

REGULATION AND BUSINESS MODELLING IN A FULLY CONVERGED DIGITAL ENVIRONMENT – A WORK IN PROGRESS

DUNCAN GILES

Special Counsel
Freehills

Introduction

In the digital age, what is ‘television’, what is ‘radio’? Is there any continuing utility in describing the ‘print media’ as the ‘print media’, when its activities are increasingly online, the ‘print’ element is becoming increasingly peripheral¹ and the more significant issues generally relate to ‘content’ elements (eg defamation, privacy) rather than the medium of print on paper?

For the 60 years since the invention of the electronic computer, the ability to digitise both content and media has been looming as the most significant development in the history of human communication. As real convergence rapidly gathers pace, traditional classifications of products, services and industries in the tautological ‘media and communications’ sector become more and more confusing, irrelevant and misleading.

This paper analyses the historical development of communication, the reasons why human communication in all its forms has now reached a watershed through the standardisation provided by digitisation, and proposes, as discussion starters, some possible regulatory and business responses aimed at significantly enhancing the social return from full convergence.

It is argued that the standardisation provided by digitisation not only allows, but requires, the simplification and harmonisation of regulation across the industry. The analysis also allows for a fresh approach to business modelling and revenue identification.

This paper is a work in progress designed to encourage debate about possible approaches to enhancing regulation and business modelling in a converged environment. Details of further resources are available at the end of the paper.

Approach

The analysis starts with a review of the historical development of the communications / media sector from pre-history to date. In this approach the concept of ‘content’ is rigorously separated from that of ‘media’. Content is something that can be delivered using a medium. Content is not a medium and a medium is not content. They are entirely separate concepts. Content is anything that stimulates the sense (or senses) of a recipient² and a medium is anything that is used to get content to the recipient (eg air, paper, copper, glass, etc).

¹ See for example, Rupert Murdoch’s now famous presentation to the US Society of Newspaper Editors in New York in April 2005, available at http://www.newscorp.com/news/news_247.html, quoting Philip Meyer’s prediction in his book ‘The Vanishing Newspaper’ that printed newspapers may be a thing of the past by 2040.

² Most usually the eyes and/or ears of a human recipient, but this analysis is designed apply equally to any of the five human senses, and also to the input of information to machines (as the machine analogue of a human sense.)

A brief history of human communication

Table 1 – Industry Development

Date	Content	Media	Consumers	Industry
35000BC	Pictures	Rock & pigment	Few	Art
3300BC	Pictures (as text)	Tablet & stick	Few	Scribes
2000BC	Text	Papyrus & ink	Few	Records
1476	Text	Paper & ink	Many	Print
1826	Pictures	Paper & light sensitive chemicals	Few	Photographic
1840	Code	Wire	Single	Telegraphic
1876	Audio	Wire / air / cable	Single	Telecommunications
1877	Audio	Tin & wax	Few	Recording
1894	Audio	Air	Mass	Radio
1895	Silent movies	Film	Many	Silent Film
1923	Sound movies	Film	Many	Film
1929	Sound movies	Air	Mass	Television
1940s	Information	Computer	Individual	Digital computing
1960s	Information	Wire / cable	Mass	Computer networks
1994	Most	Any carriage service	Mass	Commercial Internet
2020?	Any	Any digital media	Any	All converged

Table 1 shows each major step in communications (from the dawn of art and emergence of scribes and record creation to the invention of radio, television and the Internet) as the fulfilment of a desire of a content creator to communicate content using a medium so as to stimulate at least one sense of a consuming third party.

This analysis illustrates that throughout history the desire to produce and disseminate content has been satisfied through either the use or invention of a new medium specific to the intended use of the content ('newspapers', 'radios', 'TVs', etc). Note that distinct industries have been created at each stage until very recently (ie the 1940s), when the digitisation of both content and media has enabled ubiquitous standardisation and the collapse of industry boundaries.

The creation of each new industry has also historically been followed by the creation of a regulatory environment specific to that industry as indicated in Table 2:

Historical regulatory response

Table 2 – Regulatory framework

Date	Industry	Regulation
35000BC	Art	No law?
3300BC	Scribes	No law?
2000BC	Records	No law? > Roman / common law of defamation – Slander > Libel

1476	Print	Common law obscenity Licensing Act 1662 (UK)>Copyright Act 1709 (UK)>Copyright Act 1911(UK) Australian Federal customs and State law
1826	Photographic	Common law obscenity Copyright adapted to accommodate photos
1840	Telegraphic	Post and Telegraph Act 1901 (78 pages)
1876	Telecommunications	Wireless Telegraphy Act 1905 (7 pages) Telephonic Communications (Interception) Act 1960 (8 pages) Telecommunications (Interception and Access) Act 1979 (293 pages) Radiocommunications Act 1992 (407 pages) Telecommunications Act 1992 (638 pages) Do Not Call Register Act 2006 (55 pages)
1877	Recording	Copyright adapted to accommodate
1894	Radio	Wireless Telegraphy Act 1905 (7 pages) Broadcasting Act 1942 (84 pages) Broadcasting Services Act 1992 (866 pages)
1895	Silent Film	Cinematograph Act 1909 (UK) Copyright Act 1912 Commonwealth Film Censorship Board 1917
1923	Film	Copyright Act 1933 Copyright Act 1935
1929	Television	Copyright Act 1963 Copyright Act 1968 (673 pages) Broadcasting Act 1942 (84 pages) Broadcasting Services Act 1992 (866 pages)
1940s	Digital computing	-
1960s	Computer networks	Privacy Act 1988 (259 pages) Freedom of Information Act 1992 (144 pages) Classification (Publications, Films and Computer Games) Act 1995 (124 pages)
1994	Commercial Internet	Spam Act 2003 (59 pages) + Piecemeal amendments to above
2020?	All converged	All combined into a single 'Content and Media Regulation Act'?

The current regulatory environment for communications and media in Australia (and elsewhere) is therefore an extremely complex patchwork, with extensive duplication and inconsistencies³, which is ripe for simplification. Digitisation provides the spur and the incentive to do so.

³ See, for example, Attachment 1 to this paper (available at www.2020vision.wetpaint.com) which lists selected definitions from a number of the current relevant statutes listed above.

A new approach to regulation and business modelling

Digitisation

Until the advent of the digital computer in 1946, any content delivered using any one of the specific media just described was generally exceedingly difficult or impossible to deliver using another medium, because the medium was designed specifically to carry that content. Audio content could not be delivered in print, moving pictures could not be (usefully) copied, etc.

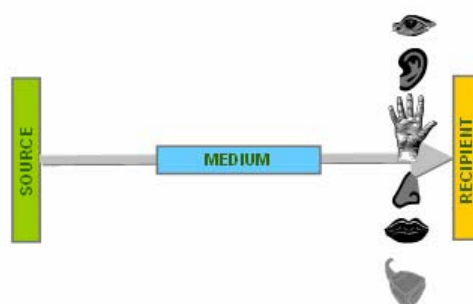
The ability to digitise and store any content on a computer radically changed the position, allowing all content to be reduced to a standard digital form in any computer (eg mainframes, PCs, PDAs, phones, etc). Standardisation of content through digitisation enabled all content to be manipulated by computers, but the stored content was still only available to a limited class – the operator, and a small group of others, such as expensively networked other operators.

It was not until the Internet was conceived in 1969, and commercialised in 1994, that the boundaries between traditional media (in the literal and wide sense of ‘any communication channel’) began to seriously collapse because all standardised content could henceforth also be communicated in a standardised way to all recipients.

The central thesis of the paper is that in a fully digitised environment, where everything can be reduced to, and transmitted as, ‘0’s and ‘1’s; it is not only possible, but preferable, to view the ‘media and communications’ sector as simply:

the communication
of content
using a medium
to stimulate at least one sense of a consumer.

Figure 1 – Simplified content delivery



In the context of this background, a fresh ‘first principles’ approach can be adopted to both regulation and business modelling of heritage and emerging industry structures across the whole spectrum of human communication.

Adjusting the regulatory framework

As digitisation now enables standardised and error free:

- creation
- transmission
- storage; and

- duplication

of all content, the existing conceptual barriers between different types of ‘media’ are becoming increasingly irrelevant, while fundamental social policy considerations remain unchanged (and may now be applicable to new content and or new media). At a high level, these considerations might include:

Table 3 – Social policy consideration examples

Ownership	Consumer protection	Offensive content
▪ Content	▪ Spam	▪ Defamation
▪ Creation	▪ Gaming	▪ Blasphemy
▪ Acquisition	▪ Censorship	▪ Free speech
▪ Use	▪ Child protection	Diversity
▪ Media	▪ Trade practices	▪ General
▪ Installation	▪ Universal service	▪ Australian content
▪ Acquisition	▪ Emergency services	▪ Children's content
▪ Cross media	▪ Billing	Bias
▪ Foreign	▪ Regional & Remote	Security
▪ Access	▪ Tobacco	▪ Network security
▪ Interception	Information sharing	▪ Data security
Syphoning / Hoarding	▪ Network information	▪ Authentication
Privacy	▪ Operator information	▪ Confidentiality
Competition	▪ Directory information	▪ Non-repudiation
Technical Standards	Other?	

A ‘clean sheet’ and genuinely technologically neutral approach could therefore be taken to regulating the industry focusing on the *communication of content* using *media* (Figure 1).

The first step in this approach would involve merging all existing relevant regulation including the:

- Copyright Act 1968
- Telecommunications (Interception and Access) Act 1979
- Privacy Act 1988
- Telecommunications Act 1992
- Broadcasting Services Act 1992
- Radiocommunications Act 1992

- Freedom of Information Act 1992
- Classification (Publications, Films and Computer Games) Act 1995
- Spam Act 2003, and
- Do Not Call Register Act 2006

into a single statute (a ‘Content and Media Regulation Act’).

This single Act would initially recreate precisely the same obligations as currently exist across all 10 pieces of legislation, but would be structured in three importantly different ways:

1. all terminology would be defined in a single place, and a standard way;
2. all existing regulation would be re-framed in terms of ‘content delivered over media to recipients’; and
3. simple plain English topic headings (starting with those identified in Table 3 above) would group similar areas of regulation together, enabling easy access to all regulation about a particular issue, and the identification of any unique issues for particular situations (for example, Australian content requirements would might apply (initially at least) only to content delivered over the Broadcast Services Bands; and restrictions on foreign ownership might not currently apply to any medium).

On initial implementation, the Act would therefore regulate in precisely the same way as before its enactment, but in a simpler and more easily accessible way.

Over time, the single Act would be:

- continually reviewed to monitor and address unnecessary inconsistencies in approach (which would also become much more evident by the simple act of locating all similar regulation in one place); and
- amended to address new and emerging issues in a logical and completely technologically neutral way (eg to what extent should the standardised censorship provisions extend to haptic (touch) content when that becomes available).

Regulatory benefits

The benefits of this regulatory approach would include:

- much greater simplicity in approach and regulation;
- a truly harmonised and consistent regulatory regime;
- greater accessibility and transparency for industry and lawyers;
- identification of all inconsistencies in approach (whether arising unintentionally or through deliberate policy – eg anti-syphoning provisions) and the justification or removal of such inconsistencies; and
- lower compliance costs.

Business modelling

As explained in the presentation accompanying this paper, entrepreneurs may be able to utilise the simplified approach proposed to content delivery in a number of ways including to:

- understand historical industry development and anticipate future industries
- conduct cross industry comparisons in a standardised way
- better analyse revenue sources and funding models (eg trade in personal information)

- identify and assess the impacts of emerging areas like:
 - VOIP
 - IPTV
 - social networking and virtual worlds
 - public interactive video
 - location-based services
 - haptic content
- predict likely regulatory action and relaxations (eg slander, USO, emergency call service)

Discussion questions

As noted at the outset, the purpose of this paper is merely to encourage debate about possible approaches to enhancing regulation and business modelling in a converged environment.

Many steps in the initial framework proposed are likely to be missing, incomplete or just plain wrong. Feedback is therefore more than welcome on any aspect, and particularly on the following questions:

Is the approach, or any parts of it, useful in practical regulatory or business modelling decisions? If not, why not?

What are the pros and cons of using the approach to develop a single ‘Content and Media Regulation Act’?

Is an additional ‘element’ required in to deal with the ‘intent’ of the content (eg ‘news’, ‘entertainment’, ‘data for processing’)?

If so, is it possible to formulate this element in an objective, or even standard, way?

Is it conceivable that other forms of value, such as providing personal information instead of a monetary payment, could be introduced into the mix?

A interactive blog and wiki has therefore been established at www.2020vision.wetpaint.com to encourage a spirited debate on the issues raised in this paper, and developed in the wiki.

I urge you to contribute any thoughts you may have.

duncan.giles@freehills.com

T +61 2 9225 5954

www.freehills.com

M +61 408 455 322