Open Source / Open content and other emerging e-business models; a complement to or on a collision course with the existing IPR / Patent regime

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Abstract: Throughout the 1990s, the emerging policy debate on the potential of a digital networks society stressed the need to balance two possibly opposing features. The protection of immaterial rights, via the IPR / Patent regime, should not be so rigorous as to hinder the development of new business models suited to the digital world. As a more focused debate on e-inclusion, interactivity, consumer as creators etc. developed, the focus shifted to the need for a balance between content owners, content owners IPRs and the reasonable interests of consumers.

Technology, however, has made it possible for consumers to circumnavigate content owners’ interests with the result that cultural diversity has moved from main stream media to the Internet. Technology has turned content, which has been exclusive to many due to cost and the necessity to have certain hardware (CD players etc) into collective goods. User generated content (UGC) has become a means to bridge the gap between consumption and production. The Open Source movement has developed rapidly, with thousands of experienced Internet users collaborating in the development of new software applications, often in parallel with the growth of proprietary solutions protected by the IPR/patent regime.

This paper looks at the significance of these developments for creativity and innovation in general and more specifically for the current wave of emerging open source / open content-based business models. We argue a) that new business models are often at odds with the legal regime, b) that consumer privacy is increasingly at odds with the legal regime, and c) that innovation may be a victim since improving existing ideas is the basis of creativity.

1. Introduction

Disruptive technologies that challenge established business models almost always receive a hostile response from dominant incumbent players. The music and film industry’s history since the late 1800s has been full of such reactions. Pianola manufacturers tried to stop the advent of the phonogram, claiming it would lead to the collapse of the music industry and losses of thousands of jobs. In the 1920s, music publishers in the USA tried to hinder radio from playing music, supported by similar arguments. When the audio and video cassettes arrived in 1970s/1980s, a united group of dominant industry players argued that such technology would lead to the end of both the TV and the film industry. By and by they found a way to use the same technology to create new revenue streams.
We see a similar profile of responses to the advent of digital technology for producing, storing and distributing audio and audio-visual content. Major content owners such as global film and record companies have responded by actively hindering the development of new technology (spoofing, malware etc), whilst also delaying the offering of legal alternatives to developing “illegal” alternatives such as P2P networks. At the same time, major IPR owners have amassed large repositories of content for future use (not necessarily through future promotion but via hindering others to promote and earn money from the same). The rhetoric from content owners has moved from “we are losing money and need strong intervention from the legal regime” to “this is copyright infringement and we need even stronger help from the legal regime”. This paper suggests that we are in a position where large content owners act in tandem with the legal regime in a way which can thwart innovation. At the same time the development of new script based application software and open API:s (web-services) and a new syndication openness has brought us to a situation with many new creators and SME:s engaged in improving existing ideas often end existing rights owners. Thousands of enthusiasts, both amateurs and professionals, have refined forms of collaborative working, where Open Source solutions are developed and improved via more or less formal networks. Those relying on IPR legislation to protect proprietary solutions from competition from Open Source alternatives have demonstrated a variety of strategic responses, either making more of their own solutions Open Source, or by legal attempts to hinder the new forms of competition.

2. Methodology

The paper and its conclusions are based on data collected in the recently completed FP6 “MusicLessons” [1] project on policy implications of the music industry’s response to digital technology (Music Lessons 2006) and the on-going Swedish extension of this project, NAMNAM (Ny AnvändarMedverkan-Nya AffärsModeller supported by VINNOVA (Swedish Governmental Agency for Innovation Systems)), which studies innovation (and hinders) within the developing open source and open content activities and markets (Eriksson et al 2007) [2]. The NAMNAM project gathered empirical data from interviews with over 1176 experienced Internet users and Open Source developers, as well as via in-depth interviews with firms involved in providing Open source consultancy services, and open content applications.

A common denominator in the data was a belief that software developed in Open Source codes and web sites with open content produced by Internet users, working in collaborative networks, will enjoy a growing significance in the future. Free software and open standards are already a feature in more and more IT systems. Few should need to pay for expensive licences in the future. Quality is often better in open source solutions, and technological advances diffuse faster when based on open source solutions.

But there are also problems regarding security, reliability and support. Without support resource, open source solutions will be less attractive. However this is a diminishing problem, even if knowledge of support resource is limited to those deeply engaged in open source collaborative groups.

NamNam’s interviewees, both individual experts and firms building new business models in this area agreed on a number of points:

- Who guarantees reliability in open source solutions? Knowledge of developing licensing systems for both open source and open content is limited even among professionals working in the area.
- Open standards are a prerequisite for harnessing the benefits of open source solutions. These facilitate the exchange of information and interoperability between
different products and services. They should be open to all and be developed via collaborative processes. A major problem here is the large number of software patents which can be used by major owners, not to protect their own activities, but to hinder other’s creativity.

- Consumers and users must be the drivers, if open source programmes are to develop in a user-friendly fashion. Younger Internet users are at the forefront here via their engagement in different communities, web groups etc., consuming, improving and producing new content and solutions.
- SMEs and larger firms, as well as state and municipal institutions need to exert pressure to force the pace of development. All can save considerable costs via a transition to reliable open source solutions. The State must be a driver in this development.

3. Results. Four key areas/issues

Four key areas have been identified where innovation can be at risk. They all involve regulatory and legislative issues – the IPR regime as an incentive to innovate or as a means of control, the challenges to competition/anti-trust legislation as collective dominance grows, established forms of agreements, contracts and licences, and finally, issues of integrity and privacy.

1) The IPR / patent regime as a means of control or as an incentive to innovate?

Throughout the 1990s, the emerging policy debate on the potential of a digital networks society stressed the need to balance two possibly opposing features. The protection of immaterial rights, via the IPR / Patent regime, should not be so rigorous as to hinder the development of new business models suited to the digital world (EC 1997) [3].

Observers have noted that the more rigorous IPR legislation governing the digital world has led to a number of disturbing developments. The emergence of “Patent Trolls” – firms that amass large numbers of software patents without having any immediate intention to exploit those via manufacturing new goods or providing new services. The business idea is to wait until someone else exploits something similar and then either use the stack of latent patents to block (or claim damages), or force a licence agreement (Cane.A 2006) [4]. Cane notes that, behind the construction of a Sony-Ericsson handset, there is “a stack of cross-licensing agreements and licenses the manufacturer had to agree with contemporaries and competitors to use technologies it does not own”.

In the present audio- and audio-visual IPR arena, more and more existing ideas reside in the repositories of large content providers who can restrict any attempted exploitation by outsiders. We suspect that such repositories often are collected with the strategy for exploitation in the far future, or for the purpose of hindering use in new business environments/models. If such strategies are supported by the legal regime then a serious threat could be posed to innovation.

The IPR and the Patent legal regimes have traditionally lived very separate lives. But there are more and more similarities, despite very different purposes. Copyright protection is given to an idea created by an individual or groups of individuals, In other words an intellectual concept. For this reason it enjoys a long period of protection, in the case of music authors, the individual’s life plus 70 years in Europe.

Patent Law relates to an economic concept providing protection in the market against similar ideas for a reasonable period of time, to allow the patent holder to recoup investments. Up to 15 – 20 years is seen to be a reasonable period of time.
When large conglomerates with very large repositories of copyrights with a long life span use these collectively to hinder or control emerging business models, then the use shifts from that envisaged by IPR law to that covered by Patent Law.

Thus IPR/Patent Law and the issue of collective dominance by influential conglomerates becomes an important issue.

2) The challenges to Competition law as collective dominance grows

Competition and Anti-trust regulators have lacked the analytical tools to differentiate between market share and market power, as well as the legal instruments to remedy such phenomena. It has been hard to estimate the market significance of “hidden repositories of IPR” adding to market share. Here a comparison can be made to industrial companies with no products but who only managing patent licenses – the so-called “patent trolls?” Similarly the inability to encompass conglomerates possibility to act jointly and thereby have significantly larger market power that their collective market shares. This enhances the ability to use IPRs to control what individuals may or may not do, and to hinder user involvement in improving existing ideas.

3) Agreements, contracts and licenses.

Today’s contracts between creators and publishers do not give much room for the creators to withdraw or alter terms. They can allow a rights holder to block the usage of rights without the original creator being able to seek alternative forms of exploitation. Compare this with normal labour laws where it is unreasonable to require that an employee never will take a second job in the same area. This may hold for a few years in normal industry work but not for ever. IPR agreements are very different in this respect. Creators are close to being serfs. However, new models for copyright protection are emerging such as Creative Commons (http://creativecommons.org/about/licenses/meet-the-licenses) . Here creators may act differently and not bind themselves to publishers but give up part of their IPR, i.e. adapt to the Creative Commons initiative. Much similar innovation can also be seen in the open source and open content licenses area. The list of open source licenses is long and in practice one unique license for each open source actor. There are four Creative Commons licenses and we expect that this list will grow also. Agreements and licenses are used to profile creative operations which compares well with how groups of industries get together to profile and create a technical de facto standard. In the first case the legal regime on agreements rule. This regime is very open and in principle any agreement can be entered unless it is unreasonable. We suspect that the inventiveness on agreements and licenses will increase and breed diversity (http://www.opensource.org/licenses/). Our conclusion is that the regulatory regime must reappraise current IPR legislation and possibly produce new directives on what is reasonable and unreasonable if IPR protection has a primary aim of spawning diversity and creativity.

4) Privacy and Integrity Issues.

Content has moved from being something for an exclusive few to be collective goods through a process where at first it was easy and cheap to make copies (cassette player) and then through digital copies over the net (file sharing). Now the publishers want to regain control by putting the collective goods back to exclusiveness. One of the mechanisms for that is DRM (Digital Rights Management) of various kinds. Depending on how much control the publishers wants the technology opens up for serious privacy infringements. Other mechanisms are infiltration on the net and making use of the new and more open
discussion on less rigorous motives for surveillance of the users Internet traffic. The legal regime seems to accept this and even go further by allowing other actors than legal authorities and police to carry out such activities. All these mechanisms will decrease consumers’ privacy and initiate development of new mechanisms where consumers can find “places” to feel anonymous.

4. Conclusions

The paper concludes that the four areas spelt out above - The IPR and Patent Regime, Competition law remedies against collective dominance, Emerging forms of contracts and agreements (Open Source/Open Content), and Privacy issues – should be key elements in the policy debate. They must be considered together – otherwise innovation as Europe heads into the Information Society, could be a victim.

*Will societal support for copyright wither?*

Our conclusions from available data, qualitative and quantitative, are that support for the patent/copyright regime in society will indeed wane:

- if the control function takes too much precedence over the economic incentive function, i.e. if copyrights and patents are used more to control usage than to support and foster new creativity.
- if the creator loses too much control over IPRs to agents and/or intermediaries (this seems to have occurred in the audio/audiovisual industries).
- if innovation based on improving existing ideas is hindered by the degree of control by rights holders, particularly so-called “patent-“ and “copyright trolls”..
- if the users collective does not accept that the “balance” (control/permitted use) is reasonable.
- if a reasonable share of revenue generated by agents, using IPRs, is not seen to filter back to the original creators.

If these factors have indeed triggered off a diminishing degree of understanding and respect for the IPR regulatory regime in society, then policy makers and those who implement the policies face a serious dilemma:

Let us consider the case of content which is taken from the Internet, often via P2P file-sharing networks. Can we handle a democratic society where over 14% (in the case of Sweden) regularly break the law via downloading materials that someone else controls without permission, or even by improving or producing new variants of such materials? A handful are chosen at random (to create fear/set a few examples) and taken before the courts. They then meet judges whose own children probably also download illegally.

**OR**

Do we seek ways to achieve a society where file sharing thrives, with reasonable payments to creators based on usage and popularity, comprising a haven for innovation, curiosity etc.

The emergence of patent trolls also poses a serious dilemma. If proprietary solutions and their owners use the law to hinder the development of improved alternative open source solutions, at what point should decision-makers intervene?
Finally, an attempt to understand the policy dilemma.

Policy makers, legislators, civil servants are all subject to a number of opposing and sometimes incompatible forces. We have endeavoured to visualise this situation in an attempt to better understand today’s confusion as regards what the IPR law says and reality.

One problem involves time frames. Many basic legal instruments such as international conventions and agreements take many years to negotiate and inevitably can be out of phase with technology. This seems to have happened in the IPR arena, with current legislation based mainly on the WIPO copyright treaty from 1996 / years before anyone had heard of something called file/sharing, even if computer experts had already started using the same technique to share resources. Both treaties such as this were also subject to considerable lobbying from vested interests, not least the telecommunications industry which was keen to enjoy a lack of “conduit responsibility” in a digital networked world.

At the same time politicians fix overall goals. In Europe we have the so-called Lisbon agenda, describing goals for Europe to be the world’s competitive Information Society by 2020. Or sub-goals along this route such as the i2010 programme. On the other hand, there is also a on-going dynamic reality, where metrics point to different rates of change or movements in certain directions. All these have to be taken into account when implementing or revising policies/legislation. Balancing these sometimes opposing forces seems to have been a very tricky process for governments and legislators.

**Opposing forces can lead to policy incompatibilities**

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Realities of today (progress, delays, mistakes)

How should decision-makers handle this dilemma. The answer is to invoke legislation which supports a high degree of innovative dynamics. Maybe one should return to some of the early debates regarding the information society. In an early document from the European Commission on “Convergence” (1994) one could read the following:
“IPRs are an important factor in developing a competitive European industry… their protection must continue to be a high priority, on the basis of balanced solutions which do not impede the operation of market forces”. In another document from the same period one can read of the need to balance the IPR regime with the need to allow new business models to develop. This does not seem to have happened. Our attempt to visualise the challenge follows in the figure below.

For creativity to be sustainable there must be a balanced mix of protection, flexibility to allow improvements to existing protected products, and a need, probably via improved anti-trust measures, to contain large owners of copyrights/patents whose first priority is not to exploit all they control as actively as possible in the market.

References