3. Media Convergence and the Transformed Media Environment

Contents

Summary 63
Media convergence and the transformed media environment 64
  Increased access to high-speed broadband internet 66
  Digitisation of media products and services 66
  Convergence of media platforms and services 67
  Globalisation of media platforms, content and services 68
  Acceleration of innovation 69
  Rise of user-created content 70
  Greater media user empowerment 71
  Blurring of public/private and age-based distinctions 73
Media convergence and ‘broken concepts’ in legislation 74

Summary

3.1 This chapter outlines factors in the media environment that necessitate reform of media classification and the development of a new National Classification Scheme. It identifies the range of trends associated with media convergence, including: increased access to high-speed broadband internet; digitisation; globalisation; accelerated innovation; the rise of user-created content and the changing nature of the media consumer; and the blurring of distinctions between public and private media consumption.

3.2 The chapter also draws attention recent work undertaken by the Australian Communications and Media Authority (the ACMA) on ‘broken concepts’ in existing broadcasting and telecommunications legislation and their relevance to media classification.

3.3 The current classification scheme is inherently difficult to adapt to a convergent media environment, in part due to the different content regulation frameworks which results in a fragmentation of administrative oversight, and also because of the division of authority between the Commonwealth, the states and territories. Piecemeal responses to changes in technologies, markets and consumer behaviour have compounded existing ambiguities, creating uncertainty for both consumers and industry.
Media convergence and the transformed media environment

3.4 Convergence has been defined as:

The interlinking of computing and ICTs, communication networks, and media content that has occurred with the development and popularisation of the Internet, and the convergent products, services and activities that have emerged in the digital media space. Many see this as simply the tip of the iceberg, since all aspects of institutional activity and social life—from art to business, government to journalism, health and education, and beyond—are increasingly conducted in this interactive digital media environment, across a plethora of networked ICT devices.¹

3.5 The ACMA defines media convergence as ‘the phenomenon where digitisation of content, as well as standards and technologies for the carriage and display of digital content, are blurring the traditional distinctions between broadcasting and other media across all elements of the supply chain, for content generation, aggregation, distribution and audiences’.²

3.6 The ACMA identifies a key consequence of convergence for consumers as being a substantial increase in ‘the availability of media content online—from broadcasters, news organisations, social media sites, iTunes and YouTube, to name a few of the main media sources—on an increasing array of connected devices and screens. The choice of devices for accessing the internet and 3G and wireless broadband networks is also giving users flexibility in how and where they consume media’.³

3.7 In their book Media Convergence: Networked Digital Media in Everyday Life, Graham Meikle and Sherman Young observe that convergence can be understood in four dimensions:

- technological—the combination of computing, communications and content around networked digital media platforms;
- industrial—the engagement of established media institutions in the digital media space, and the rise of digitally-based companies such as Google, Apple, Microsoft and others as significant media content providers;
- social—the rise of social network media such as Facebook, Twitter and YouTube, and the growth of user-created content; and
- textual—the re-use and remixing of media into what has been termed a ‘transmedia’ model, where stories and media content (for example, sounds, images, written text) are dispersed across multiple media platforms.⁴

¹ T Flew, New Media: An Introduction (3rd ed, 2008), 22.
³ Ibid.
⁴ G Meikle and S Young, Media Convergence: Networked Digital Media in Everyday Life (2011).
3.8 While technological change is a constant feature of modern economies, the changes associated with convergence, digitisation and networking have been seen as providing the basis for a new ‘techno-economic paradigm’. This is a term developed by innovation economists to refer to 50-year cycles of changes to the technological and knowledge base of societies. A techno-economic paradigm is defined as:

A cluster of inter-related technical, organisational, and managerial innovations whose advantages are to be found not only in a new range of products and systems, but most of all in the dynamics of the relative cost structure of all possible inputs to production.5

3.9 Historically, the major techno-economic paradigms have been: the Industrial Revolution (1780s–1830s); the Age of Steam and Railways (1840s–1870s); the Age of Steel, Electricity and Heavy Engineering (1880s–1920s); the Age of Oil, the Automobile and Mass Production (1930s–1980s); and the Age of Information and Telecommunications (1990s–present).6

3.10 The rise of a new techno-economic paradigm is invariably disruptive, as it challenges established business models, industry structures, organisational frameworks and public policy settings. As it generates losers as well as winners, and disrupts the institutional status quo associated with established institutional and social arrangements, there is invariably conflict and disagreement in the process of social adaptation to technological and economic change.

Each great surge of development involves a turbulent process of diffusion and assimilation. The major incumbent industries are replaced as engines of growth by new emerging ones; the established technologies and the prevailing paradigm are made obsolete and transformed by the new ones; many of the working and management skills that had been successful in the past become outdated and inefficient ... Such changes in the economy are very disturbing of the social status quo.7

3.11 The Convergence Review has also drawn attention to the extent to which convergence is having a transformational impact on media and communications industries, and the need for radical changes to the policy framework in response to such transformations:

Australia’s communications sectors are undergoing profound change as a result of convergence. Existing regulatory arrangements built around industry ‘silos’ are challenged by new technologies, market structures and business models. In this committee’s view it is likely that revolutionary change to the existing policy framework will be needed to respond to convergence.8

---

7 Ibid, 199.
3.12 The expectation of major changes to the architecture of media regulation arising from convergence also came through strongly in responses to the Issues Paper. In particular, many respondents pointed to the need for a more platform-neutral approach to media content regulation and classification that would be based upon content rather than on delivery platform. Respondents questioned assumptions that one medium has more effect on media users than another and should therefore be subject to more stringent forms of content regulation.

3.13 The concept of platform neutrality is therefore an important one in the context of media convergence. It entails a shift away from platform-specific modes of content regulation, premised upon the structural separation of industries and content into particular technological ‘silos’, that have been the basis of media policy in Australia and elsewhere:

> Whilst technology has eroded the traditional divisions between free-to-air (FTA) television and the internet, newspapers and websites, radio and streaming services, our policy and regulation is still based on the industry and service structures of the early 1990s.10

**Increased access to high-speed broadband internet**

3.14 As of December 2010, there were 10.45 million active internet subscribers in Australia, of which 8.15 million were household subscribers and 2.3 million were business and government subscribers. This figure had grown by 17% from 8.95 million in December 2009. Nearly 15.1 million Australians aged 14 or over (83% of the population) went online during the December quarter of 2010, and 71% of internet users went online at least once a day. Approximately 3.1 million Australians aged 14 or over accessed the internet via a mobile phone handset during December 2010, as compared to 1.9 million during December 2009.

3.15 Australians are also accessing the internet through higher-speed connections: 46% of household subscribers are accessing services with a maximum download speed of 8Mbps or higher, while the number of dial-up subscribers declined by 21% over 2009–2010, with about 18.8 gigabytes of data being downloaded per internet subscriber in December 2010, up by 28.8% on the previous year, and with major growth in the downloading of video content.11

**Digitisation of media products and services**

3.16 Associated with rapidly increasing internet usage by consumers and business is the digitisation of all media products and services. It is estimated that 60 hours of video are uploaded every minute onto YouTube, and four billion videos are viewed every day.

---

11. All figures are taken from Australian Communications and Media Authority, *The Internet Service Market and Australians in the Online Environment* (2011).
3. Media Convergence and the Transformed Media Environment

worldwide from that site alone. In Australia, there are an estimated six million YouTube users, watching over 200 million videos per month. The Apple iTunes store now sells almost 10 million songs per day, making it by far the major music retailer worldwide.

3.17 At a more general level, Deloitte Access Economics estimated that in 2010, the direct contribution of the internet to the Australian economy was approximately $50 billion, or 3.6% of Australia’s Gross Domestic Product. It found that 190,000 people were directly employed in occupations related to the internet, ranging from internet hardware and software industries to online information services, IT software and consulting, online advertising, government and e-commerce activities. This report also indicated that benefits to households, business and government arising from the use of the internet to access, operate, purchase and deliver goods, services and information were valued at about $80 billion in 2010.

**Convergence of media platforms and services**

3.18 Convergence of media platforms and services is now a feature of all established media, as well as being a core feature of new media. In the case of news media, for example, the top five Australian online news sites all rank among the top 25 Australian websites in terms of site visits, and an estimated 4.35 million users per month access content from at least one of these sites. For all of these media organisations, their digital content services are now very much at the heart of their news operations, and it no longer makes sense to maintain platform-specific organisational practices.

3.19 At the same time, media convergence has increased the tendency towards media globalisation. In its submission, Telstra observed that, over the period from October 2009 to October 2010, the iTunes site attracted four times the number of video downloads of the largest Australian providers (ABC iView, Yahoo!7 and NineMSN), and that its viewers spent over 10 times longer on iTunes than on the equivalent Australian sites.

3.20 Media convergence has major policy consequences. In its review of policies for audio-visual media, the Organisation for Economic Co-operation and Development (OECD) identified four fundamental changes in the media policy environment in the context of convergence:

- media policy needs to be premised upon content abundance and increased media competition, rather than upon distribution scarcity and monopolistic or oligopolistic media markets;

---

15 Telstra, *Submission CI 1184*. 
• technological changes generate new challenges for maintaining technology-neutral or network-neutral media regulations;
• media regulations can have unintended consequences in advantaging or disadvantaging some platforms, services and providers as compared to others engaged in comparable activities; and
• media markets have become more international, and national regulations may not be compatible with these international media and communications markets.  

3.21 The OECD therefore proposes as a guide to developing policy and regulatory instruments in a convergent media environment that:

New developments do not imply that existing regulations need to extend their coverage over other platforms and services ... [I]t is important that instruments used do not hinder the positive developments and aspects of convergence while also being effective, robust and flexible.  

Globalisation of media platforms, content and services

3.22 The globalisation of media platforms, content and services is also a critical feature of the convergent media environment. At one level, it can be argued that media globalisation is not a new phenomenon. Hollywood movies and American television programs were a feature of the global media landscape for most of the 20th century, and this led to extended discussions worldwide about the risks of cultural domination and ‘cultural imperialism’.

3.23 At the same time, local audiences have frequently displayed a preference for culturally relevant local media content where it is available. In the Australian context, television ratings data consistently show that locally-produced programs attract the largest TV audiences.

3.24 What has changed has been the extent to which digital media content can be sourced, distributed and accessed from any point in the world to any other point in the world. This has led to the rise of content distributors such as YouTube, and media platforms such as Apple iTunes and Android Market, that sit across national boundaries.

17 Ibid, 18.
19 In the week of 3–9 July, 2011, for example, there was only one imported television program in the top 20 list—the British drama series Downton Abbey—while programs that were topping the TV ratings included local productions such as Winners and Losers, Masterchef and Australia’s Got Talent. OzTAM, Consolidated Metropolitan Top 20 Programs: 5 City Ranking Report—Free To Air Only, Week 28, 2011 <http://www.oztam.com.au/documents/2011/OzTAM-20110703-EMetFTARankSumCons.pdf> at 20 July 2011.
3.25 For much of the 20th century, media regulations could be nationally based, as media services largely operated within existing territorial jurisdictions, and were therefore clearly subject to the laws and regulations of a single nation-state, even when they operated as multinational corporations. In describing the resulting internationalisation of content distribution in relation to the mobile applications (‘apps’) market, the ACMA observed that ‘the mobile applications market functions on both a national and global scale, and this has implications for regulation in Australia ... App stores ... are all based overseas ... [and] app developers are also based in multiple international jurisdictions.’

3.26 In the 21st century, a range of network-based media platforms and services operate on a global scale in real time since, as the OECD has observed, ‘the Internet has achieved global interconnection without the development of any international regulatory regime’.

3.27 This uncoupling of global internet-based media and national legal and regulatory systems has important implications for all forms of media content regulation in Australia, as is the case worldwide. As noted by Associate Professor Kate Crawford and Professor Catharine Lumby in their paper, The Adaptive Moment:

Nation state governments clearly have a remit to enforce the laws of their country and to protect public policy priorities when it comes to cultural and social parameters. Their ability to enforce this remit is restricted due to the sheer volume of media content as well as the decentralisation and vast number of media producers.

Acceleration of innovation

3.28 There is an accelerated rate of innovation in the context of a knowledge-based economy, in which ideas and innovation are increasingly the drivers of economic growth. The World Intellectual Property Office has observed, for example, that the number of patent applications worldwide has grown from about 1 million in 1995 to 1.9 million in 2008, and the number of patents granted has grown from 450,000 in 1995 to 750,000 in 2008.

3.29 In discussing the rise of the knowledge-based economy, Paul David and Dominique Foray relate the acceleration of knowledge production to the interrelationship between four developments:

- The growing share of intangible capital—including investment in education and training, research and development, and information and coordination as well as health expenditures—as compared to tangible capital in total capital formation. David and Foray estimate that the stock of intangible capital first exceeded that

---

of tangible capital in the United States in 1973, and has continued to grow since then.

- The growing speed and intensity of innovation, and the increasing diversity of sources of innovation, including users themselves as co-creators of new or improved products and services.
- The ICT revolution, which has fundamentally transformed the conditions for creating, storing, accessing, distributing and reusing information and data.
- The rise of knowledge-based communities and global knowledge networks, where information can be easily shared and re-used, and where collaboration can occur that is not reliant upon physical co-presence in particular geographical locations.24

3.30 The media industries, broadly defined, have been at the centre of these developments. In its survey of corporate executives’ responses to the global digital economy, Oxford Economics found that the three business sectors that anticipated the most dramatic transformations over a five-year timeframe were: IT and technology; telecommunications; and entertainment, media and publishing.25

**Rise of user-created content**

3.31 An important shift in the media associated with convergence is the rise of user-created content, and a shift in the nature of media users from audiences to participants.

3.32 Associate Professor Axel Bruns has referred to the rise of the ‘produser’, or the internet user who is both a user and a creator of online content.26 Charles Leadbeater and Paul Miller have referred to such trends as the ‘pro-am revolution’ where the tools of content creation become cheaper and simpler to use, thereby blurring distinctions between ‘amateurs’ and ‘experts’.27

3.33 The rise of user-created content is associated with broader trends away from a 20th century mass communications model, characterised by large-scale distribution, media content largely produced and distributed by media professionals, and a clear distinction between media producers and consumers. The emergent 21st century framework is one of convergent social media, characterised by dramatically reduced barriers to user participation through easy-to-use Web 2.0 technologies, and the resulting blurring of the producer/consumer distinction as there is ubiquitous user-created content accessible across multiple media platforms.28

---

3. Media Convergence and the Transformed Media Environment

3.34 The OECD identified user-created content as a ‘significant disruptive force ... [that] creates both opportunities and challenges for established market participants and their strategies’, further arguing that:

The more immediate economic impacts in terms of growth, entry of new firms and employment are currently with ICT goods and services providers and newly forming [user-created content] platforms. New digital content innovations seem to be more based on decentralised creativity, organisational innovation and new value-added models, which favour new entrants, and less on traditional scale advantages and large start-up investments.29

3.35 The OECD also referred to the wider social implications of the rise of user-created content in these terms:

The Internet as a new creative outlet has altered the economics of information production, increased the democratisation of media production and led to changes in the nature of communication and social relationships (sometimes referred to as the ‘rise—or return—of the amateurs’). Changes in the way users produce, distribute, access and re-use information, knowledge and entertainment potentially give rise to increased user autonomy, increased participation and increased diversity.30

3.36 This presents a new challenge for media classification policy, of how to design regulations that distinguish between content that is produced by large-scale organisations on a commercial basis, and user-created content. The Australian Competition and Consumer Commission (ACCC) has observed that any definition of media content for purposes of classification:

would need to be carefully drafted to ensure that other types of online audiovisual content (such as user-generated, semi-professional content and short-duration clips) are not inadvertently captured by ... the new Act.31

3.37 The importance of distinguishing between commercial media content and user-created content for the purposes of classification was raised in a number of individual and organisational submissions in response to DP77.32 For example, the Arts Law Centre of Australia noted the importance of making a distinction between ‘films and television programs produced on a commercial basis’ and ‘user-generated content media created primarily for non-commercial purposes’.

Greater media user empowerment

3.38 The rise of user-created content, and the shift in the nature of audiences towards a more participatory media culture, is associated with greater user control over media. This is partly related to a greater diversity of choices of media content and platforms, but also in the ability to achieve greater personalisation of the media content that one chooses to access.

30 Ibid, 12.
31 Australian Competition and Consumer Commission, Submission CI 2463.
32 This issue was raised by Lin, Submission CI 2476 and CI 2525; J Graham, Submission CI 2507; J Trevaskis, Submission CI 2493; and A Hightower, Submission CI 2511.
33 Arts Law Centre of Australia, Submission CI 2490.
3.39 Professor Henry Jenkins of the University of Southern California has described the relationship between media convergence and user empowerment, and its implications for traditional media companies, as follows:

Convergence requires media companies to rethink old assumptions about what it means to consume media, assumptions that shape both programming and marketing decisions. If old consumers were assumed to be passive, the new consumers are active. If old consumers were predictable and stayed where you told them to stay, then new consumers are migratory, showing a declining loyalty to networks or media. If old consumers were isolated individuals, the new consumers are more socially connected. If the work of media consumers was once silent and invisible, the new consumers are now noisy and public.34

3.40 The capacity for more personalised media is strongly related to the internet, but it is also increasingly characteristic of more traditional media platforms, such as the increasing number of Australian households with some form of personal video recorder (PVR). OzTAM observes that the percentage of Australian households with a PVR increased from 31% of metropolitan households in July 2010 to 43% in July 2011.35 PVRs include FoXTEL IQ2, Austar MyStar and TiVo, and as an increasing number of new digital television purchases take the form of ‘smart TVs’, this share is expected to increase significantly. Deloittes has observed that PVR penetration among television owners in the United States and United Kingdom will exceed 50% during 2012.36

3.41 The significance of PVRs is that they enable households to access programs of their choice that are less dependent upon the scheduling decisions of the television networks. They change the television viewing experience from one where the viewer faces a wide range of programs available at a given time, to an arrangement of greater consumer choice about what to view and when. Importantly, such devices also include parental locks, giving parents greater potential to control the access that their children have to material accessed from such platforms.

3.42 This is not to say that traditional television viewing habits will disappear. Indeed, Deloittes has observed that television’s ‘super media’ status remains strong.37 As well as commanding the largest share of media consumption and advertising revenue, television is a significant driver of other media content creation. Television celebrities feature prominently in book sales; books by chefs who have been on television out-sell those of chefs who have not; television programs have significant flow-on effects for the children’s toy market; and many of the best selling music artists had their first public exposure on TV talent contests. Moreover, they argue that:

Despite the sale of tens of millions of television sets that offer a form of built-in search capability for television programming, the vast majority of viewing will be

---

3. Media Convergence and the Transformed Media Environment

3.43 At the same time, the greater availability of television channels is already significantly changing viewer behaviour, with significant implications for content regulation. In December 2011, the five main free-to-air television channels accounted for 54.9% of the capital city TV viewing audience, the 10 digital channels accounted for 26.5%, and the 200+ pay TV channels accessible through FOXTEL and AUSTAR for 18.6%.39

3.44 While the current time-zone based restrictions on TV content apply most strongly to the main free-to-air channels, it is now the case that 45% of TV viewing is not occurring on these stations.

3.45 Moreover, the figures do not include ‘catch up’ online services which the TV networks operate, such as ABC iView, Yahoo! 7 TV, ninemsn video, TEN Online, and SBS On Demand.

3.46 In May 2011, ABC iView had over one million visitors and 3.3 million visits to the service, amounting to an 84% increase on the figures 12 months previously.40 Individual programs such as Angry Boys recorded over one million pays during 2010–11, a figure almost equal to its five-city average audience share. Time-zone based restrictions are impossible to apply to such online services.41

3.47 Such trends can be expected to be accelerated by the digital switchover: as of September 2011, 82% of Australian households had digital television, and it is expected that the full switchover to digital TV will be completed by the end of 2013.42 The rollout of the National Broadband Network (NBN) will also make internet TV services (IPTV) available to a much wider range of Australian households, as well as enabling greater use of online catch-up TV services.

Blurring of public/private and age-based distinctions

3.48 The eighth and final driver of change associated with media convergence is the blurring of distinctions between public and private, and of age-based restrictions to media access. Historically, there has been more extensive regulation applied to the media which has been publicly available or distributed (cinema, radio and television) than towards print media (books, newspapers, magazines) whose distribution and consumption were considered to be more private and personal in nature. In a 1976 report into Australian broadcasting, it was observed that:

The public own the airwaves ... [and] since frequencies are scarce, and the broadcast media are influential, to grant a broadcast licence is to bestow a privilege. This

---

38 Ibid, 24.
40 Australian Broadcasting Corporation, Join the Conversation, Annual Report 2010-2011, 55.
41 Ibid, 57.
privilege carries with it an obligation to provide the public with programs which meet
the standards it expects.43

3.49 While expectations that the media continue to meet community standards remain
important, the distinctions between media distribution methods are now less clear-cut.
Newspapers, magazines, audiovisual media content, music and film are increasingly
distributed and consumed online, in environments that are both public in terms of the
networked platforms from which they are accessed, and private in terms of their
consumption in the home rather than in public places. The ALRC expects that such
trends will intensify, as more and more Australians acquire access to high-speed
broadband services.

3.50 It was estimated that, in the 12 months prior to April 2009, 2.2 million children
(79%) aged 5–14 years reported accessing the internet, which was an increase from
65% in 2006. This included 60% of 5–8 year olds, and 96% of 12–14 year olds. In
2009, 92% of child internet users accessed the internet from home, 86% accessed it
from school, and 45% from public libraries and internet cafes.44

3.51 It is considerably more difficult to restrict access to online content than is
possible for other media platforms. While television has long operated through a time-
based regulatory framework (as programs with certain types of content—violence,
nudity, sexual references—cannot be shown before particular times), and cinemas and
video store employees can make age assessments or request ID, of those purchasing
tickets or hiring DVDs, age verification is far more ad hoc and difficult on the internet.

3.52 This point was made by several respondents to the ALRC’s Discussion Forum in
relation to the viability of Restricted Access Systems (RAS) as a means for regulating
minors’ access to online content. It was noted that credit/debit cards are widely
available to people under the age of 18, and that any more rigorous form of age
verification had the potential to raise significant privacy concerns.45

Media convergence and ‘broken concepts’ in legislation

3.53 In its paper Broken Concepts: The Australian Communications Legislative
Landscape, the ACMA identified seven broad regulatory consequences of convergence
for the media domains for which it has regulatory responsibility.46 Insofar as these
concern the Broadcasting Services Act and its provisions as they relate to media
content regulation, they are also relevant to the ALRC’s Inquiry.

---

43 Inquiry into the Australian Broadcasting System, Australian Broadcasting: A Report on the Structure of
the Australian Broadcasting System and Associated Matters (1976).
44 Australian Bureau of Statistics, Australian Social Trends: Children of the Digital Revolution
45 See ALRC Classification Discussion Forum, <www.alrc.gov.au/public-forum/classification-forum/3-
restricted-access-systems#comments> at 18 November 2011.
46 Australian Communications and Media Authority, Broken Concepts: The Australian Communications
Legislative Landscape (2011).
3. Media Convergence and the Transformed Media Environment

3.54 The seven ‘broken concepts’ which the ACMA identified were:

(1) misalignment of policy and legislative constructs with market changes, technological changes and consumer behaviour;

(2) inconsistencies in the treatment of devices and content, and gaps in the existing framework’s coverage of new forms of content and applications—for example, the very different treatment of broadcasting services as defined under the Broadcasting Services Act and programs delivered over the internet;

(3) misplaced emphasis on the legislative framework that skews regulatory activity towards traditional media and communications activity;

(4) blurring of boundaries between historically distinct devices, services and industry sectors, leading to inconsistent treatment of like content, devices or services;

(5) piecemeal responses to new issues, which has added unnecessary layers of complexity to legislation;

(6) questions regarding the applicability of mechanisms for enforcing existing community standards over new forms of content delivery; and

(7) institutional ambiguity regarding which government entity has responsibility for particular industries or activities, meaning that either several regulators or no regulators have a clear mandate to address market or consumer concerns.

3.55 Similar problems can be identified in the current classification scheme. It ‘over-classifies’ some media, such as DVDs and computer games, while other media, such as mobile apps, are not required to be classified at all. It distinguishes classification guidelines according to the form of media and this does not easily map onto new devices and types of media content.

3.56 One of the key concepts developed in this report is that of platform neutrality. Discussed in more detail in Chapter 4, it is based upon the premise that the primary purpose of a National Classification Scheme is the classification of content. In the context of media convergence, this points to need to minimise platform-based distinctions to the greatest degree possible, in order to maintain an adaptive regulatory framework that can be oriented towards future media developments.
