

The Future of Communications: “Convergence” beyond Broadcasting and Telecommunications

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Communication Transformation

Our existing and future social structure is a network society in which “microelectronics-based information and communication technologies” power organisational and relationship-based arrangements (Castells, 2004). Put another way, we will continue to be heavily reliant on broadband ecosystems, made up of devices, applications and networks.

In the “access to content” world, supply is defined by ubiquitous distribution; that is, content everywhere, anytime and on any device and platform. Pascal Lamy is of the view that such cross platform flow will not occur between terrestrial broadcasting and mobile broadband, for some time yet. In his 2014 report to the European Commission, he stated that the two platforms will co-exist for some time based on the needs of the consumers and that “convergence of both platforms is not on the practical policy agenda yet.”¹

However, the speed of platform convergence might occur at a faster rate than Lamy suggests. For example, three years prior to Lamy’s report, Matsumura and Kanatsugu had reported the innovation of a converged platform concept- Hybridcast- a system that is intended to “[make] the most of the fusion of broadcasting and communications networks”. Conceptually, the system melds the strengths of broadcasting (simultaneous delivery, high quality, and high reliability) and those of communications (the ability to respond to the individual needs and requests of users).

The underlying implication is one of rapid convergence. This requires efficient spectrum use and effective and equitable spectrum management. Otherwise, the existing and future ecosystem will be threatened.

Content Explosion: Opportunities and Risks

As service providers combine the delivery of voice, Internet, broadband and video, it is content which will be the great differentiator (spectrum being the great enabler). The adage “content is king” is also being transgendered. Content is king, queen, prince and princess of all it pervades.

¹ <http://ec.europa.eu/digital-agenda/en/news/report-results-work-high-level-group-future-use-uhf-band>

It is particularly in the domain of “exclusive” content that value proposition is being sought. Data mining is one of the thriving areas. For example, in order to access Android’s Brightest Flashlight, users must grant access to their location, photos/media/files, Wi-Fi connections and network connections among other things. The entire value chain of multiple platforms is being mined to monetise content.

However, there are ethical issues which require attention. We are each guaranteed the inalienable right to communicate ideas and opinions freely and also to be free in our ability to receive such communication (freedom of expression/communication). But we also expect that the ideas and opinions we have should be free from interference by persons who are not intended to be recipients of those ideas and expressions (“Data privacy”) (see Guy Berger et al.).

But, in a world where persons download applications which disclose their every location and where they post every shred of information about themselves, what does privacy mean?

Most people might agree to willingly “surrender” or “sell” their private information but not have it “taken” or “stolen” from them. So, our concept of privacy is predicated on the expectation that we should have an inviolate ability to “determine for ourselves when, how, and to what extent information about us is communicated to others” (Westin).

This expectation of privacy is being made unrealistic by technological advances and the burdens of functioning in the network society. Information is being amassed on an unprecedented scale and most people have no ‘real’ knowledge of when, the nature or extent to which information about them is being stored and accessed.

In a recently concluded 30-minute experiment, in the United Kingdom, persons interested in accessing free Wi-Fi were required to agree to terms & conditions which included “[giving up] their firstborn child or most beloved pet.” Six persons signed up.

That stark picture contrasts with a 2012 World Economic Forum paper which suggests that the analysis of patterns from mobile phone usage “[could]... predict the magnitude of a disease outbreak half-way around the world, allowing aid agencies to get a head start on mobilizing resources and therefore saving many more lives.”

Also, five years ago a study of 2400 banks in 69 countries, found that greater information sharing among the banks led to greater profitability in the banking sector, reduced bank risk, a reduction in the possibility of a financial crisis and ultimately, economic growth (Houston et al.).

So, it is unrealistic to expect that there will be any letting-up on the mining of data to spur economic growth and development. But, equally, there must be an insistence on balance between access to data, on the one hand, and meaningful use and dissemination, on the other.

The Network Society is a Different Society

The Japanese government predicts that by 2030 human-robot co-existence will be a social reality in that country.²

It is also being posited in some quarters that intelligent machines will become so critical to the network society that they too should have rights. George Dvorsky (2012) states:

“Pending technologies, like synthetic neurons and neural interface devices, will result in brains that are more artificial than biological. We’ll need to respect the moral worth of hybridized persons.”

He further suggests that hybridized machines ought to be afforded protections and freedoms as any human. Has Dvorsky and other transhumanists gone too far or are they providing a realistic blueprint for a society in which the ability to engage in intelligent communication becomes the defining characteristic of personhood?

There are no easy or ready answers to these questions but it is inevitable that at some stage communications regulators will have to consider the implications of intelligent machines which will not just be an assemblage of software and hardware but converged with humans to one degree or another.

Conclusion

It is not intended to suggest that all of these issues are to be treated with equal weight or immediate importance. After all, regulators’ hands are full dealing with the realities of the existing and rapidly evolving communications ecosystem. However, it is not too early for regulators to begin probing the deep conceptual reaches of the network society in which there is certain to be a nexus between techno-regulation, human rights and notions of human nature.

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Their views are personal and do not necessarily reflect the position of the Broadcasting Commission.

² 2007 “Long-term Strategic Guidelines”

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