THE BCJ AT 35: PEOPLE TRANSITIONING DIGITAL

On the 35th anniversary of The Broadcasting Commission of Jamaica **ANTHONY CLAYTON** and **CORDEL GREEN** consider the future of regulation in the age of the metaverse

The Broadcasting Commission of Jamaica (BCJ) is celebrating its landmark 35th anniversary at a moment of profound global crisis which is likely to be the catalyst for transformative and irrevocable change. In January 2021 The Economist estimated that the total global cost of the COVID-19 pandemic in 2020 and 2021 is now about $10.3tn in lost output, which is larger than the combined output of almost three quarters of the nations of the world[1], while the IMF estimated that the cumulative cost would reach US$28trn by 2025[2], about one third of the world's GDP.

The global economy will eventually recover, but it will not simply revert to the prior status quo. Many organizations, having been forced to move to a more distributed model of working, have realized the potential gains in terms of cost, time and worker engagement. Urban planning, building design and modes of transport are being markedly affected; many office buildings will have to be repurposed, some car parks will become redundant and homes are being redesigned to include workspaces and offices. The transition to online is also exposing the inadequacies of long-established institutions, such as government ministries, universities, and even some regulatory agencies, with models for service delivery that are adapting too slowly, not at all, or do not fit with the new patterns of socialization, different demands of cyber-communities or the complexity of an evolving metaverse.

MEDIA TRANSFORMATION: PANDEMIC PROPORTIONS

The pandemic has also had a serious impact on the business operations of broadcasters in many countries. In Jamaica, advertising revenues fell markedly – in some instances by as much as 75% – and many broadcasters had to implement cost-cutting measures, including automation, layoffs and salary cuts in order to keep their stations on air. In spite of these profound difficulties, many of the broadcasters did an admirable job of keeping the public informed about the COVID-19 pandemic, and brought forward a number of programming innovations to keep the public engaged during curfew and lockdown periods. The BCJ held a series of consultations in June 2020 with the major media operators to get their views on the business, policy and regulatory implications of the pandemic, and subsequently made a number of recommendations to government for changes in taxation arrangements and other reforms in order to assist the media industry to survive. The ISPs, however, benefited from the increased traffic and were relatively little affected by the downturn. The net effect of the pandemic was to accelerate the rate of migration to online delivery.

Jamaica's media demonstrated significant innovative ability and agility during the crisis, but these qualities will be even more important in future. Jamaica is about to undergo digital television switch over, which will open up new opportunities for local broadcasters to modernize content delivery and develop a new generation of programmes and other media products. The ability to adapt and monetize content across platforms will be vitally important. The pandemic therefore coincided with the beginning of a further phase of transformation; there will be no going back to the pre-pandemic position.

All of these issues are just a small subset of a vast process of technological transformation and associated societal disruption and change. The integration of technologies such as 5G networks, smart devices, cloud services, artificial intelligence (AI), and virtual and augmented reality is disrupting the ways in which content is created, distributed, received and experienced. Social media has become the world's largest source of news, information and entertainment, and technology companies now control the places where over half of the world's population gather virtually.

The BCJ is the oldest regulator in the Caribbean but takes pride in being one of the most innovative. The BCJ is now focused on the key strategic areas of regulating new services; transitioning to a digital platform; media literacy and a modern governance framework for content development. Regulation in the new era requires a much more sophisticated approach than the traditional directives and sanctions. The promotion of digital literacy, in particular, is now a vital regulatory response; it is the first line of defence against the explosion of fraud, disinformation and fake news. The pandemic made the need for better digital literacy painfully obvious, as the FBI reported a four-fold increase in the volume of cyber fraud. Scammers took advantage of the chaos and offered fake advice on COVID-19 to induce recipients to click on their links, which allowed them to install malware and capture personal and financial information.

The pandemic also made it clear that it is now essential to deal with the enormous damage that can be caused by fake news. Many people rely largely on social media for their news, and most of them don't realize how many items are misleading or malicious. Some of it is intended to cause harm, such as one item that circulated in Jamaica in the early stages of the pandemic that said that the

government was about to shut down the country for months, and that everyone should run to the shops as it would be their last chance to get supplies. That was designed to cause panic-buying, which would have left many people without food. A number of bogus "cures" for the COVID-19 virus were circulated, followed by alarmist statements about vaccines, then conspiracy theories about sinister reasons for the vaccination programs. This disinformation cost lives.

ARTIFICIAL INTELLIGENCE: REAL CONSEQUENCES

Against these trends and transformations, the future of regulation is in question. The serious problems with content, including unfiltered access to pornography and ultra-violent material, hate speech, unethical advertising; exposure to cyber-bullying, grooming and revenge porn and fake news have created a strong argument for specialised content regulation to give focussed attention to these harms. However, the increasingly seamless flow of content across the audio-visual continuum, the similarity of the content being made available on platforms and the consumption of content whenever and wherever it is available – without device or distribution discrimination – clearly justifies the elimination of siloed regulatory treatment between broadcasting, cinema, video games, social media, virtual and augmented reality and so on. It is clear, therefore, that the entire regulatory architecture needs to be re-examined. One key design parameter for the new model of regulation is that it will depend heavily on AI, as the volume of material now far exceeds human processing capacity.

The transfer of responsibility to AI is also part of a larger process of change. AI is revolutionizing many fields, with applications such as the mass delivery of customized learning experiences, support for those with visual or other impairments, speech recognition, translation services, powerful search facilities and personalization of the online environment. As Satya Nadella, Microsoft chief executive officer said, "AI isn't just another piece of technology. It could be one of the world's most fundamental pieces of technology the human race has ever created."[3]

However, while this technology is now driving a transformation of social and economic systems, it also presents both overt and invisible challenges; one of the latter is the way that algorithms used to model preferences herd users into echo chambers where dissenting views are progressively excluded. Over time, this can undermine the basis for shared values and tolerance in a society and threaten democracy itself.

The World Commission on the Ethics of Scientific Knowledge and Technology (COMEST) has called attention to AI's role in the selection of information and news that people read, the music that people listen to, the decisions people make, as well as their political interaction and engagement. Their underlying concern was that the AI systems used by technology companies are "black boxes", which open an information gulf between the companies and everybody else, including policymakers and regulators.

Information is being created, distributed and amassed on an unprecedented scale but most people have no knowledge of when, or the nature or extent to which information about them is being stored, accessed and shared. This gap is one of the most pressing concerns in our transition to a world in which people are developing deeper and closer relationships of trust with "smart" devices that are controlled

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by artificial intelligence.

A related problem is that most people who interact with the AI that lies behind their apps do so unknowingly. The general willingness to trust the integrity of providers has allowed the less scrupulous to scrape vast amounts of valuable data that can then be used for marketing or even to manipulate people's behaviour and choices. Most people don't know that their personal data is someone else's currency. Governments, regulators and civil society groups are increasingly focused on the consequences of the disproportionate power and potential abuse of influence by social media and big tech, and related concerns about issues such as data privacy, algorithmic bias, disinformation and profound threats to democracy. Some of the most important emerging concepts include institutional frameworks that can reconcile cross-channel, technology agnostic regulation with deep, specialist expertise as well as the development of new legal concepts of responsibility in the information age, including voluntary or mandated obligations to technology platform providers to counter the abuse of social media. It is important to realize that this could include not just conspiracy theorists who encourage violence, but also extend to authoritarian governments that use their platforms for oppressive purposes and to spread disinformation, as well as nationalist leaders who use charges of fake news to confuse the public and make it harder to challenge the corruption and fraud in their administrations.[4] A recent example is the attachment of warning and cautionary labels to posts containing deliberate untruths by then US president Donald Trump before, during and after the 2020 presidential election.

Notwithstanding the belated and inconsistent efforts by tech companies to address these concerns, the challenges associated with the regulation of AI are formidable for three main reasons:

- First, the pace of technological development now far exceeds the ability of most countries to develop the necessary legislative and regulatory frameworks.
- Second, it is difficult to arrive at a regional or international consensus as to the new rules required, because of divergent national interests. For example, the interests of the USA, where most of the major technology firms are based, have conflicted with those of the EU with regard to regulation and taxation, although the G7 agreement in June 2021 to create a global minimum tax rate may offer a partial solution.
- Third, it is hard to determine the optimal combination of ways to limit harms while also protecting the consumer's freedom of choice, freedom of expression and personal privacy. This thorny debate is currently focused on section 230 of the US Communications Decency Act of 1996, which is based on a Congressional policy that sought to promote the growth of the internet, and grants immunity from liability to social media platforms and other interactive websites. Extensive abuses have made this approach increasingly untenable, and reform now appears inevitable. The EU's General Data Protection Regulation (GDPR) is the most comprehensive solution proposed to date but there have been concerns as to whether it will operate as a form of monetary absolution for big tech, that is, by allowing (in theory) large

technology firms to violate the terms of the GDPR as long as they regard the gains as worthwhile and the financial sanctions as affordable. Other measures are possible. In January 2018 Germany imposed punitive measures on social media companies for allowing unlawful content on their digital platforms. These measures shift the culpability from the individual to the platform, with fiscal sanctions if they fail to act. The UK's Committee on Standards in Public Life recommended a similar legislative framework that would make social media companies liable for illegal content on their platforms, and in June 2020 the UK's House of Lords Committee on Democracy and Digital Technologies recommended the creation of a regulator to protect democracy by controlling electoral interference and that technology firms be given a duty of care, with sanctions for firms that fail in their duty (including fines of up to 4% of global turnover or blocking the sites of those found to be serially non-compliant).[5]

HARM MITIGATION: REGULATORY REACH

The challenge, therefore, is to find a way to mitigate the negatives without impairing the extraordinary potential of AI for all areas of human development. One widely held view, at least in the private sector, is that industry self-regulation is best suited for the rapid speed at which AI is developing, the assumption being that such regulation will be faster and more agile than regulatory bodies that are established by government. The experience, though, is that the "soft law" systems that have been established at the company level have been found badly wanting and are largely the result of reactive attempts at public relations. These self-regulatory processes tend to rely on a high level of automation (particularly with social media), using algorithms to search vast data sets for problematic material. However, there are a number of problems with this approach:

- There may be concealed bias in the assumptions written into the algorithm.[6]
- Algorithms cannot screen entirely autonomously, for a number of reasons. One is context. In English, for example, words can be modified by context or intonation; irony can turn a word into the opposite of its nominal meaning. Humans understand context and metaphor, but this is hard to encode. Another is that words can be used to signify something that is obvious only to initiates.
- Language is fluid; English, for example, is spoken in many dialects and accents, which constantly evolve.
- Harmful misinformation can be presented in an acceptable form; spurious information about the dangers of vaccines can be presented in a pseudo-scientific manner that makes it appear credible.[7]
- There are fuzzy boundaries. For example, it may be difficult to define when religion becomes political, and when an appeal for spiritual struggle is actually a call for jihad.
- Terrorists can change platforms and spread different messages across multiple platforms, and terrorist organizations can morph into new forms, so that an algorithm may become increasingly inaccurate unless it is constantly retrained with new material.[8]
- There is a fundamental conflict between the business model of social media companies, which is based on advertising which is generated by viral content, and the idea that they should exclude posts that generate a lot of traffic.
- The reliance on technology companies to use AI-based algorithms to moderate content amounts to the privatization of censorship. This would have mattered less in the past, but now that technology companies are, in effect, by far the largest media corporations in the world, it matters a great deal.

So, while algorithms can reduce the problem of volume, they cannot replace the humans who have to be involved in further rounds of screening. However, it is impossible for humans to screen more than a tiny fraction of the volumes of content in social media, so the solution is likely to involve a combination of better algorithms and tiered human screening. This will clearly involve the technology firms, which have the capacity to do this. However, given their largely reactive response to the abuses taking place on their platforms, many people now consider that tech companies can no longer be trusted to be the sole arbiters to draw the boundaries and, as the social impacts are now very far-reaching, there must be some independently-determined standards (which almost certainly means government regulation). So, there is as yet no common agreement as to how to draw the ethical boundaries, or who should draw them, who should apply them, who should enforce them and how they should be enforced.

The AI used in regulation should therefore be developed and implemented in accordance with international human rights standards, with an emphasis on strengthening freedom of expression, universal access to information, the quality of journalism, and media pluralism, while mitigating against the spreading of disinformation, including terrorism, violent extremism, hate speech and fake news.

This will require a multimodal and co-regulatory approach, involving actors across all vectors of information – across platforms, across devices and not confined by physical borders. These actors will be policymakers, regulators, operators, content creators, aggregators, intermediaries, users and civil society. For their part, regulators must be evidence-based and rules must function across platforms in a technology-agnostic manner. This means that regulators must be capable of using ethically-based AI systems that can be developed and deployed in a complex media ecosystem.

These are not, however, the current priorities. The post-war era of multilateralism appears to be fading; mercantilism and business nationalism are increasingly ascendant. Today, the US, China, Russia and other state and non-state actors contend across a wide range of fronts. They strive for dominance in key areas of technology such as artificial intelligence and quantum computing, honing the ability to attack information infrastructure, plant fake news and sow confusion, dissension and division on social media; building the capacity to maintain cyber security and protect infrastructure from malware. Areas of research and development, such as the internet, artificial intelligence, space research, bioinformatics and other areas with both academic and commercial applications

are now seen as having important military and geopolitical implications as well. Human-centred values and ethics are relatively peripheral concerns. It therefore appears unlikely that the weakened multilateral system will be able to support the development of a meaningfully inclusive system of AI governance.

SMALL NATIONS: GLOBAL IMPACT

In this context, Small Island Developing States (SIDS) must ptotect their own interests. This is one of the reasons why the BCJ has spearheaded the Caribbean AI Initiative, which is a collaborative project with the UNESCO Cluster Office for the Caribbean, supported by UNESCO's Information For All Programme (IFAP). Under the auspices of the Caribbean AI Initiative, a series of Caribbean forums were held to discuss the potential, the roadblocks and the implementation challenges of AI in the Caribbean. These consultation workshops included a Caribbean youth forum on AI and brought together players from various stakeholder groups with the objective of sharing and refining a Caribbean AI roadmap based on six principles: resiliency, governance, transformation, upskilling, preservation and sustainability. This translates into a focus on cooperation, human rights and sustainable development. The guidelines reflected in this roadmap are intended to provide a route for developing AI policy in the Caribbean and reflects UNESCO's human-centred, multi-stakeholder vision for developing standards for AI use (which include cooperation, human rights and sustainable development). It was written to serve as a guide for the Carribean SIDS in adopting AI in their transition to digital economies and societies.[9]

Clayton and Green[10] identify digital literacy as a key pillar of regulation in the fourth industrial revolution and one of the most important responses to the challenges and opportunities of AI. It is important that people understand the role of algorithms in the AI systems with which they interact and the ethical considerations and expectations for the design and use of such systems.

This is not a trivial task. Even a high level of digital literacy is not yet enough; people aware of fake news can still be duped by fake news.[11] Another fundamental problem is that particular AI decisions can be very opaque. An algorithm trains on particular data sets and then makes judgments as to how to treat new information, and not even the AI creator can always anticipate particular outcomes. Genetic algorithms evolve, which makes it harder to devise consistent rules. Responsibility also becomes more diffuse; if an autonomous vehicle is involved in an accident, who is the responsible party? Is it the person sitting in the vehicle at the time, the vehicle manufacturer, the software engineers who wrote the main operating system, or the individual who wrote an app that interfered with the vehicle's navigation?

This suggests a need for a new media and information literacy program, designed to include updated competencies in AI, big data, the internet of things, AI ethics, AI governance, machine rights and other fourth industrial age technologies such as 3D, augmented reality, virtual reality and the cloud. An understanding of these issues to going to be crucial in navigating the world ahead.

With these objectives in mind, the BCJ, supported by UNESCO, launched a project in November 2020 to establish a digital media and information literacy skills framework for Jamaica. The outputs will include tools for assessing and eventually certifying digital literacy, and recommendations for the creation of a national digital literacy policy which will include target setting and monitoring in relation to education, training, employment, digital safety and media literacy, among other things, set within the overall national framework in Vision 2030.

In this context of changing technologies, markets and business models, the BCJ has embraced and fostered industry, national, regional and global investment in the development of a new regulatory philosophy. The BCJ is aligned with best practices for good regulatory principles, and is actively involved in bodies such as the International Regulators' Forum, the Small Nations Regulators' Forum and various working groups on technology standards and governance, including newer areas of interest such as artificial intelligence. The Jamaican Electronic Media Regulatory and Policy Framework (2015) and more recently the BCJ's paper on Content Regulation in the Era of the Fourth Industrial Revolution[12] outlined the BCJ's key areas of focus for the next few years. Concerns about the long-term future of the media and communications industry have shaped the Commission's digital strategy over the last decade and will continue to do so.

ANTHONY CLAYTON *is Chairman of the Broadcasting Commission of Jamaica. He is also the Alcan Professor of Caribbean Sustainable Development at the University of the West Indies; Visiting Professor in the School of Engineering at the University of Surrey; and Affiliated Scholar at the Institute for Public Policy at Florida International University. He is a Fellow of the Caribbean Academy of Sciences; Co-Chair of the Energy Committee of the Inter-American Network of Academies of Sciences; Fellow of the World Academy of Sciences; and holds the Order of Distinction in the Rank of Commander.*

CORDEL GREEN *is Executive Director of the Broadcasting Commission of Jamaica. He has been appointed to the Jamaica National Commission for UNESCO and represents Jamaica on UNESCO's Intergovernmental Council for the Information For All Programme (IFAP). He is also a Vice-Chairman of IFAP and Chairman of the Working Group on Information Accessibility; Advisory Board Member of the Carnegie AI and Equality Initiative (AIEI); Honorary Member of the Multicultural Media, Telecom & Internet Council (Washington, DC); and a member of the Law Committee for the IEEE Global Initiative for Ethical Consideration in Artificial Intelligence & Autonomous Systems. He is an Attorney-at-Law, a former Assistant Attorney-General of Jamaica, and a former broadcaster.*

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