Preparing for the Broadband World:

Fostering Consumer Confidence through Collaboration and Partnerships

A Communications Alliance Research Project

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Foreword

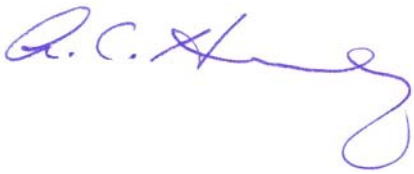
We live in an exciting time of impressive technological developments that are changing the way we communicate and interact with each other. At no time in our history has information and communications technology been more important to society. We are witnessing a plethora of new products and services on the market. Data speeds are increasing exponentially to cope with this relentless growth.

The complexity and volume of the products and services on offer can be confusing. In addition, these products and services are increasingly being considered as ‘essential services’ and not merely a utility. This is creating significant challenges for the industry and consumers.

This research is about starting the discussion about how we can work collaboratively to close the gap between expectation and delivery. Working in partnership to improve customer satisfaction is the only way to achieve lasting outcomes in this fast changing world.

We are delighted to offer this research into the marketplace of ideas and look forward to a healthy dialogue about the future of the communications industry.

Neville Stevens
Chairman of the Board



Anne Hurley
Chief Executive Officer

Key Findings

Consumer dissatisfaction

Dissatisfaction is the gap between expectation and delivery. What needs to be addressed is not just failures in service provision, but ***perception that failure has occurred***.

Consumer expectation

Consumer experience and knowledge lags well behind changes in technology. Consumers are becoming increasingly dependent on telecommunications technologies and are ***becoming increasingly demanding***.

Consumer empowerment

We need to ***empower consumers***. To build consumer confidence, service providers, consumers and regulators need to share responsibility, and view each other as ***collaborators rather than antagonists*** in solving their common problems.

Co-operative competition

Strengthened cooperation is needed between industry, consumer representative bodies, government and regulatory agencies, as well as ***follow-through on implementation and action***. Regulation must be very much a last resort measure.

Paradigm shift

A paradigm shift is complex, turbulent, and extends over time. Where are ***new consumer service approaches*** needed? Which traditional approaches ***continue to be successful*** and provide continuity from old to new paradigms?

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Executive summary

Dissatisfaction can be considered to be the gap between expectation and delivery. What needs to be addressed is therefore not simply failure but *perception that failure has occurred*.

Since the introduction of the Telecommunications Act 1997, the Australian telecommunications industry has become a diversified and competitive sector, and the principle of co-regulation has become firmly established.

Competition and technological innovation bring substantial benefits to consumers in terms of an ever-expanding array of choices, but this comes at the cost of a proliferating confusion of features, options, pricing and usage monitoring arrangements.

Consumer experience and knowledge lags well behind these changes in technology. Dissatisfaction can be considered to be the gap between expectation and delivery. What needs to be addressed is therefore not simply failure but *perception that failure has occurred*.

Because these technologies are part of who they are as well as what they do, consumers are becoming increasingly demanding. It is important that service providers and consumers, as much as possible, view each other as collaborators rather than antagonists in solving problems that they share.

Contemporary telecommunications services require a much higher level of consumer knowledge and technical understanding than earlier technologies. A shift in approach is needed, from shielding and protecting consumers towards empowering them. An important part of the equation is broadening the base of user experience, and a broad-based approach to sharing responsibility for consumer satisfaction or dissatisfaction.

The co-regulatory framework has brought substantial benefits to the Australian telecommunications sector, and the notion of cooperative competition is important in thinking about the complex dynamics of the relationship between the various stakeholders in the telecommunications industry. Some simplification in the regulatory structures will be needed as convergence matures.

Competition is seen as of critical importance to innovation, and therefore to ensuring sufficient diversity in the marketplace for the needs of all consumers to be met. Regulation should only be a last resort measure where competition and co-regulatory arrangements prove inadequate.

Strengthening of cooperation between consumer representative bodies, government and regulatory agencies and industry are important, but so also is ensuring follow-through on implementation and action. Adherence to best practice in customer service might require creative and innovative responses to the needs of consumers, based on a well-developed and continuously adapted understanding of markets and technologies.

“A shift in approach is needed, from shielding and protecting consumers towards empowering them.”

Even when paradigms shift, elements of old structures and ways of working may be worthy of preservation. Traditional elements of the relationship between consumers and service providers – such as courtesy and respect – are as important as ever, though old issues reinvent themselves through technological change. More original, fine-grained research is needed to understand how older and newer paradigms can be brought into alignment, and to develop consumer service approaches that will build consumer confidence and empowerment.

Introduction

The notion that consumers are able to properly understand and make informed choices in this environment is impossible to sustain.

Since the introduction of the Telecommunications Act 1997, the Australian telecommunications industry has become a diversified and competitive sector, and the principle of co-regulation has become firmly established. Communications technologies are becoming more and more embedded in the everyday lives of consumers, with uptake across an ever-increasing array of media, technologies and services.

However, the dynamics of competition, industry growth and the interests of consumers house inherent contradictions and tensions. While competition and technological innovation continue to bring benefits to consumers in terms of an ever-expanding array of choices, this comes at the cost of a proliferating confusion of features, options, pricing and usage monitoring arrangements. In the words of one regulatory stakeholder consulted for this research, there is now 'an almost bewildering array of products and services'.[1] The consumer confronts 'an almost unbelievable complexity' and is literally overwhelmed by the volume of available information. The notion that consumers are able to properly understand and make informed choices in this environment is impossible to sustain.

Compounding these difficulties, we are now 'at the hard end of the market'[2] as increasingly sophisticated technologies are taken up by more and more people. Earlier adopters of technologies tend, by their nature, to be more technologically literate than those who take them up later in the innovation cycle. The switch from dial-up to broadband, in particular, appears to be a key area of complexity and difficulty for both consumers and service providers.

The Telecommunications Industry Ombudsman reports a 31% increase in complaint issues in its 2007 Annual Report, which is already a cause for some concern. However, the number of complaint issues relating to internet services increased by 108.9%, while mobile and landline service issues increased by only 3.9% and 4.1% respectively. The number of complaint issues relating to internet services is now close in numerical importance to mobile and landline technologies, and it is clear that consumer difficulties with broadband may be set to become an increasingly contentious and politically explosive issue.

Broadband-enabling and the trend towards converged devices with software-based applications, such as the much-hyped iPhone[3] and other 'smart' devices, add further complications and increase the interrelationships between networks, devices, software and content. Several stakeholders expressed the view that consumer experience and knowledge lags well behind these changes in technology.

In an environment of confusion and inadequate understanding of the differences in benefits between the various options available to them, the majority of consumers make initial purchase decisions purely on the basis of price.[4] The cheapest option will often be one which doesn't fully meet their needs, and may be more likely to cause problems down the track. One consumer representative stakeholder expressed the view that the level of consumer uncertainty is such that people are not taking up new data services as quickly as they could, citing consumer confusion and nervousness around mobile premium services, where there is a lack of transparency about unit usage costs and a sense that the financial commitment can quickly escalate.

The increasing volume of the complaint issues reported by the TIO can be read as a symptom of these proliferating complexities in the telecommunications sector. While the rise in volume of complaints may simply reflect the more widespread use of technologies, applications and services, the response of consumers to difficulties will inevitably reflect quite generic patterns in consumer dissatisfaction: those of billing and credit, understanding and quality of products and services, and experience of consumer service and ongoing support.[5]

Satisfaction & dissatisfaction

Failure is an unacceptable difference between expected and observed performance.[6]

Helping consumers to successfully navigate the increasingly complex telecommunications landscape is clearly not a simple task. When consumers encounter difficulties with products and services and contact their service providers to address them, what may start as a simple informational query or reporting of a service difficulty, can easily escalate to a complaint if it cannot be swiftly resolved.

Industry sustainability and success rely on building consumers' expectations that service providers are reliable and responsive, and confidence that consumers are respected and their interests are being looked after. Yet the Galaxy customer satisfaction survey commissioned by Communications Alliance found that 20% of the customers who contact their mobile, home phone or internet service provider are dissatisfied with the way that the issue was handled by the company. Indeed, ACMA, in its 'Telecommunications Today: Consumer Satisfaction' report, notes that around 70% of household consumers surveyed believe that broadband is a critical service for the future, but problems with broadband are given as the reason for dissatisfaction by 29% of dissatisfied consumers. Other major reasons given for dissatisfaction are the belief that services are too expensive (41%) and that customer service is poor (29%).

Since dissatisfaction can be considered to be essentially the gap between expectation and delivery, what needs to be addressed is not simply failure but perception that failure has occurred. In all of our use of technologies, 'ignorable failures' are a commonplace and largely expected (if irritating) part of our everyday experience.[7] Differences will always exist, therefore, in what are considered acceptable or unacceptable divergences between expectation and experience.

ACMA's Telecommunications Today report on consumer satisfaction, for example, finds that consumers are most likely to be satisfied with their telecommunications services if they are female, aged over 75, working in community or personal care services, or have a household income of between $13,000 and $20,799. On the other hand they are more likely to be dissatisfied if they are professionals, male, have a household income of greater than $100,000 or are between 35 and 44 years old.[8] This diversity within the consumer population is both a reflection of varying levels of technological literacy, but also of differences in expectations and in willingness to act on (or accept) 'failures'.

"Industry sustainability and success rely on building consumers' expectations that service providers are reliable and responsive…"

Consumers' understandings of innovative products and services can only be based on what they already know and understand. This knowledge may be based not just on direct experience, but also on expectations built up from the experiences of family, friends and colleagues, and imaginatively through advertising and marketing information and images. Dissatisfaction, as the gap between consumer expectations and service delivery, can therefore be created and exacerbated in various ways. For example, consumer expectation may actually be unrealistic – but is this the fault of advertising and marketing, of unreasonable and unrealisable demands, or of both? Has there been a failure to deliver what was promised, or a misunderstanding of the contract between provider and customer?

Telecommunications: a utility or 'essential' service?

The more 'essential' a service is perceived to be, the greater the potential for consumer dissatisfaction.

Products that were luxuries in one era become necessities in another. As goods and services become more widely available, they come to be seen as an entitlement of all citizens. Marketing of such products often asserts how necessary they are. For example, the mobile phone has been marketed as a safety device, especially for children. However, the more important and less 'trivial' a product is seen to be, the greater the potential for dissatisfaction with it on such grounds as technical failure, lack of customer support, geographical unavailability and pricing.

The recent Productivity Commission Report argues that communications infrastructure is increasingly considered to be a utility and indeed an essential service: 'these services may well be regarded as essential in the future if they are not already.[9] Businesses and government agencies are more and more using telecommunications to provide services, and consumers are becoming dependent on telecommunications for their interactions with education, health, banking, government and many other general service providers. Increasingly, these services will assume that the majority of customers have access to broadband speeds.[10] For this reason, one consumer representative stakeholder suggested that a key priority for the telecommunications industry should be to accelerate the shift from dial-up internet to broadband access.

Ideally, broadband access should reach the same level of ubiquity as fixed line services have achieved. This is particularly urgent in the view of the need to develop knowledge and experience (hence realistic expectations) of broadband internet throughout the community in the lead-up to the roll-out of the National Broadband Network.

However, the shift from dial-up to broadband was cited by another of the consumer representative stakeholders as a major source of difficulties for consumers, especially in cases where the consumer also wishes to switch providers. It is likely that a high proportion of the TIO complaint issues relating to internet services involve consumers upgrading to broadband. The task of switching from dial-up to broadband would be highly challenging for consumers with little technical literacy,[11] and would in all likelihood require some interaction with a customer service officer of the service provider. Consumers may feel under pressure to take what they see as an inevitable technological next step, but participating in a little-understood process[12] will often be a stressful and frustrating experience. Unless the transition runs very smoothly and the consumer feels taken care of in the process, it is easy to see how minor technical difficulties can quickly escalate to complaints about both service difficulties and customer service.

"Public perceptions and knowledge clearly still have a long way to go."

Public perceptions and knowledge clearly still have a long way to go. Bandwidth availability is increasing rapidly, but so also are the uses — particularly streaming video — and numbers of devices and simultaneous users who may be sharing one household broadband connection. It is becoming ever easier for households to exceed monthly bandwidth limits. Consumers are now largely conditioned to think of the water and energy utilities they use as limited, but the common conception of bandwidth is not of it as a scarce commodity. Bandwidth seems immaterial, so there is a widespread lack of understanding among consumers about why pricing is structured as it is, and the reasons for limitations on use. Pricing and

service delivery practices (such as shaping) are designed to encourage users to behave as if bandwidth is limited, but they sit in an uncomfortable juxtaposition with the encouragement to explore the possibilities of the broadband experience, such as social networking, streaming and downloading music and video.

The TIO, for example, suggests that best practice in respect of providing advice to consumers who query high usage charges should involve discussing different types of usage, such as browsing, file sharing, uploading and downloading, and the effects these can have on a bill, rather than simply asserting that the bill is correct and needs to be paid.[13] While this may advance consumer education about the different types of usage, we should also remember that itemised billing for telecommunications usage is a relatively recent phenomenon, and is already much more informative for telephone and internet charges than for other utilities such as electricity and water. Perhaps consumers have developed a better understanding of the kinds of activities that result in high power and water usage? Data usage is much more 'invisible' within the household than water or power usage, and parents may be quite unaware of the amount their children are incurring in upload/download rates for music, video and game-playing.

Engaging the active consumer

The circulation of media content across different media systems, competing media economies, and national borders, now depends more than ever before on consumers' active participation.

As consumers integrate converged communications technologies into their everyday lives, they become increasingly dependent on them just to *be themselves*. Because these technologies are part of who they are as well as what they do, consumers are becoming increasingly demanding.

We can think of what consumers do to take up mass-market consumer goods and build them into the specific contexts of their everyday lives as a kind of productive work on commodities. In the convergent communications environment, indeed, it is apparent that the consumer *needs* to perform work on the product in order to make it functional. Installation, customisation, trouble-shooting, updating – there is a high level of activity that the consumer must actively participate in, both when the product is new as well as on an ongoing basis after purchase. Indeed there is a sense in which new media technologies are so multi-faceted and flexible in use that we don't know what the product or service actually is when we buy it. Either we are aware of only a part of its functionality, or the technology is upgradeable and hence continues to evolve even after purchase (sometimes without direct user intervention, as is the case when services download their own upgrades).

Not all consumers are technically literate, nor are the majority interested in new technologies as things in themselves and as more than a means to an end. Time is a scarce commodity in the contemporary world and so consumers want these resources to work with minimal effort, seamlessly and transparently. With utilities such as electricity or water and the 'plain old telephone system', for example, there is a reasonable expectation of 'plug and play', and when things go wrong there is little the consumer can do for themselves (and indeed little they are allowed to do).

The consumer's involvement in problem-solving, for example, is necessary but may be resented by consumers, since their time is limited and they prefer to choose how they spend it. Yet the consumer's responsibility for participating actively in diagnosing and solving their telecommunications problems is affirmed by a case study in the 2007 TIO Annual Report, in which the TIO noted an ISP customer's refusal to help the ISP troubleshoot the problems he was experiencing and hence that he 'had not attempted to resolve the complaint in a meaningful manner'.[14]

"It is clearly important… that service providers and consumers… view each other as collaborators rather than antagonists in solving problems that they share."

When the consumer has paid for a product but then has to perform tasks that they might see as the responsibility of the seller, their attitude may devolve into one of resented exploitation. The consumer complaint may then become not just an attempt to have a problem fixed but indeed may result in a public expression of dissatisfaction. Each consumer complaint, in other words, is about more than the specific incident they have experienced, and becomes a component of their collective experience as a consumer. 'Word of mouth', so important in the establishment and maintenance of public trust in commercial institutions, is more than simple communication among consumers, but is an aspect of their collaboration as a community with common interests.

It is clearly important, then, that service providers and consumers, as much as possible, view each other as collaborators rather than antagonists in solving problems that they share.

The TIO's 2007 Annual Report, for example, identifies a pattern in relation to internet diallers:

> The decline in complaints about internet diallers is typical of the TIO's experience where the advent of new technology and products can lead to a sudden increase in complaints before these decrease as the products are in turn replaced by different services and, consequently, different complaints.[15]

Internet diallers are a form of 'malware' or 'spyware', which, when installed on a computer connected by dial-up modem can disconnect from the user's ISP and redial, usually to a long-distance or international number, often connecting to adult chat line services. One TIO member responsible for a large number of internet dialler complaints to international destinations had in fact taken the step of closing access to number ranges used by internet dialler content providers. The decline in problems with internet diallers is likely to be at least partly a consequence of many users converting to 'always on' internet services which don't connect via a dial-up service.

However, the issue of internet diallers is an example of a 'problem' which is not really a result of anything the service provider has or has not done, but is a capability of the technology that internationally-based agents are using to exploit or defraud Australian consumers. Consumers themselves often have little knowledge of the technical aspects of virus/malware prevention, and yet will often have 'caused' the problem themselves through downloading a piece of software or clicking on a malicious link in an email or a website they have visited. Where then should responsibility for this 'problem' lie, if not in some shared space of responsibility within which consumers and service providers collaborate to serve the interests of both?

"Where then should responsibility for this 'problem' lie, if not in some shared space of responsibility within which consumers and service providers collaborate to serve the interests of both?"

Information and consumer literacy

We need to consider how best to prepare consumers for developing a range of competencies which are not oriented towards shielding or protecting them…
from the influence of the media, but rather towards enabling them to make informed decisions on their own behalf.

Contemporary telecommunications services require a much higher level of consumer knowledge and technical understanding than earlier technologies. Research recently commissioned by ACMA argues that a shift in approach is needed, from shielding and protecting consumers towards preparing people to 'self-regulate' through media education.[16] We need to consider how best to prepare consumers for developing a range of competencies which are not oriented towards shielding or protecting them, especially young people,[17] from the influence of the media, but rather towards enabling them to make informed decisions on their own behalf — in other words, towards *empowering* them.

Education will certainly go some way towards providing consumers with a better understanding of the technologies they use, and will circumvent some of the confusion, anxiety and antagonism this causes, which includes a widespread lack of understanding of the economics of the telecommunications industry. If, however, consumer dissatisfaction arises as the gap between expectation and delivery, then an important part of the equation is the development of a broad base of user experience for new technologies, services and applications to build on. Facilitating the uptake of broadband, for example, will go some way towards smoothing the path for the uptake of the National Broadband Network as it develops.[18]

A pure notion of technical literacy doesn't go far enough in capturing the shift that is needed towards building more realistic consumer expectations about what their experiences of technology use will be like. This cannot be the sole responsibility of industry or of consumers themselves. A greater sharing of responsibility for consumer satisfaction or dissatisfaction with products and services requires a broad-based approach. An industry stakeholder stressed the need to provide streamlined and well-structured information and direct experience of the use of products and services at the point-of-sale, as well as options for ongoing training in the use of complex products. A consumer representative stakeholder also suggested that a coordinated issues-based approach to consumer education, along the lines established by the Australian Consumer Fraud Taskforce, could provide a useful model for maximising the impact of consumer education campaigns.[19]

All categories of stakeholders identified the difficulties of providing adequate and understandable information to consumers as a major source of complexity. Whether they want to make an informed choice between competing products and services, to upgrade or vary an existing service, to understand a problem or billing issue, or to troubleshoot a problem, information needs to be structured in ways that make it accessible to consumers of varying degrees of knowledge. The notion of 'information architecture', developed in the domain of web-based interaction design, may capture the sense that the complexities of an informational environment can be made to appear simpler through presenting information in progressive 'layers' that consumers can navigate their way through without getting a sense of being overwhelmed or 'lost'.

"A greater sharing of responsibility for consumer satisfaction or dissatisfaction with products and services requires a broad-based approach."

A related source of complexity is that of inter-dependencies between suppliers. It is sometimes unclear, where products and services from multiple suppliers are bundled, or where one supplier resells services bought from another, which is the appropriate pathway for an information query or fault report. As an industry stakeholder noted, these inter-relationships mean that customer service is inevitably more complex.[20]

The notion of ***cooperative competition*** is therefore an important one in thinking about the complex dynamics of the relationship between the various stakeholders in the telecommunications industry. We note Communications Alliance's use of the phrase 'pre-competitive collaboration'[21] to indicate the necessity for industry collaboration within a competitive context. From the point of view of the complex dynamics of the sector, both competition and cooperation necessarily co-exist at all levels of interaction, and are constantly in a shifting and sometimes unstable balance.

Encouragingly, there was broad consensus among the stakeholders consulted that the co-regulatory framework had brought substantial benefits to the Australian telecommunications sector, and was very largely successful. One of the industry stakeholders called for some simplification in the regulatory structures as convergence matures, particularly as telecommunications providers increasingly become content providers. Stakeholders across sectors stressed the importance of competition to innovation, and therefore to ensuring sufficient diversity in the marketplace for the needs of diverse consumers to be met. The stakeholders were all in agreement that regulation should be very much a last resort measure, to be used only where competition and co-regulatory arrangements failed.

Stakeholders across the board emphasised the importance of strengthening cooperation between consumer representative bodies, government and regulatory agencies and industry. Promoting dialogue and joint initiatives, such as the Telecommunications Consumer Protections Code, is important, but so also is ensuring follow-through on implementation and action.

Paradigm shift, paradigm crisis, or business as usual?

Are we in the midst of a qualitative shift in the terms of engagement between consumers and telecommunications service providers?

The current situation, in consumer culture and in the telecommunications industry specifically, certainly seems chaotic and turbulent, with a great deal of uncertainty around competing standards, continuous innovation and the emergence of new players in established and emergent industry sectors. For consumers, uncertainty and complexity are experienced as they try to come to terms with the proliferation of choices generated by the disengagement of applications and content genres from fixed hardware platforms. Are we in the midst of a qualitative shift in the terms of engagement between consumers and telecommunications service providers? Is it useful to think of these changes in terms of the need to come to grips with a paradigm shift?

The term 'paradigm shift' first became popular after Thomas Kuhn published *The Structure of Scientific Revolutions* in 1962. Kuhn argued that scientific theory evolves, not through the accumulation of facts, but rather through radical transformations in ways of thinking about the world. A paradigm, in Kuhn's view, is not simply the currently dominant theory, but the entire worldview in which it exists. According to Kuhn, when significant anomalies have accumulated against an established scientific paradigm, the discipline is thrown into a state of ***'paradigm crisis'***. A paradigm crisis changes the way terms are used, how professionals view the objects they work with, what approaches are regarded as valid, and what methods are used to innovate. To be successful new paradigms must continue to account for all the old circumstances that prevailed under the old paradigm.

While the term 'paradigm shift' has become something of a cliché and must be used with caution, it has become widespread across many political, social and economic contexts, to encapsulate the notion of a transformative or discontinuous change in world-view — a radical shift between modes of thinking and organising. Perhaps, if things seem chaotic now it may be that we are in the middle of a 'paradigm crisis', and not through to a new paradigm at the other side of a paradigm shift.

It is possible that some of today's uncertainty and turbulence will subside over time as consumers come to be familiar with today's new technologies, and as some options fail to find markets as consumers balance ease-of-use, fit to lifestyle and willingness to pay. The 2007 TIO Annual Report, indeed, observes that new technologies tend to result in a 'spike' in complaints, before consumers become familiar with these technologies and the service providers iron out the 'wrinkles'. However, stakeholders believe that for the foreseeable future more and more new technologies, services, applications and content forms will continue to come along, adding further differentiation and diversification to the current 'convergence' mix.

What Kuhn's formulation leads us to believe, however, is that even when paradigms shift, old paradigm structures and ways of working may be worthy of preservation. Stakeholders across the telecommunications sector certainly stressed that many traditional elements of the relationship between consumers and service providers are as important as ever.

While the basics of good customer service – such as courtesy and respect – do not change fundamentally, old issues reinvent themselves through technological change. At base, carriage technologies remain relatively simple (although there may be complexities behind the scenes that consumers only need to know about when things go wrong). The increasing complexity of products and services from the consumer's point of view is largely due to the changing nature of the devices, which drives innovation in applications and media.

Yet a high proportion of complaints lodged with the TIO continue to be about customer service. Complaints about customer service, essentially, relate to the interpersonal interactions between consumers and the representatives of service suppliers. A lack of response from a service supplier to an email or failure to answer a phone call is fundamentally no different to a lack of response to a piece of postal correspondence or a telegram. A regulatory representative stakeholder suggested that fundamentally what is needed is adherence to established best practice in customer service, but that what this might require is creative and innovative responses to the needs of consumers, based on a well-developed and continuously adapting understanding of markets and technologies.

Old paradigm terms remain in circulation, but capture old paradigm concepts, which are in the process of subtly shifting, if not breaking down. As ACMA suggests in the recent media release to accompany its 'Top six trends in communications technology' report:

> Regulatory pressure created by developing technologies is starting to bite into core legislative concepts and definitions, creating strained or 'broken concepts'. Ultimately, their 'elasticity' will expire at which time they will no longer function efficiently or effectively in a converged environment.[22]

Within the TIO complaints statistics it is possible distinguish both old and new paradigm issues. For example, unfair contract clauses are in and of themselves part of the traditional consumer protection paradigm, but convergence is continually throwing up examples of new clauses which must be tested against prevailing standards to assess whether or not they are fair.[23] It is likely that it will take some time for all the potential issues for converged service delivery and pricing to work themselves through the system, and there is therefore significant potential for issues relating to unfair clauses in contracts to arise and need to be worked through. The challenge for the industry then is to establish trusted processes that will actively pre-empt problems and prevent them as far as possible from reaching the level of complaint that raises concern in TIO and government circles.

The requirements for protection of vulnerable classes of consumers also may need to be rethought in the context of increasing empowerment for consumers.[24] Should, for example, vulnerability be redefined to include a lack of basic technical or trouble-shooting capacity?

One difficulty has been that new technologies enter the market at different stages in the competitive cycle.[25] Aggressive competition for market share in emerging markets will often focus on the point of sale, rather than on ongoing support and maintenance. It will also always be the case that there are providers who do not do the right thing by consumers.[26] As one regulatory stakeholder put it, the complexities of the current situation suit opportunistic entrepreneurs, and it wi ll always be the case that unconscionable, or misleading and deceptive, conduct exists. Old scams reinvent themselves in new technological forms, and new products and services will continue to test limits. Two examples recurred in the stakeholder interviews: that of Mobile Premium Services and 'clickwrap'.

"The challenge for the industry then is to establish trusted processes that will actively pre-empt problems and prevent them as far as possible from reaching the level of complaint that raises concern in TIO and government circles."

Content and platform convergence is changing what we mean by 'video', 'telephony', 'applications', 'services' and a host of other terms in everyday usage, and creating challenges for regulators, industry and consumers.

Mobile Premium Services were cited several times as an example that touches on many of the issues of messiness, fragmentation and complex supply chains within the industry. Two regulatory stakeholders suggested that this is a consequence of expanding services that are based on an existing billing and service model, but one that is burgeoning in undesirable ways, with particular consequences for vulnerable consumers. It was suggested that it is urgent and imperative for the industry to pull together to address this issue, and that this is potentially an opportunity for innovation and generation of increased consumer confidence in the use of phone-delivered services if the issues can be successfully addressed.

Similarly, the use of Internet-based license and privacy agreements ('clickwrap') sometimes verges on 'immoral'[27] conduct on the part of companies which ask consumers to accept waivers of rights online that they would not be asked to give away in the offline world. Similarly, one consumer representative stakeholder expressed concern about digital contract formation online, and in particular that consumers are rarely given copies of the terms and conditions they 'signed up' to by checking the 'I agree' box.

Several of the stakeholders expressed the view that, with the maturing of the co-regulatory environment and the considerable work that has been done to develop and refine industry codes, it is timely to evaluate compliance and enforcement. It was suggested that it is far better to increase incentives, consensus and competition towards this end, since regulation is a blunt instrument. Yet companies tend to see compliance as a cost to them, rather than as an opportunity to build a reputation for excellence in customer service.[28]

Two of the stakeholders independently drew on the analogy of the development of motor transport to speak about the current point of development of the telecommunications sector. It has taken some decades of development, but contemporary motor transport arrangements have reached a high level of reliability and community safety through a co-evolutionary process of technology development (standardisation of safety features and reliability in cars, safer roads, speed bumps, roundabouts and traffic lights), regulation (speed limits, banning of alcohol and drugs, road rules) and changes in driver behaviour (education and licensing, re-testing for older drivers).

The rapidly changing telecommunications environment, considered in the light of this analogy, clearly has a long way to go. With the passage of time, as well as the introduction of new technologies, products and services, we can also expect to see the emergence of standards, improved consumer knowledge and community understanding of 'safe' behaviour (financially, socially as well as in terms of security and privacy),as well as regulation where it is necessary. As one industry stakeholder also suggested, industry may also need to build 'safety' features into products, to reduce the risks for consumers, for example by providing 'speed bumps' to ensure for example that data downloads or premium services don't result in consumers unnecessarily 'speeding'.

"Yet companies tend to see compliance as a cost to them, rather than as an opportunity to build a reputation for excellence in customer service."

Conclusion: Tele-paradigms and accelerated culture

The idea of the paradigm shift is generally used in a simplistic way, to describe any kind of radical transformation. But it is easy to call a transformation a ‘paradigm shift’ after it has happened and we know where things have come from and where they have arrived at. Taking the idea of a paradigm shift seriously means recognising that a true paradigm shift is complex, turbulent, and takes place over an extended period of time. It also calls attention to the way that within competing new paradigms, provision may need to be made for ‘old paradigm’ problems to continue to be resolved. It is important not to throw the baby out with the bathwater in the pursuit of the new. There is a need for critical analysis of the consumer service approaches that continue to be successful and provide continuity from old to new paradigms, bringing consumer confidence with them.

It is not surprising that, in what is now routinely called ‘the information society’, the field of telecommunications is at the leading edge of changes to established relations between producers/providers and consumers. In a relatively brief time, monopoly services with limited options have given way to many competing entities offering a bewildering array of alternatives subject to a constant cycle of invention and obsolescence within an ‘accelerated culture’. These conditions can be, simultaneously, exhilarating and disturbing for consumers and service providers. The former are attracted to new ways of communicating, but anxious about whether they have made ‘the right choice’ and easily frustrated when the promised seamless transition to new technologies and providers proves to be problematic. The latter are excited by the possibilities of winning new customers to innovative telecommunications services, but also disconcerted by the rapid evaporation of ‘brand loyalty’ and the substantial lack of consumer product knowledge. Expenditure of time and effort on getting a service to work or contacting the company after sale can lead to a dissatisfied sense that the consumer is working for the service provider, rather than the other way round. The larger the gap between customer expectation and perceived quality of delivery, the greater the level of dissatisfaction.

The idea of a new customer-service provider paradigm occasioned by convergence should be treated with due caution. Implicit in any consumer transaction is an older paradigm concerned with such features as use value, product reliability and value for money. It is apparent from the current circumstances and evidence that, without a re-configuration of service provision and consumption, the telecommunications industry will continue to be experience significant degrees of consumer dissatisfaction and producer disorientation. More original, fine-grained research is now needed that would help to generate new knowledge of how older and newer paradigms can be brought into alignment, and to develop consumer service approaches that will build consumer confidence and empowerment.

References

[1] For privacy/confidentiality reasons the stakeholders consulted as part of this research are not referred to by name here, but are instead referred to as 'regulatory', 'industry', or 'consumer representative' stakeholders. The individuals who were interviewed are listed in Appendix 1. All interviews were conducted by phone.

[2] Comment by a consumer representative stakeholder.

[3] The iPhone was noted as a significant new convergence development by several of the stakeholders.

[4] Comment by a consumer representative stakeholder.

[5] Comments along these lines were made by regulatory, industry and consumer representative stakeholders.

[6] Carper, K.L. (1996) 'Construction pathology in the US', Struct. Eng. Int. 1: 57.

[7] Petroski, H. (2006) Success through Failure, Princeton: Princeton University Press, p.62.

[8] ACMA (2008) Telecommunications Today. Report 4: Consumer Satisfaction, Canberra: Australian Communications and Media Authority, pp. 7-8.

[9] Productivity Commission (2008) Review of Australia's Consumer Policy Framework: Productivity Commission Inquiry Report, Volumes 1 (Summary) & 2 (Chapters and Appendices), Canberra: Productivity Commission, April 2008. http://www.pc.gov.au/inquiry/consumer/docs/finalreport (accessed 23 May 2008), Vol. 2, p. 464-5. The Review points out that essential services are important from a consumer policy perspective. Key challenges include: product complexity (meaning that consumers may not be well-informed) more billing, contract and service quality problems; the need for special protection of disadvantaged consumers.

[10] The Australian Bureau of Statistics data on household expenditure classifies telephony charges as household services, separately from utilities like water, electricity and gas. Internet and Pay TV expenditure are categorized as recreational or leisure expenditure. See: 1998-99 Household Expenditure Survey, Australia (cat no. 6535.0) and 2003-4 Household Expenditure Survey, Australia (cat. no. 6535.0.55.001).

[11] The Australian Bureau of Statistics' Adult Literacy and Life Skills Survey (4228.0) includes a problem solving component. A proficiency level of 3 (on a scale of 5) is regarded as the 'minimum required for individuals to meet the complex demands of everyday life and work in the emerging knowledge-based economy' (p.5). Only 30% of the general population 15 years and over meet this standard of problem-solving proficiency. Level 2, the minimum level met by 65% of the population, is characterised by tasks with well-defined, transparent and explicitly-stated criteria, with linear step-by-step reasoning, without loops or back-tracking.

[12] One consumer representative stakeholder recounted the experience of a colleague, who was assisting someone to upgrade to broadband, being asked by a service provider whether the service was an 'unbundled local loop service'. It is unlikely that most consumers would understand what this means, nor would they have ready access to this information.

[13] TIO 2007 Annual Report, p.43.

[14] TIO (2008) Telecommunications Industry Ombudsman 2007 Annual Report, p.44.

[15] TIO 2007 Annual Report, p.31.

[16] Penman, R. & Turnbull, S. (2008) Media Literacy, p.39.

[17] Penman and Turnbull suggest that we are seeing the emergence of 'Generation C' (for 'content'), a significant new social force that gives an indication of the potential for the increasing emergence of more engaged and empowered consumers in the future. Gen C favours 'communal creation and communal use of knowledge', which occupies 'a hybrid, consumer-and-producer position. They both consume internet content and can be active producers of that content' (p.14). This is the segment also referred to as 'produsers', who draw on new media literacies and capacities which include creativity, collaboration, and critical and communicative capabilities.

[18] Comment made by a consumer representative stakeholder.

[19] The 2008 Fraud Fortnight campaign ran between 24 February and 8 March. It focussed on scams that 'seduce and deceive by promising things like great prizes, true love or easy money' (http://www.scamwatch.gov.au/content/index.phtml/itemId/725687).

[20] This point was also made by one of the consumer representative stakeholders.

[21] Anne Hurley (2007) 'The key to industry progress towards NGN is increasing industry collaboration', presentation to the Australian Telecommunications Summit, August 2007. www.commsalliance.com.au/__data/page/15834/Presentation_-_CommsA_Aust_Telecom_Summit_August_2007.ppt

[22] ACMA Media Release, 20 May 2008, 'Top six trends in communications technology create regulatory pressure'. Full report details: ACMA (2008) Top Six Trends in Communications and Media Technologies, Applications and Services — Possible Implications, March 2008.

[23] The Productivity Commission Report identifies as an emerging issue the extent to which lack of comprehensibility in contracts, advertising, signage or labelling might constitute misleading or deceptive conduct. This is especially important in view of the increasingly 'essential service' nature of telecommunications. However, while utility services were traditionally straightforward reticulation connections into the home with simple tariffs, the contemporary telecommunications landscape has been transformed from the 'plain old telephone system' (POTS) into 'pretty amazing new services' ('PANS'). The Productivity Commission Report raises the issue of whether legislative amendments or the introduction of a new 'comprehensibility' or 'plain English' requirements into the national generic consumer law might be necessary. (2008, Vol. 2, p. 144)

[24] See for example the discussion in Goggin, G & Newell, C. (2003) Digital Disability: The Social Construction of Disability in New Media, Lanham, Maryland: Rowman and Littlefield.

[25] Comment made by a regulatory stakeholder.

[26] The TIO suggested that the proportion of complaints resolved at level 1 is itself an indicator of an appropriate level of customer service.

[27] The term used by one of the regulatory stakeholders.

[28] One suggestion was that of promoting adoption of the Australian Standard on Complaint Handling, as world's best practice in this area.

Appendix:
The convergence context

What do we mean by convergence?

'Welcome to convergence culture, where old and new media collide, where grassroots and corporate media intersect, where the power of the media producer and the power of the media consumer interact in unpredictable ways'[29]

Convergence is a complex and multi-faceted process, encompassing technological, industrial, cultural and social changes in media and communications within our culture. The term is used to describe the flow of content across multiple media platforms, the cooperation between media and communications industries, and the changing behaviour of media consumers. Henry Jenkins, author of *Convergence Culture*, points out that, although convergence alters the relationship between existing technologies, industries, markets, genres and audiences, it is clearly still a process that is a long way from completion:

> For the foreseeable future, convergence will be a kind of kludge — a jerry-rigged relationship between different media technologies — rather than a fully integrated system. … The way in which those various transitions play themselves out will determine the balance of power within this new media era.[30]

When we talk about convergence we are actually talking about a number of inter-related but distinct processes:

- A large-scale social reorganization, driven by technological change and the trend to increasing competition, flexibility and consumer agency across all sectors of the economy,
- The disengagement of content and applications from distinct carriage platforms,
- IP transformation,[31] and increasing transmission capacity making high-bandwidth services more attractive to end-users.

The term 'convergence' is somewhat deceptive, suggesting that diverse media and technologies are coming together, which would imply that the process is one of simplification. In fact the de-coupling of applications and content genres from fixed hardware platforms is resulting in high levels of diversification and differentiation. Consumers now have a huge array of options for where and how they consume, for example, TV programs. At all levels, convergence is generating increasing complexity, not simplification. And if convergence is creating synergies and positive feedback loops, these appear to be accelerating the pace of change beyond all our expectations, and generating change in unpredictable ways.

According to ACMA Chairman Chris Chapman:

> Changes in communications technology are out-pacing our notions of what we thought was possible just five years ago … it is the very nature of convergence that it gets away from us and leads us to unexpected places in a veritable nanosecond.[32]

Convergence is not a new idea, but has been around in one form or another since the early 1980s. The shaking up of established principles of interaction between consumers and industry is part of a process of global transformation which has been going on for some time. As the recent Productivity Commission Review of Australia's Consumer Policy Framework observes,[33] the relationship between the telecommunications industry and consumer policy is particularly interdependent and involuted. As well as being an area which is subject to consumer policy, the telecommunications industry is also one of the main drivers of change for consumer policy. The Final Report of the Productivity Commission Review outlines the following major drivers of change in consumer markets:

- **A more competitive market environment**, because of economic reforms and the growth of the Internet.

- **A greater variety of goods and services,** which has helped to make consumers more demanding and increased the effort required to compare alternatives.

- **Growing product complexity**, which has led to greater reliance by consumers on skilled intermediaries, widespread use of standard form contracts, with inability to vary terms raising unfairness concerns, greater emphasis on regulated (and often complex) information disclosure, and the growth of sometimes prescriptive, industry-specific consumer regulation.

- **Changes in spending patterns,** with around 80 per cent of household income now spent on services, while for some services, gauging quality and suitability before and even after purchase can be difficult, increasing the importance of consumer confidence and trust in suppliers.

- **Technological change** has contributed to greater choice and product complexity, as well as changing spending patterns, better access to information on goods and services and new ways to purchase them. The growth in e-commerce has raised new redress issues; created additional opportunities for fraud; heightened related problems such as unsolicited approaches (spam); and added to the global dimensions of consumer policy.

- **Changing consumers with higher expectations:** consumers are now more confident and informed. However greater product complexity, and demographic changes — such as population ageing and increasing market participation of young people — may have simultaneously increased the pool of vulnerable consumers.

All these trends are experienced in the telecommunications industry, which is both a microcosm and a motor of broader shifts in consumer markets.

Where new technologies are concerned, there is always a tendency for 'hype', and for public debate to polarise to utopian or dystopian extremes. It is important, then, to be circumspect about the nature of the changes underway, and not to blindly assume that they are fundamentally rewriting the rules of engagement between consumers and suppliers. As the Productivity Commission report recognizes:

> Many of the problems that consumers may face in the on-line world — such as undelivered orders, warranty disagreements and misleading advertising — are little different from those in the traditional purchasing environment and can ostensibly be addressed using the existing generic consumer law. Indeed, there are reasons to be cautious in considering targeted consumer regulation in this area.[34]

Just as the notion of convergence has been in circulation since the early 1980s, so too has the idea that a qualitative shift has been underway in the relationship between production and consumption. This transition is often referred to as the shift from Fordist to Post-Fordist production regimes. However, the uneven and multi-directional nature of change resists reduction to a single, dominant process. Many current forms of production and consumption, such as the fast food and building industries, have been described as *Neo*Fordist. Consumer-provider relations, therefore, are influenced by multiple factors that produce unexpected outcomes. For example, the popularity of mobile telephony was easily foreseen, but not the particularly powerful appeal of SMS.

These changes are clearly still underway today, as the Productivity Commission's summary of trends shows, in the shift in emphasis from mass-standardised goods and services to the proliferation of customised products and flexible services.

‘New Times’ — the shift from Fordism to Post-Fordism

Convergence is not a new idea. The following was published in 1983:

> A process called ‘convergence of modes’ is blurring the lines between media, even between point-to-point communications, such as the post, telephone and telegraph, and mass communications, such as the press, radio, and television. A single physical means — be it wires, cables or airwaves — may carry services that in the past were provided in separate ways. Conversely, a service that was provided in the past by any one medium — be it broadcasting, the press, or telephony — can now be provided in several different physical ways. So the one-to-one relationship that used to exist between a medium and its use is eroding.[35]

Just as the notion of convergence has been in circulation since the early 1980s, so too has the idea that a qualitative shift has been underway in the relationship between production and consumption. This transition, often referred to as the shift from Fordist to Post-Fordist production regimes, was debated in the UK in the late 1980s under the rubric of ‘New Times’:

> [Since the late 1970s] we have witnessed a qualitative change, which has shifted the centre of gravity of the society and the culture markedly and decisively in a new direction. … The ‘New Times’ argument is that the world has changed, not just incrementally but qualitatively, that Britain and other advanced capitalist societies are increasingly characterised by diversity, differentiation and fragmentation, rather than homogeneity, standardisation and the economies and organizations of scale which characterised modern mass society.[36]

It is worth noting that the ‘New Times’ thesis was advanced before the fall of the Berlin Wall and the dissolution of the Soviet Union, and long before the Internet became a feature of everyday life. Intimations of change were being felt, but their ultimate character was the subject of speculation in an ‘age of uncertainty’. Post-Fordist arguments have been criticised on various grounds – indeed, some have claimed that many current forms of production and consumption (for example, the fast food and domestic building industries) can be described as *Neo*Fordist. The uneven and multi-directional nature of change resists its formulaic reduction to a single, dominant process. Consumer-provider relations, therefore, are influenced by multiple factors that produce outcomes that can be both highly predictable and difficult to anticipate.

Thinking of what consumers do as a form of labour

Consumers' understandings of innovative products and services can only be based on what they already know and understand.[37] This knowledge may be based not just on direct experience, but also on expectations built up from the experiences of family, friends and colleagues, and imaginatively through advertising and marketing information and images.[38]

A concern with the innovation process as an interconnected whole—through which novel goods are created within social contexts of production, but must be symbolically positioned within the marketplace in ways which match the understandings and expectations of consumers—is reflected in what has been called the design/domestication interface.[39] The 'design/domestication interface' provides a bridge between the worlds of production and everyday contexts of consumption, and consists of *collaborative work on the object* which is initiated by the object's producers and is taken over and continued by its consumers. Once the product has been acquired by the consumer, the object is incorporated into the everyday life of the consumer, through the process of 'domestication' itself. This process may itself be long-term and complex, before the generic artefact of the marketplace is converted into a particular 'owned' one.

The idea that what the consumer does with/on the commodity is a form of productive work is not new. In convergent communications environment, however, it is much more apparent that the consumer *needs* to work on the product in order to make it functional. Installation, customisation, trouble-shooting, updating – there is much more that the consumer has to be involved in, compared to other utilities. With electricity or water, for example, there is an expectation of 'plug and play', and when things go wrong there is little the consumer can do for themselves (and indeed little they are allowed to do).

The idea of audience co-creation of media, currently in widespread circulation, is one aspect of the agency of the empowered consumer. Media audiences exist 'in a large-scale and complex industry involving content providers, service providers, account managers, media buyers, the marketing of media to agencies and of agencies to clients, all premised on the founding instance that audiences can be delivered to clients'. But what is delivered is not the people but their *attention:* 'the media market is a market in attention'[40] So one aspect of the work that media audiences and consumers of information products do is that they provide their attention. Their attention cannot, however, be presumed or counted on.

The consumer's involvement in problem-solving, for example, is necessary but may be resented by the majority of consumers, since their attention is limited and they prefer to choose how they 'spend' it.

In their recent book *Media Consumption and Public Engagement: Beyond the Presumption of Attention*, Couldry, Livingstone and Markham seek to establish the degree to which a genuinely 'public connection' can be detected through the media and the audience practices that surround them.[41] It cannot be assumed that attention is evenly distributed, and acceptance cannot be assumed when the consumer's attention is forcibly commanded (for example when something goes wrong). Cubitt suggests that:

Understanding that the work of consumption is work … brings to the task of attending to media a sense of responsibility. The responsible citizen of a media democracy is not an end consumer, since audiencing transforms space, time, matter, and energy into information. This transformation is information because it makes a difference to later events, that is, it makes history.[42]

Kuhn's notion of the 'paradigm shift'

But does this transition constitute a 'paradigm shift'?

The term 'paradigm shift' first became popular after Thomas Kuhn published *The Structure of Scientific Revolutions* in 1962. Kuhn argued that scientific theory evolves, not through the accumulation of facts, but rather through radical transformations in ways of thinking about the world. A paradigm, in Kuhn's view, is not simply the currently dominant theory, but the entire worldview in which it exists.

Scientific method is oriented towards finding a coherent framework that will account for as much of the available observational data as possible. There are always anomalies within any paradigm — failures to account for observed phenomena — which must be ignored or understood as acceptable levels of error. Anomalies have varying degrees of significance within a discipline, however, and as scientists take advantage of technological innovation to extend their observational methods, an accumulation of highly significant anomalies may stretch a dominant paradigm to its limits.

Kuhn illustrated the argument using examples from the history of science. Paradigm shifts tend to be most dramatic in sciences that appear to be stable and mature, as physics was at the end of the 19th century. At that time, physics appeared to be filling in the last few details of a largely worked-out system. Indeed, in 1900, Lord Kelvin stated that 'There is nothing new to be discovered in physics now. All that remains is more and more precise measurement.' Yet only five years later, the Newtonian model which had been used to describe force and motion for over three hundred years was challenged when Albert Einstein published his paper on special relativity. Because the Einsteinian model accounted for an accumulation of anomalous data, it eventually replaced the Newtonian formulation and became accepted in mainstream science as a superior description of reality.

When enough significant anomalies have accrued against an established paradigm, a scientific discipline is thrown into a state of ***'paradigm crisis'***. Bold individuals then embark on what Kuhn calls revolutionary science, exploring alternatives to long-held assumptions. These explorations generate alternatives to the established framework of thought and action. Because potential new paradigms are new and generally incomplete, they may themselves generate anomalous data. The mainstream scientific community will understandably be resistant to unproven trends they may see as faddish, though some will recognize that the old ways of thinking have reached their limits and will want to explore new ways of thinking. By joining the quest for new paradigms, they will help to refine and generate data which assesses the relative merits of competing alternative theories. The period of paradigm crisis is one in which both old and potential new paradigms have their adherents, and is often one of vociferous confrontation between competing world-views. Over time one of the new paradigms will itself become dominant and a paradigm shift will have occurred.

Although this overview conveys the impression of a fairly orderly progression between paradigms, punctuated by periods of crisis and transition, the reality is inevitably more complex than this. Although one paradigm or world-view may be dominant, there are always alternative paradigms in circulation, which compete for attention and adherence, just as the dominance of traditional medical models co-exists with 'alternative medicine'.

It is clear however that Kuhn envisages the period of transition between established paradigms as neither smooth nor rapid. Kuhn quotes Max Planck's observation that sometimes 'a new scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents eventually die, and a new generation grows up that is familiar with it'. Despite a number of criticisms and modifications, Kuhn's idea was revolutionary in its time, causing a transformation in the way that science is understood as a social process. It was itself therefore part of a paradigm shift in the history and sociology of science.

A paradigm shift doesn't just revise or transform scientific theory, it changes the way terms are used, how scientists view their objects of study, what questions are regarded as valid, and what methods are used to achieve new results within the field. While Kuhn argues that the new theories are not simple extensions of the old ones, but radically new world views, to be successful a new paradigm must be superior to the old paradigm in the sense that it accounts not just for the anomalous data precipitating the crisis, but also for all the observational data that the old one did. In the case of early twentieth century physics, this was achieved through Newtonian mechanics being incorporated into the Einsteinian paradigm as an adequate approximation at speeds that are very slow in comparison with the speed of light.

The term 'paradigm shift' has since become widespread across many political, social and economic contexts, to encapsulate the notion of a transformative or discontinuous change in world-view — a radical shift between modes of thinking and organizing. However the term 'paradigm shift' has become something of a cliché and must be used with caution. Paradigms do not simply disappear, but can resonate long after they have become unfashionable. As the eminent cultural theorist Raymond Williams has noted, at any one time dominant, residual and emergent forms of culture exist.[43]

Are we currently in a paradigm crisis?

Hall suggests that the transition from Fordism to Post-Fordism may not be an 'all or nothing' process:

> What kind of 'transition' are we talking about and how total or how complete is it? This way of posing the question implies an all-or-nothing answer. Either it *is* a New Epoch, or nothing at all has changed. But that is not the only alternative. [44]

In fact, he suggests, we may have entered a long-term phase of transition:

> In a permanently Transitional Age we must *expect* unevenness, contradictory outcomes, disjunctures, delays, contingencies, uncompleted projects overlapping emergent ones. … earlier transitions (such as that from household to factory production) all turned out, on inspection, to be more protracted and incomplete than the theory suggested. We have to make assessments, not from the completed base, but from the 'leading edge' of change.[45]

The current situation, in consumer culture and in the telecommunications industry specifically, certainly seems chaotic and turbulent, with a great deal of uncertainty around competing standards, continuous innovation and the emergence of new players in established and emergent industry sectors.

A number of commentators, most notably Castells, have linked these changes to the increasing 'informatisation' of society. Castells stresses that social dynamics are irreducibly created through the interrelationships between the economy, the state, and the ways people create meaning in their lives through collective action. This view is encapsulated in the statement that 'our societies are increasingly structured around the bipolar opposition of the Net and the Self'.[46] (1996, p. 3). By 'the net', Castells means not just the Internet but the whole constellation of networked forms of organization that he argues are replacing vertically integrated hierarchies as the dominant form of social organization.

In their book *Consumption in an Age of Information*, Cohen and Rutsky also link the changing production/consumption relationship to processes of informatisation:

> consumption is almost invariably conceived in opposition to production, often with the implication that consumption is a passive counterpart to the activity of production. Yet, in an age of information, this distinction, too, seems increasingly anachronistic, as the production of information becomes increasingly subordinated to its reproduction, which often occurs at the level of distribution and consumption, not in its conditions of production.[47]

It is possible that some of today's uncertainty and turbulence will subside over time as consumers come to be familiar with today's new technologies, and as some options fail to find markets as consumers balance ease-of-use, fit to lifestyle and willingness to pay. Perhaps, if things seem chaotic now it may be that we are in the middle of a 'paradigm crisis', and not through to the 'new paradigm' at the other side of a paradigm shift. In 5 to 10 years' time, when consumers have more familiarity with converged content, services and devices, and there is less uncertainty about which of today's new technologies will be winners, things may look less chaotic than they do now.

If we accept Cohen and Rutsky's analysis, however, then things look somewhat more pessimistic than this. They suggest that the rapid circulation of all forms of media and information will continue to drive complexity and turbulence in the relationship between consumers and producers, and indeed that consumption is:

> similar to those turbulent processes in which an interaction of factors becomes too complex to be predicted or controlled. Indeed, the consumption of information has less in common with the directed, linear movement of intelligible "information" than with the fluid, chaotic dissemination of "noise".[48]

It is possible that, over the next few years, more and more new technologies, services, applications and content forms will come along which will continue to add differentiation and diversification to the current 'convergence' mix. What Kuhn's formulation leads us to believe, however, is that even when paradigms shift, old paradigm structures and ways of working can be expected to be preserved. The transition to Post-Fordism, for example, does not completely replace, but retains elements of Fordism. Fordism was characterised by:

> [a] tension between high fixed costs and low variable ones, and the consequent drive for volume. First, as Ford himself emphasised, mass production presupposes mass consumption. Consumers must be willing to buy standardised products. … Second, Fordism was linked to a system of protected national markets. … Third, mass producers were particularly vulnerable to sudden falls in demand. … [Fordism gave rise to an economic culture] marked by its commitment to scale and the standard product (whether it is a Mars bar or an episode of Dallas); by a competitive strategy based on cost reduction; by authoritarian relations, centralised planning, and a rigid organization built round exclusive job descriptions.49

As Hall points out in the 'New Times' debate, standardisation remains a requirement for many products in Post-Fordism, citing as an example the size, shape an composition of McDonald's Big Mac or French fry.[50] Standardised goods and services, far from having disappeared, are more important than ever, including as they do such standards and conventions as the universal service obligation and the minimum requirements of the Australian Broadband Guarantee[51], infrastructure services, and the media formats which ensure interoperability between diverse hardware and software platforms. Standardised services are the bedrock on which differentiated and flexible products and services can be built. Standardisation and differentiation are, therefore, always held in tension, sometimes productively and sometimes obstructively.

Convergence changes the relationship between producers and consumers

Throughout the 1980s and 1990s, the tools industry developed for finding out about consumer needs, and communicating with consumers about how they could be met, were market research and marketing:

> One of the features of Post-Fordist production is the leading role given to market research, packaging and presentation. … marketing has provided the dominant and most pervasive classifications of 'social types' in the 1980s … These are the types outlined in commercial lifestyling and 'psychographics' — forms of research which don't present descriptions of living, breathing individuals so much as hypothetical 'analogues' of 'aspirational clusters'.[52]

In its contemporary manifestation, convergence complicates the relationship between producers and consumers to the point where the traditional tools can no longer be applied in the same way. As well as concentrating media and devices, convergence 'addresses multiple devices, wireless access and continuous connectivity to individually preferred networks of personal and work contacts, and leisure and entertainment resources.' The result is an expansion and diversification which has led to 'uncertainty about the future of traditional media and how they should be reshaped for a multi-platform digital environment' and 'the emergence of new audience formations.'[53]

The circulation of media content – across different media systems, competing media economies, and national borders – depends heavily on consumers' active participation. In *Convergence Culture, Jenkins* argues that 'convergence represents a cultural shift as consumers are encouraged to seek out new information and make connections among dispersed media content. This book is about the work – and play – spectators perform in the new media system.'[54]

As consumers integrate converged communications technologies into their everyday lives, they become increasingly dependent on them just to *be themselves*. As Jenkins points out,

> Convergence doesn't just involve commercially produced materials and services travelling along well-regulated and predictable circuits. … It also occurs when people take media into their own hands. Entertainment content isn't the only thing that flows across multiple media platforms. Our lives, relationships, memories, fantasies, desires also flow across media channels.[55]

The active consumer has spent considerable time making an effective personal investment in the products, and this is intimately tied up with their sense of self. Because these technologies are part of who they are as well as what they do, consumers are becoming increasingly demanding:

> 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.[56]

Old paradigm terms remain in circulation, but capture old paradigm concepts, which are in the process of subtly shifting, if not breaking down. Content and platform convergence is changing the what we mean by 'video', 'telephony', 'applications', 'services' and a host of other terms in everyday usage, and creating challenges for regulators, industry and consumers.

The notion that core concepts and definitions are being strained or even broken certainly suggests the kind of transformation in world-view that would accompany a paradigm crisis. A proliferation of neologisms is another indication of the attempt to capture the new concepts needed to make them relevant to new paradigms. In particular, we need new ways of describing the diversification in the role of the consumer in contemporary convergence culture. The notion of 'produsage', for example, captures the idea of user-generated content as a blurring of the notions of production and usage: 'the engagement of participants in a hybrid user-producer role … drives other new media projects from open source software development to citizen journalism and Wikipedia.'[57]

If it is the case that the current period is one of paradigm crisis rather than paradigm shift then this is only one of the terms whose ultimate status is unclear. Will this become one of the major themes of the dominant relationships between consumers (end-users, customers, retail clients, citizen/consumers, however these are understood) or just a niche activity?

Consumer literacy/education

The new and emerging telecommunications services require a much higher level of consumer literacy than earlier technologies. In a recent review of media literacy research commissioned by ACMA, Penman and Turnbull suggest that the contrast between traditional broadcast media and converged digital media is like that between 'two worlds', with different conceptions of media users in each world and different understandings of what it means to be literate.

> [On the one hand there is] a world of discrete platforms and services that we know as radio, television and telephone. On the other hand, there is the world of digital connectivity in which the traditional boundaries are blurring into non-existence.[58]

These two worlds have different implications for our understanding of media and of media literacy. From the point of view of regulation, these two worlds necessitate a shift in approach, from shielding and protecting consumers towards preparing people to 'self-regulate' through media education.[59] Penman and Turnbull argue that the very nature of new media forces such a reconsideration, because access to new media is increasingly difficult to control, and is in any case in a state of continuous transformation. Consumers themselves are also involved in creating and transforming the new media environment, and therefore:

> We recommend that following three key questions may provide a more useful guide to promoting digital literacy from a preparatory stance:
>
> - How can we help to prepare people to participate in the new convergence culture?
> - How can we help them see how the media are shaping their understandings?
> - How can we help them make informed value judgements about their digital practices? [60]

Indeed, how we understand consumers as media audiences is transformed:

> With broadcast media it has been relatively easy to construe audiences as consumers, and passive ones at that, and media organizations as producers, and powerful ones at that. With the newer, interactive media in particular, it is much harder to sustain this picture. … internet audiences are very different from broadcast audiences: in particular, internet audiences can create as they consume. [61]

Penman and Turnbull say that this evolution heralds the emergence of 'a new type of user', which some commentators have referred to as 'Generation C' (for 'content'). Generation C is proposed to be a significant new social force that favours 'communal creation and communal use of knowledge'. Significantly, members of Generation C occupy 'a hybrid, consumer-and-producer position. They both consume internet content and can be active producers of that content'.[62] This is the segment also referred to as 'produsers', who draw on new media literacies and capacities which include creativity, collaboration, and critical and communicative capabilities.

Penman and Turnbull argue that we need to consider how best to prepare people for developing a range of socially situated competencies, which are not oriented towards shielding or protecting consumers, especially young people, from the influence of the media, but rather towards enabling them to make informed decisions on their own behalf — in other words, towards *empowering* them.

Education will certainly go some way towards providing consumers with a better understanding of the technologies they use, and will circumvent some of the confusion, anxiety and antagonism this causes (which includes a widespread lack of understanding of the economics of the telecommunications industry). If, as we suggest, consumer dissatisfaction arises as the gap between expectation and delivery, then the notion of 'literacy' may not go far enough in capturing the shift that is needed. The shift is both towards more realistic consumer expectations about what their experiences of technology use will be like (which is as much the responsibility of industry as consumers), and towards a greater sharing of responsibility for consumer satisfaction or dissatisfaction with products and services:

> Traditional regulation of telecommunications, broadcasting, internet and radiocommunications is built on services and networks being in fixed and known locations. Recently, greater mobility of services has had a major impact on the way Australians communicate and conduct their business. At the same time it is also posing challenges for regulators in *identifying and understanding the reasonable expectations of industry and consumers in facilitating and regulating new services*.[63]

Literacies, after all, are socially situated practices. As Livingstone argues, they are not merely a set of skills, but are part of 'the knowledge arrangements of society'[64]. Indeed, the increasing ubiquity of interaction with and through new media emphasises and reinforces a strong connection between digital literacies and full engagement and participation in society. As Livingstone puts it, 'debates over literacy are, in short, debates about the manner and purposes of public participation in society' (2004: 20)[65]. As Jenkins asks, 'What models of democracy will take roots in a culture where the lines between consumption and citizenship are blurring?' (Jenkins 2004: 41).

These ideas go back to the 'new times' debate discussed earlier:

> There has been an enormous expansion of 'civil society', related to the diversification of social worlds in which men and women now operate. At present, most people only relate to these worlds through the medium of consumption. But, increasingly we are coming to understand that to maintain these worlds at an advanced level requires forms of collective consumption far beyond the restricted logic of the market. This shift of time and activity towards 'civil society' has implications for our thinking about the individual's rights and responsibilities, about new forms of citizenship and about ways of ordering and regulating society other than through the all-encompassing state.[66]

Many current debates about telecommunications are still conducted in the light of a model of citizenship influenced by the state's former monopoly of infrastructure and service provision. Commercial deregulation, and the introduction of new technologies and services, has introduced a market logic that emphasises the primacy of the private consumer rather than the public citizen. This shift may be well accepted until the consumer becomes dissatisfied for some reason, whereupon the language of citizenship is frequently reverted to, and the primacy of government as guarantor of service and protector of inalienable rights is reasserted.

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