveepan, Marsden James R. (2006): Impact Of Legal Threats On Online Music Sharing Activity: An Analysis Of Music Industry Legal Actions, The Journal of Law and Economics, vol. XLIX

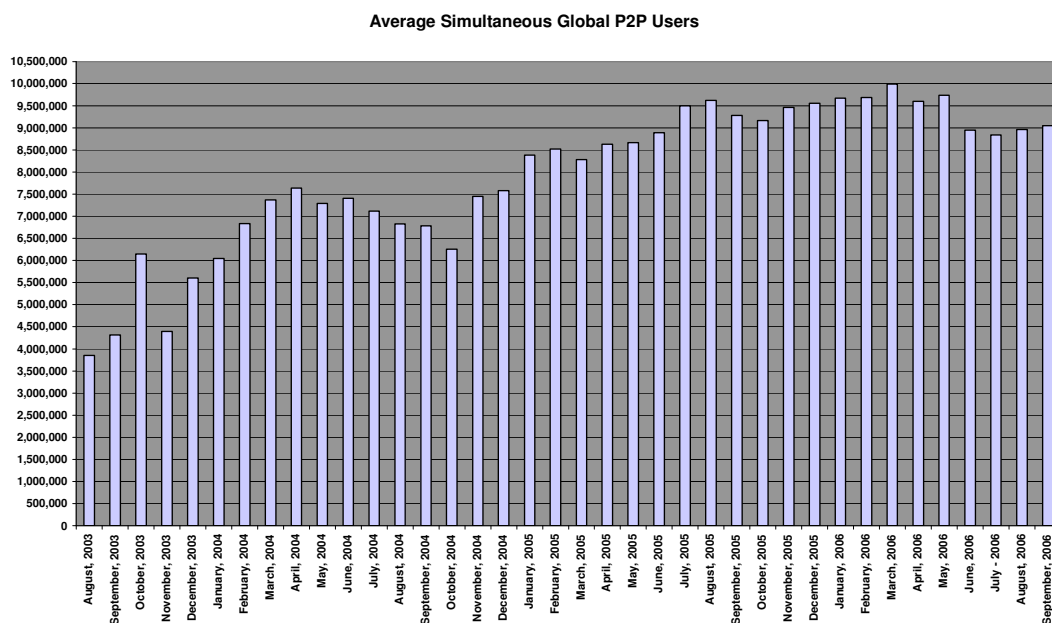
²⁸ Id. p 110.

The number of file-sharers on the global level is increasing²⁹. What we can conclude from these results is that when it comes to digital cultural goods, copynorms have a stronger effect on user behavior than existing legal rules, and increasing the level of enforcement has a diminishing rate of return.

In such a situation we need to look for social factors that influence individuals' behavior in a given context. These factors are the following:

- “
- **Perceptions Regarding Peer Behavior. What others are doing matters.** *Descriptive norms arise because people take their cues from what they believe others around them are doing. What they perceive others to be doing thus matters a great deal.*
 - **The Number of People Perceived to Follow a Norm. Size matters—but less and less beyond a certain point.** *As discussed above, what others are perceived to be doing influences people's behavior, and the initial perceived size of the group complying with a norm greatly affects the influence of the norm.*
 - **Relevant Peer Groups. Context matters.** *People do not necessarily conform to the norms of the population at large. As common experience tells us, there are many important norms that differ greatly among different groups. Such groups include*

²⁹ Blomqvist et al. (2005) finds that 24% of the population in Canada, 18% in the USA, 12% in Germany and France, 8% in the UK and Sweden use file-sharing services. There are several reasons for this phenomena. Technological ease, high costs of enforcement, moral judgments, and market decisions of 'rational' consumers are a few of the reasons identified. The inability to enforce the legal obligations also hints that the solution might not be in the legal domain. Current statistics show a sharp, nearly three-fold increase in the numbers since the beginning of legal threats :



firms, industry associations, religious and ethnic groups, formal and informal social associations, and other social networks. People often take their normative cues from the groups to which they belong rather than generalized morality, law, or other influences.

- ***Self Interest. Self-interest matters.*** *Most law and social norms theorists thus far have favored rational choice theory to explain social norms, focusing on game theory and rational self interest to explain how social norms influence behavior.*
- ***Reciprocity. Fairness and cooperation matter.*** *Sometimes people cooperate while at other times they behave opportunistically. There is a wide variance among individuals as to these behaviors, but sometimes a norm of either cooperative or opportunistic behavior prevails. Research suggests that a set of behavioral characteristics known as reciprocity determines what type of norm prevails.”³⁰*

The easiest way to control these factors in a relatively small, closed community of individuals who share the same interests, in other words clubs organized around a cultural good – an author, a genre. And in fact fan communities around jambands have radically different approach to the sharing, copying, appropriating of cultural goods produced by the authors they respect than the general population:

“Fans pay attention to the rules set by jambands and work diligently to comply. As a result, a culture of voluntary compliance with intellectual property rules pervades the jamband community. Fans carefully track in-formation about bands’ rules, communicate with the bands to clarify them, and publicize them to one another. In addition, jamband fans enforce bands’ rules through: (1) informal sanctions such as shaming and banishing; (2) specific rules and policies of fan organizations such as etree; (3) monitoring and reporting illegal activities to band management and attorneys; and (4) software code in file-sharing programs that allow only per mitted trading. Fans also appear to base their compliance on a perception that bands’ rules are generally legitimate. To the extent that they do not always agree with a band’s rules about particular shows, they note that compliance is warranted by the band’s continuing generosity.”³¹

It seems that there are several ingredients to the success. Authors need to build communities based on sustained relationships with fans. They need to be perceived as fair in dealing with fans. People alter economic behavior when they perceive that the other party is being unfair.

³⁰ Schultz, Mark F., “Copynorms: Copyright and Social Norms” (September 27, 2006). Available at SSRN: <http://ssrn.com/abstract=933656>, p 14-15

³¹ Schultz, Mark F., “Fear and Norms and Rock & Roll: What Jambands Can Teach Us about Persuading People to Obey Copyright Law” . Berkeley Technology Law Journal, Vol. 21, p. 651, 2006 Available at SSRN: <http://ssrn.com/abstract=864624>, p 682

“A prime example of fairness on the part of jambands is allowing fans to tape and distribute concert music. These recordings serve as the basis of a community, they provide free advertising, they feed the obsession of the most intense fans, and they make fans more favorably inclined to bands overall. Allowing trading of live recordings and older, less profitable material could go a long way toward increasing perceptions of fairness.”³².

If users are given a chance to comply with the rules, some of them will, and more will follow the good example.

“To create the right conditions for cooperative behavior, people first need a chance to comply. Many people are inclined to cooperate, as shown by the results of experimental games and other instances where people choose not to act opportunistically.”³³.

There is a significant amount of resources at the users, which can and should be put to work. These resources (equipment, bandwidth, expertise, time) not only can be used for promotion and distribution tasks, but for enforcement and community management jobs as well.

The technology serving the communities has an important role in supporting such factors, by its ability to present a clear picture or distort the information on what other users of the technology are doing, how they behave. Strahilevitz calls this phenomena the “Charismatic Code”³⁴:

“a technology that presents each member of a community with a distorted picture of his fellow community members by magnifying cooperative behavior and masking uncooperative behavior.”³⁵

³² Id. p 723

³³ Id. p 725.

³⁴ Strahilevitz, Lior, “Charismatic Code, Social Norms, and the Emergence of Cooperation on the File-Swapping Networks” . Virginia Law Review, Vol. 89, 2003 Available at SSRN: <http://ssrn.com/abstract=329700>

³⁵ Id. p 33.

The online culture consumption club in practice

Keeping in mind all the factors described so far, let us see how an ideal online culture club might look like. We need to address the sustainability of online culture clubs on at least three separate but interconnected levels: on the level of technology, copyright and the market.

Technological protection measures

The most important question online clubs need to solve how to prevent leakage of content from the clubs? We have discussed community norms, and the enforcement potential of online communities as an alternative to technological means to control the dissemination of digital goods. Are community norms in themselves enough to curb unauthorized publication of goods outside of the club? How can we stop users whose club membership was terminated due to expiry or contract breach to use, access, re-distribute content acquired while they were club-members?

DRM schemes offer handy tools of prevent and/or detect such norm-breaking behavior. Thus it is crucial to discuss our approach to DRM. Should an ideal, club-based culture distribution scheme reject DRM because

- DRM technologies suffer from fundamental technological flaws,³⁶
- proved to be unable to curb piracy,
- the lack of interoperability draws significant resistance from policy-makers (at least in the EU)³⁷?

³⁶ Doctorow Cory (2004): Microsoft Research DRM talk, Available on the internet at: <http://www.craphound.com/msftdrm.txt>, last accessed on 10/15/2006, Biddle, Peter et al. (2002): The Darknet and the Future of Content Distribution, Microsoft Corporation

³⁷ "European Union consumer chief Meglena Kuneva has hit out at Apple Inc.'s bundling of its popular iPod music players and its iTunes online music store, according to German weekly magazine Focus. "Do you think it's fine that a CD plays in all CD players but that an iTunes song only plays in an iPod? I don't. Something has to change," EU Consumer Protection Commissioner Kuneva was quoted as saying in a preview of an interview to be published on Monday." EU's consumer chief takes aim at Apple over iTunes, Reuters, Mon Mar 12, 2007 1:39AM EDT

Is it a valid assumption that instead of relying on DRM technologies to limit unauthorized use of copyrighted content, the resources of online communities are sufficient to enforce copyright licenses within the community? Is watermarking –a weak, non-intrusive form of DRM– an adequate tool to detect infringement thus to reinforce norm compliance? This paper does not wish to take a position, but wishes to induce discussion of these questions.

Legal framework³⁸

In a p2p technology based online club users need to have upload and download rights. If we stay in the domain of music, they need to secure rights from three different players: the composer, the performer and the sound recording producers. Though this three might be the same copyright person or entity, this still means users need all the three licenses from the same rights holder.

To be able to offer a song to other club members, each user needs authorization to make the work available to the public. To be able to download a work from other members, each user needs to have a right to reproduce the work. These rights can be acquired through individual agreements with the rights holders, or in many cases through the relevant collecting societies. The details and the exact methods of securing authorization are different based on who the authors are and where the user resides. The exact legal details (for example the limitations and exceptions) of such method need further clarification in an international context.

The use of pre-defined legal templates can lower the transaction costs of securing the proper authorizations as we have seen in the case of CC licenses.

We also need to mention the case of remixes, mesh-ups and the rightful creation and distribution of derivative works as such activity needs a third set of authorizations from the rights owners.

“The Norwegian Consumer Council, Forbrukerradet, lodged a complaint with the Ombudsman on behalf of Norwegian consumers claiming that the Fairplay DRM system acted against the interests of consumers. It said that the fact that the technology stopped songs bought from iTunes being played on any player other than an iPod broke the law in Norway.” Apple DRM is illegal in Norway, says Ombudsman, OUT-LAW News, 24/01/2007

³⁸ Based on Aniko Gyenge’s contribution.

We also need to examine whether fair use safe havens apply in online culture clubs, but the most probable answer to this question is no (except private copy). Nevertheless one needs to examine and define potential uses and contexts (like educational clubs) where fair use would hold.

Economic framework

In an ideal club-based model users form closed communities around a band, a genre, a cultural good they feel attached to. These groups negotiate the list of cultural goods they wish to acquire, and negotiate and allocate the resources they are willing to sacrifice in return for a legal access. These processes utilize standard online bidding, voting, and discussion tools. The group generated demand meets the creative supply on an electronic marketplace, where they can negotiate the terms and conditions of the use of the goods they wish to have access to. Prices will be the factor of the size of the group, its reputation, its members willingness to pay, etc. Upon a successful negotiation, the artist becomes the member of the group. As a member, he or she can have an influence on the community and the norms of the community. The artists also gain access to the distributed resources of fans.

It is important to define what is being sold and bought on this marketplace. The most obvious item traded is the good in digital format, and the rights to use (download, create derivative works) it. In many cases (as the comparison between the owner digitized catalog and the size of the catalog actively used by the users suggests, see footnote 22) some of the users already have access to the good in question because for example they own it on CD or LP. In such a case the club members negotiate usage rights only. The price –depending on whether the rights holder is willing to buy the digitized versions from the users– may or may not reflect the community members’ efforts to digitize and preserve the content which in some rare cases can be quite substantial³⁹.

³⁹ From time to time the BBC asks the public whether they have a recording of a show missing from the BBC Archives. The cost to digitize works only published in pre-digital formats like LPs, 8 track cartridges, on paper, etc. can be quite substantial. On the other hand many users devote themselves to preserve, archive and digitize such content.

On the other hand, the negotiated price probably will be more than just the value of the legal and physical access to the digital file. The ability to join a community of like-minded people with similar tastes, interests, loyalties, devotions is valuable to fans and artists alike. As the examples of fee based online fan clubs⁴⁰ show community membership is valuable for the fans. On the other hand the club paradigm -if viable-, carries value for the artists as well if it increases the number of paying consumers and/or reduces the number of infringers. The open ended negotiation process ensures that all of these values get represented in the final price.

One natural question that arises is what happens when a users club membership ends? There are several scenarios:

- the user loses all rights that he or she acquired through the club membership
 - o based on the level of DRM protection, the user might lose the physical possession of the goods as well.
- The users are offered a chance to buy permanent rights so they can continue to use the good, discounted by the amount of membership fee he or she has already paid.
- In a third, completely different scenario, the club is defined by its ability to buy a song back from a user. In this case the users pay the normal market price (99 cents per song at the moment) to buy the song, but when they decide to leave the club, they get a discounted refund (65 cents) upon confirmed deletion of the song in question. The difference of the two prices is the price of rental.

The choice between these different economic models is mostly defined by the business models of mainstream online music distributors. In the light of the recent Apple and Microsoft announcements, that they will start to sell unprotected music⁴¹ for a little more than a dollar, the need to police users seems to be less of an importance than the need to provide a steady,

⁴⁰ The yearly membership fee for David Bowie's online fan-club is 64 USD. For this amount users get access to message boards, and other community services, some exclusive content, an exclusive CD and pre-sale ticket purchase opportunity. Most probably this latter was the strongest selling point to the several thousand Bowienet members. (7000 members were reported in 2002)

⁴¹ At the time when I write this, it is still a question whether DRM free means truly unprotected mp3s, or a weak DRM format containing watermarks.

reliable revenue stream for the artists and the possibility to build a close relationship between artists and fans.

On the other hand, if these developments will still not prove to be enough to lure users away from the free, illegal p2p alternatives, the task will be to design a service that is able to attract users more than the failing mainstream services.

Conclusion

It seems that the web2.0 revolution has completely failed to change how we think about cultural markets. The problem of cultural markets seems to revolve around a purely economic question of finding the right price. Sometimes issues like the user experience, the ease of use and the DRM issues are considered as well, but we hardly look at cultural markets as collaborative efforts of culture production, distribution, consumption, archiving, discussion, etc. P2P in this context is nothing more than a technology of lowering distribution costs.

But users are more than just a bunch of hard-to-control, unruly individual consumers, whose bandwidth is up for grabs for Joost and Bittorrent Inc. As the examples of underground libraries, illegal archiving communities show users are capable to take action to circumvent what they see as market failure⁴². They are willing to share with each other their resources, their time, expertise, archives, bandwidth.

One of these community resources is the users' capacity to negotiate, monitor and enforce norms on how content is handled within their communities. We have seen successful examples to such communities. The question is whether such a club based approach can be scaled up to the level of a mainstream service. Luckily there are several normative, legal and economic parameters to adjust. Hopefully there is a setting which results in a system that is viable in the digital content ecosystem ranging from the legal Napster service to the illegal Grokster network.

⁴² Bodó Balázs: Robin Hood Digital, available on the internet at: <http://www.warsystems.hu/?p=82>

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Economics of copyright and piracy

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