

Liberty-enhancing businesses

When can you make money through the freedom of others?

Abstract

This document outlines the rationale for a novel form of experiment, and explores investigative protocols and controls. The aim is to understand the impact of licensing on the flow of value in the new digital economy.

It is proposed to launch one or more small businesses, conceived and instrumented as a vehicle to collect experimental evidence under controlled conditions to compare two alternative and opposing business strategies; liberal licensing versus the narrow enforcement of intellectual property rights.

The data gathered should help strategists map out a key aspect of the emerging digital economy, and shed light on a fundamental question for their business; When should creatives allow others the freedom to exploit their output, and when should they register and impose intellectual property rights to limit that freedom, in order to achieve the greatest commercial gain?

This work is a natural extension of less rigorous experimentation into public domain invention and product launches already undertaken by the author during a commercial sabbatical from his full time prototyping work at BT's Research and Development labs. In February 2010 the Enigmaker project released six new inventions into the public domain. One of these, a Creative Commons licensed design branded the Tacticalendar, has since been released as a consumer product.

Rationale and Objectives

Society profits hugely from the exchange of insight and information. Its beneficiaries can build upon shared work enabling them to achieve things which would otherwise be out of their reach. However, business strategies reliant on intellectual property rights are typically concerned with prevention. Through measures such as patents and copyright, creators are invited to create legal obstacles for others to benefit from their work. Many feel that they must enforce these rights to defend their professional role and earning power.

Legislators have judged that the cost to our society of these limitations is a reasonable price to pay to stimulate creative output. However, in some cases the decision to enforce rights also disadvantages paying customers and chokes the intended commercial dividend. The naive application of licensing can not only restrict liberties, but actually disadvantage the business itself, leaving no winners at all.

Business losses from eager licensing can take place directly through loss of market share or reduced revenue owing to the restricted freedoms around a company's product. Also significant is the opportunity cost of missing out on a potential strategic position, customer relationship or other profit-generating mechanism. The existence of alternative revenue streams, lubricated by openness and sharing, are easily overlooked until a competitor demonstrates their value.

In common with many industry commentators, I believe the limitations on consumer freedoms imposed by industry-approved digital music initiatives disadvantaged the legitimate product against the more accessible and flexible, unlicensed alternative of mp3 ripping. The emergence of liberal digital distribution and consumption mechanisms such as iTunes and the iPod has undermined the A&R advantages which record labels once had as gatekeepers to the market. Mainstream sales volumes for the copyright industry are in freefall and disintermediation now threatens their existence.

Similarly, open source projects, which channels the contributions of many interested parties into an asset available to all, are at the core of Firefox, Google Chrome, Linux, Android, Apple's Mac OS X and iOS. Against the odds, these software products have been able to erode the market share of proprietary and closed source alternatives, including those as well-resourced and dominant as Microsoft Windows and Internet Explorer.

Where the recording industry and software industry has led, a wider group of creatives follow as the impact of the digital revolution cascades through their sectors. The commoditisation of both digital hardware and software, and the development of digital fabrication techniques, has led to the emergence of challenging alternative business models in which Open Source, Creative Commons and similarly liberal licenses act as the architectural foundation of a growing collection of products and services without the encumbrances and transaction friction of rights-controlled resources.

The idea that all available IP rights should be enforced to maximise profit has been challenged across a number of industry sectors. Unfortunately designers, developers and inventors familiar with a license-enforcement model are ill-equipped to identify the alternative value chains available to them through liberal licensing. For example, actively facilitating the adoption of your designs by others can create a rich market for consultancy and support which the original creator is uniquely able to anticipate and serve. However the question remains under which circumstances this is more profitable than simply charging for the use of the design.

The conservative, establishment perspective on these innovations may be that liberal-licensing is a fad, applies to products serving a niche market and is not genuinely industry-changing. However, even if we adopt this point of view, there is value in understanding the limited envelope in which they do indeed lead to commercial success.

Contributors across all industries need an informed standpoint concerning the flow of value in radically liberalised economies. Strategists need to weigh up which IP rights they should waive, what the form of the expected payback should be, and how they should orient their business in order to best harvest the dividend. However, comparative and quantitative evidence is hard to come by.

Despite the scarcity of actionable insight, established companies and seasoned professionals cannot rest on their laurels and continue with traditional models. As other disruptive innovations have proven, by the time new competitors have emerged and proven the case for liberal licensing it may already be too late to defend existing markets against those playing the game-changing wildcard.

The experiments I propose will be inevitably narrow in scope, but should harvest hard data for decision-makers articulating a licensing strategy for their business. In particular, I hope that the evidence gathered will help businesses avoid self-defeating licensing approaches in the case where liberal licensing alternatives are significantly more profitable than intellectual property enforcement.

Method

During the span of the PhD I would like to turn what is today a gut instinct into a more analytically sound picture of the way intangibles can flow through a business, lubricating relationships and facilitating the unlocking of new value. The ideal thesis would document a quantitative evidence base which begins to map a taxonomy of liberty-enhancing business models.

Building on this model, I would like to identify specific questions for which live market experiments can be created. I would like to work closely with the management school to invent a model for a business to be simultaneously launched through an open brand and a closed brand.

[This problem suggests game-theoretic/economic modelling and analysis]

Timeline

Profile

I am a contributor and user of open source and public domain design projects, with ten years of industry experience as a commercial inventor, platform architect and product designer.

My experience in industry and the maker community spans the whole spectrum of perspectives on licensing. At one extreme, my work at BT Labs has led to a number of granted patents and the prototyping and deployment of a great deal of trade secret and privately licensed technologies. At the other extreme, I am an author and maintainer of software, workshop facilitator and hacker for open source projects built on Arduino and Processing, creator of the Enigmaker public domain invention project, and the Tacticalendar -

a Creative Commons BY-NC-SA-licensed design for a laser-cut consumer product.

As a lead contributor and instigator of emerging technology projects, my role blends naturally into that of the technology strategist, marketer and entrepreneur, attempting to drive cashflow through the technologies I create. This last perspective is definitive in the scoping of the proposed project. Decisions around the liberal sharing of IPR lack the hard numerical certainties of the profit and loss accounting for conventional markets, and no established heuristics seem to exist which can help structure the decision to proceed on a given licensing strategy.

Piano light Flight instrument

Existing work

Henry Cheesbro

Eric von Hippel

Proponents argue that the liberal licensing of well-known projects such as the linux kernel have been a defining factor in its success, but it's hard to be sure, given we cannot wind back the clock and re-run the experiment.

In recent years, novel commercial approaches have arisen which attempt to find an alternative commercial equilibrium. On this model, creators distribute their works whilst explicitly granting freedoms to others to copy, modify or further innovate. This strategy is not limited to open source software, but has been appropriated and remixed by inventors, craftspeople, writers, musicians to suit their own needs, and formalised through organisations such as the Open Source Initiative and Creative Commons.

associated with software producers, handicraft movements and

create a form of controlled study, using an instrumented and artificially constructed business.

Why Highwire

Interdisciplinary, as consumer and contributor Maker Entrepreneur Digital specialist Personnel Lancaster

SUGGESTED STRUCTURE #0 <http://highwire.lancaster.ac.uk/applications/>

Between 1500 and 2000 words including...

A working title of the topic area - This should do more than convey the key words associated with the proposed research. General overview of area - This should take the form of a brief abstract of the general area of study and identify the discipline(s) within which it falls. You might also refer to the way in which your own background gives you competences in your chosen area. Identification of the relevant literature - In this section you should develop your proposal to demonstrate that you are aware of the debates and issues raised in relevant bodies of literature. References to key articles and texts should be made to show that you appreciate their relevance to your research area. Key research questions - Since you need to demonstrate that the topic can be completed within the normal time period allowed, you need to demonstrate that it is manageable, and so focus on key questions within your niche area. Relevance of this proposal to the aims of HighWire - This is a centre for post-disciplinary research in innovation that crosses between computing, Design and Management. Show how your ideas will contribute to these aims. Bibliography - You should include a short list of references to key articles and texts included in the application.

SUGGESTED STRUCTURE #1 http://www.visionedu.co.uk/a_guide_for_a_full_time_phd__pro.htm
1-2000 words

OBJECTIVES HYPOTHESES METHODOLOGY LITERATURE REVIEW OUTCOMES

SUGGESTED STRUCTURE #2

Working Title Statement of Topic and Aims Review of Literature Outline Method/Approach Time Line
References and Bibliography

Enabling businesses

What forms of value What climate policy and economic context favours open business models

Enabling

facebook open compute (open hardware - server)

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