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Business Models to Support Content Commons

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Abstract

The application of conventional, 'scarce resource' economics to content has been mistaken and harmful. More appropriate forms of economic analysis highlight the critical role that accessibility to information plays in the process of innovation. Meanwhile, down at the micro-economic level, there is an all-too-common perception that open content approaches are unsustainable and bad for business, and reflect naïve idealism on the part of their proponents. This paper identifies a range of suitable business models, and thereby demonstrates that the content commons is sustainable and appropriate for profit-oriented business enterprises.

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1. Introduction

The paraphernalia of the digital era comprises means of digitising old materials, creating new materials in digital form, manipulating them, transmitting them, and rendering them on inexpensive devices. These new capabilities have brought with them promises and threats.

On the one hand, people have exulted in greatly enhanced access to information in all its forms.¹ Information is now regarded as a key driver of the economy and society, and 'content' has come to be distinguished from computing and communications. The term 'content' is used in this paper to refer to digital works other than software, including text, image, sound, video, and combinations of them ('multi-media').

On the other hand, there are losers. Large copyright-owning corporations see rampant (mis)appropriation of their content. Fearing the loss of a significant proportion of their revenue, they have mounted court-cases to enforce their rights, and sent 'nastygrams' to chill the (mis)behaviour of both unfair competitors and consumers. They have also sought to develop and deploy technological protections to inhibit access to works whose copyright they own.²

Dissatisfied with the outcomes, they have also used their power over elected representatives, particularly in the USA, to achieve substantial extensions and enhancements to the laws that grant them their economic power.³ The increased monopoly powers that have been granted to copyright-owners have had their natural result: sustained high prices even though the digital era has significantly lowered producers' cost-profiles. A new wave of content proprietisation is rippling around the world, as governments in many countries accept the blandishments of the US Administration and copy industry-dictated provisions into their own laws.

A fundamental tension exists between openness and closedness of content. This is nicely captured by the expression 'Information wants to be free ...', whose origins, interpretations and constructive ambiguities are examined in Clarke.⁴ As predicted one and even two decades ago, some of the actions of copyright-owners have resulted in a backlash by consumers; and that has in turn spawned yet more aggressive actions by copyright-dependent corporations.

¹ R Clarke, "Information Wants To Be Free ...", Xamax Consultancy Pty Ltd, (1999), @ <http://www.anu.edu.au/people/Roger.Clarke/II/IWtbF.html>.

² R Clarke & S Nees, "Technological Protections for Digital Copyright Objects", *Proceedings of the ECIS 2000 Conference*, Vienna, (3-5 July 2000), pp. 745-752, @ <http://www.anu.edu.au/people/Roger.Clarke/II/TPDCO.html>.

³ P Samuelson, "The Copyright Grab", *Wired 4.01* (January 1996), @ http://www.wired.com/wired/archive/4.01/white.paper_pr.html

⁴ *Supra* note 1.

A movement has arisen which aims to lift the debate above the adversarial and litigious depths it has plunged to. Foundation works include Barlow,⁵ Dyson,⁶ Kelly⁷ and subsequently Lessig.⁸ This movement argues that content needs to be open, and that the powers that originators are granted in copyright works need to be exercised judiciously. This is achieved through the granting of copyright licences with relatively liberal terms. An early family of such licences was that of the Australian Educational Sharing Network (AEShareNet). The best-known set is that of Creative Commons.

Large copyright-dependent corporations, particularly in the music and feature-film industries, have been fighting a rearguard action against the open content movement. One of their criticisms has been that open content licensing is harmful to the interests of originators of works, and that business would be unsustainable if a substantial amount of material migrated from closed, proprietary approaches to a content commons. The motivation for this paper is to de-bunk that myth. The intention is to demonstrate that business models exist, and that more are being developed, that enable financial returns to originators, despite the granting of copyright licences under liberal terms.

The research question addressed in this paper is 'what business models enable content-developers to make their materials available in a content commons by means of open content licences, rather than seeking monopoly rents from the works by means of copyright licensing fees?'. The paper commences with a consideration of the economics of innovation, in order to identify the role of information in that process. It then addresses the 'micro' question of sustainable business models for organisations working within the context of content commons.

2. Access to Information as an Enabler of Innovation

Prior to considering business models, it is necessary to appreciate how businesses function. The behaviour of individual business enterprises is greatly influenced by context and policy settings. Industries that deal in digital content are dynamic and undergo continual re-definition, hence the focus is not on 'cash cow' business operations in stable markets, but on innovative businesses whose products and means of production undergo continual evolution.

Invention is the conception of a new idea. Innovation is a step beyond invention, and involves the deployment of one or more ideas in the real world. This may involve the articulation of an invention, that is to say, its integration into an existing category of artefacts or processes, including adjustments to them to accommodate the new idea.

⁵ JP Barlow, "The Economy of Ideas: A framework for patents and copyrights in the Digital Age", *Wired* 2.03 (March 1994), @ http://www.wired.com/wired/archive/2.03/economy.ideas_pr.html

⁶ E Dyson, "Intellectual Value", *Wired* 3.07 (July 1995), @ http://www.wired.com/wired/archive/3.07/dyson_pr.html

⁷ K Kelly, "The Economics of Ideas", *Wired* 4.06 (June 1996), @ http://www.wired.com/wired/archive/4.06/romer_pr.html

⁸ L Lessig, *The Future of Ideas : The Fate of the Commons in a Connected World*, (2001); and L Lessig, *Free Culture : How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity*, (2004).

Other instances of innovation include the application of knowledge to the manufacture or deployment of a new kind of artefact or process; and the adoption of a new product or process.

Innovators are generally confronted by hurdles, such as the need to attract substantial investment, a long delay before revenue streams can be generated, and technological, legal, commercial and project management risks. Parliaments have intervened into free-market activities by creating monopolies of various kinds that are intended to provide protection for innovators, at least during the sensitive early years of their initiatives. There has been a dramatic escalation in the propertisation movement in recent years, as corporations that have become dependent on protectionism have felt the buffeting of the digital era, and have extracted from Governments extended and strengthened copyright and patent regimes.

Access to information is vital to innovation.⁹ Innovation depends on access to 'codified knowledge', by which is meant information that is expressed and recorded in a more or less formal language – sometimes disciplined text, but often formulae, blueprints, and procedural descriptions. To supplement this, however, innovators also need access to 'tacit knowledge', which is informal and intangible, and exists only in the mind of a particular person. It is to a considerable extent focussed on the knowledge of how to do something, or how to use something, rather than knowledge of facts or relationships.

Innovation is therefore heavily dependent upon freedom of movement of ideas and information among many individuals and organisations. Monopoly powers such as copyright and patent constrain that freedom. The barriers to innovation are increased with every extension to those monopoly powers, such as the preclusion of reverse-engineering, the criminalisation of what were previously civil breaches, the power to issue 'take-down notices', and onerous discovery procedures.

To the extent that enhanced and extended propertisation measures have been underpinned by analysis, the studies have relied on conventional economics. That body of theory is based on the scarcity of resources. It assumes that there are limits to the quantity of the tradable item, and that one party's possession and use of it deprives other parties of the possibility of possessing and using it. In the digital world, those assumptions are incorrect, and the application of inappropriate economic theory has contributed to the distortion of economies and societies by misguided extensions of property rights in information.¹⁰

Information is not scarce, and the last quarter-century has brought with it great advances in all aspects of information production and reticulation, resulting in much more rapid and less expensive access to information. An alternative, more recent,

⁹ I Nonaka and H Takeuchi, *The Knowledge-Creating Company : How Japanese Companies Create the Dynamics of Innovation*, (1995). See also: Clarke R. & Dempsey G. "The Economics of Innovation in the Information Industries", Xamax Consultancy Pty Ltd, (April 2004), @ <http://www.anu.edu.au/people/Roger.Clarke/EC/EcInnInfInd.html>

¹⁰ GC Dempsey, *Knowledge and Innovation in Intellectual Property: The Case of Computer Program Copyright*, Unpublished PhD Thesis, Australian National University, (March 1998).

body of theory, information economics, adopts assumptions that are very different from those of conventional economics:¹¹

- tradable items are not scarce;
- one party's possession or use of them does not deprive others of possession and use;
- information is both an output from, and an input to, innovation processes;
- information is difficult to appropriate, because:
 - tacit knowledge cannot be extracted, reproduced, communicated or assimilated quickly or for low cost;
 - codified knowledge may not be reproduced, communicated or assimilated quickly or for low cost; and
 - knowledge embodied in artefacts is, in many cases, not codified, and hence may not be readily extracted.

These assumptions are attuned to the digital era, and they lead to a very different view of innovation from that of conventional economics:

- innovation is mostly cumulative, seldom 'big bang';
- innovation is heavily dependent on contributions by users, adopters, suppliers, and competitors;
- mere imitators, in the absence of 'value-add', contribute little, and are 'free riders' on the innovator's investment; but
- there are many natural protections for innovators, especially the investment and lead-time involved in:
 - the development of tacit knowledge;
 - its conversion into codified knowledge; and
 - development and marketing of competitive products.

The conclusions from an analysis grounded in information economics are therefore fundamentally at odds with those of conventional economics:

- innovators need only limited assistance to be able to overcome hurdles and achieve returns;
- even a 'limited monopoly' hinders cumulative innovation, and its scope and length must be no more than that necessary to avoid stunting the initial innovation;

¹¹ DM Lambertson, *Economics of Information and Knowledge : Selected Readings*, (1971); and GC Dempsey, "Revisiting Intellectual Property Policy: Information Economics for the Information Age", 17:1 *Prometheus* 33 (1999).

- mere imitators must be punished for misappropriation; but
- encouragement must be given to:
 - investigators of innovations;
 - enhancers of innovations;
 - extenders of innovations; and
 - developers of competing innovations.

The justifications that have been used to provide advantages to existing, large information-industry corporations by means of copyright and patent extensions are grossly flawed. The accessibility of information is a crucial factor in innovation, and interventions that proprietise information need to be very carefully designed if they are to provide advantage to genuine innovators. The changes of the last decade have been to the benefit only of non-innovative investors in established intellectual property assets, and have worked very much against new rounds of innovation.

3. Business Models

The preceding section's analysis set the 'macro' context. The purpose of this section is to identify business models that enable for-profit business enterprises to flourish, despite the ceding of much of their potential monopoly power into the content commons.

The term 'business model' is capable of many interpretations.¹² Timmers¹³ refers to a business architecture of products, services, actors and information flows as perceived by a particular business enterprise. The approach of Osterwalder & Pigneur¹⁴ is similarly broad: "three elements ... make up a business model: revenue and product aspects, business actor and network aspects, and finally, marketing specific aspects".

A more constrained and workable interpretation of the term is that a business model is "the method of doing business by which a company can sustain itself -- that is, generate revenue".¹⁵ This paper adopts a variant of Rappa's approach, traceable to Clarke. It interprets a business model as an answer to the question 'Who Pays? For What? To Whom? And Why?'

The various forms of 'eBusiness' that arose following the commercialisation of the Internet in about 1993-95 took a different approach to mainstream business. Many of the 'dot.com' era start-ups lacked a substantive business rationale: "many of these

¹² R Clarke, "Open Source Software and Open Content As Models for eBusiness", *Proceedings of the 17th International eCommerce Conference*, Bled, Slovenia, (21-23 June 2004), @ <http://www.anu.edu.au/people/Roger.Clarke/EC/Bled04.html>

¹³ P Timmers, "Business Models for Electronic Markets" 8:2 *Electronic Markets* (1998), @ <http://www.electronicmarkets.org/modules/pub/view.php/electronicmarkets-183>

¹⁴ A Osterwalder and Y Pigneur, "An e-Business Model Ontology for Modeling e-Business", *Proceedings of the 15th International eCommerce Conference*, Bled, Slovenia, (June 17 - 19, 2002).

¹⁵ R Clarke, "Electronic Publishing: A Specialised Form of Electronic Commerce", *Proceedings of the 10th International eCommerce Conference*, Bled, Slovenia (June 1997), @ <http://www.anu.edu.au/people/Roger.Clarke/EC/Bled97.html>

businesses dismissed standard business models, focusing on increasing market share at the expense of the bottom line. ... A canonical "dot-com" company's business model relied on harnessing network effects by giving products away to build market share (or mind share). These companies expected that by operating at a loss they could build enough brand awareness to charge for their services later."¹⁶

Some dot.coms succeeded, however, and some of those used rather different business models from what had hitherto been the norm. Valuable lists and classification schemes are provided by Bambury,¹⁷ Afuah & Tucci¹⁸ and Rappa. Perspective is added by Shapiro & Varian,¹⁹ which argues that appropriate micro-economic models have long existed, but have long been overlooked.

The following sub-sections consider in turn each of the sub-questions 'Who Pays? For What? To Whom? And Why?'

3.1. Who Pays?

Answers to 'Who pays?' can be classified into three categories: content-consumers, content-providers, and third parties.

3.1.1. Consumers Pay

The mainstream approach is for a stream of revenue to be provided by the consumers of the content. Many variants exist, the most common being **cash payment** (or its equivalent, such as by credit-card) at the time of consumption. Barter (payment in kind rather than cash) and 'knock-for-knock' arrangements also come into play.

An appreciation of business models depends, however, upon a deeper understanding of the nature of reciprocity in markets. The assumption is commonly made that value-exchange is necessarily immediate and reciprocal. There are, however, many circumstances in which value-exchange is not direct and/or is not reciprocal; and these patterns occur frequently in Internet transactions.

In Rheingold,²⁰ attention was drawn to the difference between conventional 'horse-trading' and equally conventional but less-studied 'barn-raising'. On the prairies, a newcomer or a longstanding member of the community who has suffered adversity such as a fire, may be incapable of paying for the materials and labour to build a barn. Winter is approaching, the unprotected hay will quickly deteriorate, and by mid-winter the animals will have starved to death.

When neighbours gather on a Saturday to build the much-needed barn, they may be acting out of altruism (which is disparaged by conventional economics as evidence of a 'gift economy'). But they may be participating in a market describable by an appropriate economics. They may be relying on **deferred reciprocity**, knowing that

¹⁶ Wikipedia entry, accessed 16 November 2006. See also J Cassidy, *Dot.con: How America Lost its Mind and Its Money in the Internet Era*, (2002).

¹⁷ P Bambury, "A Taxonomy of Internet Commerce", 3:10 *First Monday* (October 5, 1998), @ http://www.firstmonday.dk/issues/issue3_10/bambury/index.html

¹⁸ A Afuah and C Tucci, *Internet Business Models and Strategies*, (2001).

¹⁹ C Shapiro and HR Varian, *Information Rules: A Strategic Guide to the Network Economy*, (1998).

²⁰ H Rheingold, *The Virtual Community: Homesteading on the Electronic Frontier*, (1993).

one day they'll be in a similar position (or, indeed, if they enjoyed similar support at some time in the past, that they're repaying an old debt). Or they may perceive it to be a transaction in 'community economics', with **indirect reciprocity** existing in the form of a benefit that will be received in a different form, from someone else in the community. The 'cooking pot' metaphor²¹ is another means of explaining indirect reciprocity. Yet another is the 'honey-pot' metaphor to describe contemporary electronic publishing.²²

With the advantage of a new, or an old, but in either case an alternative, economics, other mainstream, non-cyberspace examples of deferred and indirect reciprocity are easy to find, such as loans and subscription fees (which involve deferred reciprocation); gratis access for limited time or functionality but thereafter for-fee (conditional deferred reciprocation); and debt-factoring (indirect reciprocation).

3.1.2. *Producers Pay*

There are various circumstances in which the producer pays, e.g.:

- government agencies deliver content and services in accordance with their mission statements;
- business enterprises disclose information under a legal obligation; and
- individuals publish under 'vanity press' arrangements.

An example of unintended producer-pays is pre-publication in anticipation of indirect reciprocation or deferred reciprocation. Additional circumstances discussed in later sub-sections include cross-subsidy, loss-leaders, and the generation of network effects.

3.1.3. *Third Parties Pay*

The most common examples of third parties are **advertisers and sponsors**. These are organisations that perceive sufficient benefit in exposure, brand-building or referrals of customers, to provide the funding for the goods or services in question.

The business of advertising on the Web has changed significantly since about 2000. A company called Overture (which was taken over by Yahoo! in 2003) established a scheme whereby advertisements were displayed in users' browser-windows, and those that were clicked on resulted in a payment by the advertiser to the organisations that caused the ad to appear there. This is sometimes referred to as a 'pay per click' scheme. Such schemes are generally dependent on surreptitious mechanisms, commonly known as 'adware', a sub-category of spyware. Google's AdWords is a well-known application of the idea.

²¹ RA Ghosh, "Cooking pot markets: an economic model for the trade in free goods and services on the Internet" 3:3 *First Monday* (March 1998), @ http://www.firstmonday.dk/issues/issue3_3/ghosh/index.html

²² R Clarke, "Key Issues in Electronic Commerce and Electronic Publishing", *Proceedings of the Conference Information Online and On Disc*, Sydney, (19 - 21 January 1999), @ <http://www.anu.edu.au/people/Roger.Clarke/EC/Issues98.html>

Pay per click advertising has been further refined, in two key ways. The first is that advertisers pay intermediaries in order to get priority-placement of their ads. The second is that the intermediaries are achieving better targeting of ads, by analysing the content of the web-page that the user is about to have displayed and inserting ads that bear some relationship to the apparent topic the user is interested in.

A further level of sophistication has been added. Owners of web-sites can set space aside on their pages into which advertising intermediaries can insert ads. The process is a form of Web syndication, and participating web-sites are referred to as 'affiliates'. Google's AdSense is a well-known application of the idea.

Another form of third-party funding is **patronage**, where the benefits to the payer are psychic in nature, as arises with commissions of artistic and musical works, and donations to community service organisations. A current example of significance is the support for the open-content encyclopaedia Wikipedia.

A further category is vital, and yet often overlooked. The term '**subsidy**' is derided by conventional economists, and only tolerated in circumstances in which 'market failure' exists. Yet, despite their urgings, significant proportions of all national economies involve 'transfer payments' from one organisation or person to another that are not directly linked to reciprocation by the payee.

A particular category of subsidy that economists find less distasteful is '**cross-subsidy**'. This refers to subsidy within an organisation, whereby it funds one 'losing' activity from the proceeds of another, more financially successful activity. A particular version of 'cross-subsidy' is precisely how all 'big business' works. In the terms used by the Boston school of consultancy, 'cash cows' (parts of the business currently exploiting monopolies to extract super-profits) are used to fund 'rising stars' (which currently need cash injections but which are expected to become future 'cash cows'). The process of cross-subsidisation, whether within a conglomerate, in venture capitalism, or by the personally wealthy, is described by the dignified term 'portfolio management'.

3.2. For What?

The foundational 'things' for which payments are made are **goods and services**. Some categories of content-consumer are particularly concerned about the content's **quality**, and will pay for it. The notion of 'quality' is rich, and can encompass reliability and timeliness as well as accuracy and precision.

The next level of development is payment for '**value-add**' to goods and services. One example is information that is maintained on an ongoing basis, so as to be up-to-date when the user accesses it. Another is customisation of content in order to fit the user's specific needs. For-profit publishers do many things. A major reason that they have not been 'disintermediated' out of existence, as some pundits suggested in the mid-1990s would happen, is that they have expertise that they can apply, which adds value to content.

But 'value-add' can be subtle, and can result in a single underlying product giving rise to a range of related products sold through different channels to different purchasers

with different needs. The notion of '**differentiated products**' and specifically the versioning of information is addressed in Shapiro & Varian.²³

A broader classification is '**complementary goods and services**'. If the product itself doesn't generate enough revenue, a creative person can earn from adjacent activities. Standard products, even digital ones, often don't have a perfect fit to the customer's needs, and there's money to be made in customisation, advice on application of the content to the specific need, and the training of staff in its use. Moreover, many products don't have to be ephemeral, so they can be renewed, and the theme re-worked and made to appear relevant weeks, months and years later.

A related notion is the '**after market**' for goods and services that consumers need in order to sustain a prior investment. Many categories of content require, or can be conceived so as to require, something equivalent to consumables, repairs and maintenance, updates, and accessories.

An important function of gratis content provision, such as tutorials and white papers, is the generation, maintenance and projection of **reputation**. In this context, reputation is the perception that a business enterprise or individual has high standing in a particular domain. This gives rise to referrals, and to the further perception that the business is worth not only hiring, but hiring at a relatively high rate. The 'loss-leader' notion that originated in (or, rather, outside) retail shops has digital applications.

A relevant body of theory is 'network economics'.²⁴ In conventional markets, the exchange-value of a tradable item is forced downwards as the quantity available for purchase increases relative to the demand (e.g. land, iron ore, umbrellas). For some categories of tradable item, on the other hand, the exchange-value instead rises as they become more common, because the benefits to owners increase (e.g. fax machines, mobile/cell-phones). In such circumstances, the basis of value is not relative scarcity, but critical mass. Applying that theory, **network effects** can be sought by subsidising one set of goods and services in order to encourage consumer adoption of some other revenue-generating goods and services. An example celebrated by business analysts is Apple's use of its iTunes service not to make money by selling music (which was set to become a competitive market), but by stimulating sales of its music player, the iPod (which had competitive advantages and consequently enjoyed a significant period of market dominance).

3.3. Why?

Answers to 'who pays?' and 'for what?' need to be complemented by an appreciation of the motives that the payers have for parting with their money.

A major driver of revenue-generation for many corporations is **necessity**. This arises because a consumer is 'locked-in' to the use of a sole-source paid service. Classic examples include the after-markets for ink-cartridges for printers and copiers, and for 'genuine spare parts'.

²³ Supra note 19, Chapter 3, pp. 53-81.

²⁴ N Economides, "The Economics of Networks" (1996) 14:6 *International journal of industrial organization* 28.

Another mainstream approach is **fear**, which is the mechanism that the music industry has sought to inculcate by threatening court-action against consumers of unlicensed digital music, ensuring that access to the courts is slow and highly expensive, and publicising the court-actions, the delays and costs, and the out-of-court settlements. More accessible for most producers, but less effective, is the effects of **conscience**, which is what the shareware approach depends upon. Intermediate between the two are the concepts of **duty and fairness**, which stimulate a proportion of people to, for example, purchase CDs of music that they have already downloaded and played multiple times.

The more constructive approach is to focus on the '**perceived value**' of the content by the payer. There are several sub-categories:

- the most straightforward is value-for-money, in the sense of the **lowest available price**. For commodities and standard-products, consumers in particular are highly price-sensitive, and very cheap and especially gratis sources will commonly undermine less cheap channels;
- there are many circumstances, however, in which the **costs of acquisition** can be considerable, or the '**whole-of-life**' costs may be more significant than the purchase-price. Careful design of content-related goods and services can encourage consumers to perceive a nominally less cheap alternative to actually be the cheaper one;
- for many purchasers, there is **the real or imagined need for speed**. This may arise from a genuine urgency, or from fashion. Live event feeds, news, and postings about 'now' 'happenings' can attract premiums from purchasers out of all proportion to the apparent value of the content;
- akin to the attraction of timeliness is **uniqueness**. It's easy to underestimate the allure of the personal signature, the 'first day cover' and the 'original record-sleeve'. In the digital era, the challenges of achieving uniqueness are greater than ever before, but such techniques as combining something physical with something digital will ensure survival of the technique;
- in some contexts, some **quality** factor or factors can be the key reason why a purchaser pays. Strategies are available to content-providers to put base-level content in the commons, but charge for higher resolution, larger, extended, or 'for commercial re-use' versions of the same material. Other aspects include reliability and security: consumers would prefer not to have to search the net, download 10 copies to find 1 copy of sufficient quality, then scrub their machine to get rid of the malware that came with some of the more dubious copies.

3.4. To Whom?

This section has in effect presented a tool-kit whereby a rich set of possible business models can be created by combining features from each sub-section. There are various channels whereby the revenue reaches the producer.

Most basically, a content-provider may collect revenue directly from the payor. Alternatively, an organisation further along the value-chain may be better positioned to collect it. In that case, a contract is needed, in order to establish a relationship such as principal-agent, wholesaler-retailer, or franchisor-franchisee.

Some intermediaries perform value-adding functions, such as bundling or aggregating goods and services from several providers into a package that is of interest to some category of consumers. The bundling may be of payment services, which gives rise to the categories of 'transaction aggregator' and 'invoice consolidator'.

4. Key Opportunities

The preceding section catalogued aspects of business models some of which are of long standing, and others of which are modern inventions stimulated by the technical and business architecture of the Internet and Web. This section applies the palette of possibilities by suggesting opportunities for commons-based for-profit businesses.

The terms offered by Google's AdSense and its ilk are such that advertising appears unlikely to provide a significant revenue-flow to any but the luckiest content-originator. It may have a role to play in cost-defrayal, however, particularly for community-based organisations whose primary costs are the technical infrastructure to prepare and deliver the content.

Fundamentally, a commons-based enterprise has to identify customers or customer-segments, appreciate their needs, structure offers that satisfy those needs, and gently discourage customers from over-using gratis sources of much the same product. Rather than achieving this by lock-in or fear, it needs to be done by delivering perceived value.

One key approach is 'differentiated products'. There are many ways in which multiple versions of much the same content can be produced. The timeliness of release, the provision of extras, bundling with products from strategic partners, and search-facilities on archives are examples straight out of the text-book.²⁵

Another important principle is that there are times when the market needs to be encouraged to grow, without much attempt to extract revenue. Once a lot of people want whatever is on offer, their price-resistance is lower. If a bank can increase ATM fees once its customers are habituated to using the facility, a digital content provider can do likewise. The music industry avoided learning that simple rule for far too long, but since about 2005 it has begun to make music readily available in digital form, and it may move to price-points that most consumers are prepared to pay.

The music industry debacle of the last 5-7 years teaches another lesson as well: a content-provider needs to be confident that they are delivering value-for-money, and that customers will understand that and pay for it. Publishers perform a whole host of functions, and open content providers have to ensure that each of the various customers for their product is getting the form of value-added content that they need.

An important source of funding is the various categories of what conventional economists would be likely to see as 'fairy godmothers'. Many successful businesses cross-subsidise their content-provision from other business lines. These most

²⁵ Supra note 19.

commonly arise from application of the expertise that is expressed in the content. Put simply, gratis content is seldom 'codified knowledge'. It does not give expertise away, but rather advertises its availability. This suggests a need to focus on things that are harder to appropriate than mere bits. For example, expertise in applying eLearning materials may be harder to replicate than eLearning materials themselves.

For these reasons, support services, and professional and consultancy services, are common lines of business from which content-provision is cross-subsidised. Sites that start as 'vanity press' can migrate to 'sales support tools', and even graduate to being the primary channel for customer-acquisition. The author's web-site, launched in February 1995, went through that transition. Since about 2000, many clients have appeared on my digital doorstep who had never heard of me until a search-engine put me on their screens. The steady and ongoing growth in hits to an accumulated 20 million, and the large proportion of the author's consultancy revenue that derives from this form of marketing, evidence the symbiosis of content commons and the business of selling expertise.

5. Conclusions

Corporations that have achieved monopoly power over content have sought to sustain and extend their power, and to represent alternative approaches as unworldly and their own as something other than corporate welfare. This paper has argued that, far from being a socialist plot, the notions of open content and a content commons provide a realistic basis for business. Rather than encouraging corporations to squat fatly on wealth, the open approach stimulates more activity and further rounds of innovation and wealth generation.

This paper undertook an examination of business models appropriate to the new context. This demonstrates that the fear that de-propertisation will undermine business is unfounded. There are many ways in which for-profit organisations can operate successfully, both contributing to and leveraging off the content commons. Open source and open content are not naïve 'gift economies'. They are describable by economic models, and are harbingers of a new wave of business activity that leaves naïve economic rationalism in its sidewash.