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THE CHALLENGE OF MANAGING DIGITAL CONTENT

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Importantly, the views and opinions expressed are those of the author and may not necessarily reflect those of ITU or its Membership. Any errors and omissions are those of the author. Any comments or suggestions on the paper can be emailed to the author at scott.minehane@windsor-place.com.

1 INTRODUCTION

> *"**Content is King**. Content is where I expect much of the real money will be made on the Internet, just as it was in broadcasting…*
>
> *When it comes to an interactive network such as the Internet, the definition of "content" becomes very wide… But the broad opportunities for most companies involve supplying information or entertainment. No company is too small to participate. One of the exciting things about the Internet is that anyone .. can publish whatever content they can create…*
>
> *The Internet also allows information to be distributed worldwide at basically zero marginal cost to the publisher… Over time, the breadth of information on the Internet will be enormous, which will make it compelling… "* **Bill Gates, 1 March 1996**[1]

The majority of the predictions and issues highlighted in Bill Gates' seminal work of more than 20 years have become true today. Content is a very important area where money is being made on the Internet. The content being delivered is very broad and now includes all nature of text, graphics, photos, music, video streaming and increasingly augmented and virtual reality, and it is being published by all nature of individuals as well as large corporations. What perhaps was not envisaged in '*Content is King'* is the rise of social networks like Facebook, Twitter, Wechat, Snapchat etc. where the platforms for dissemination of content are easy to use and available to all, and audiences are personal, local and global. The challenge of micro-payments which concerned Gates has also been solved by extension of the two-sided television broadcasting model to the Internet. Advertising is more important today in revenue generation terms for the Internet than subscriptions.

What was forecast 20 years ago, has become a reality, especially in the last five years with the proliferation of affordable smartphones, and increasingly ubiquitous wireless broadband networks. This has resulted in enormous disruption of the traditional content delivery models of newspapers (first), and now broadcasters are being disrupted by digital content providers. Ensuring a level playing field between old and new content distribution models has also been difficult with prevailing local content rules, cultural requirements as well as taxation and licensing requirements being inconsistent, dated and often *ad hoc*.

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[1]   Full essay originally published by Microsoft is available at www.craigbailey.net/content-is-king-by-bill-gates/

Regulatory frameworks, therefore, must evolve as markets evolve, it is not possible to regulate the future into the past. Flexibility in adopting regulatory approach is arguably the key, but there is little doubt that new arrangements, approaches and tools will be necessary. Some of those frameworks may need to be temporary and transitional. Regulatory frameworks must also be as future-proofed as far as possible. It is important to appreciate that the App Economy,[2] sometimes involving two-sided markets, is complex and very different from the more traditional markets. The traditional linear relationship between provider and consumers may no longer exist and where it does, this relationship may not just be local but indeed global.

The optimal approach to regulation in this new digital environment does not mean more, but rather, better and more flexible future-proof regulation.

Supporting innovation and investment within these frameworks are not the only goals – there is the additional need to consider and balance rights and responsibilities in digital era considering factors such as freedom of speech, access to reliable news and information, privacy, and consumer empowerment to make user experience the best that it can be. At the same time, this unprecedented level of consumer empowerment comes with new hazards and regulatory issues that need to be managed in order to safeguard the quality of the consumers' online experience and their ability to harness the positive impact of these new technologies. If it is done well, it can result in a more inclusive and informed society and enhanced business and other economic opportunities for all.

In light of these observations, this paper will highlight the disrupting yet empowering ability of digital content, before going on to outline the issues of traditional content regulation in a digital environment. The paper will then close with recommendations for consideration of regulating digital content, both commercial and user-generated, before concluding it is important to note that a flexible and future-proofed regulatory approach is key in such an innovating and dynamic technological environment.

The structure of this paper is therefore as follows:

<blockquote>

(i)   Exploring what is meant by digital content and how it is disrupting and empowering (see section 2);

(ii)   Highlighting the challenges with traditional content regulation in a digital environment (see section 3);

(iii)   Outlining possible solutions and frameworks for regulating digital content (see section 4); and

(iv)   Conclusions and issues for discussion (see section 5).

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[2]   Refer to ITU Discussion paper, GSR-16 *The race for scale: market power, regulation and the app economy, May 2016*

2 DIGITAL CONTENT: DISRUPTING AND EMPOWERING

2.1 Disruption of traditional content providers

While the development of information and communications technology is an ongoing process that has been in train for more than a century, the last decade has been unusually spectacular and disruptive.

The word 'disruptive' has entered common parlance, being used as a description of how app-based companies and innovative business models are challenging the traditional incumbents across a wide range of industries.

Digital content providers are causing intense pressure on traditional content providers by challenging the established industry value chain, redefining the rules of competition and altering traditional key success factors. Traditional business models are being squeezed by the dual threat of declining audiences and the migration of advertising to online outlets, and are struggling to respond in the face of innovation.[3]

Globally, internet advertising revenue is tipped to pass television. Google has passed print, and Facebook has passed radio. Google is now the largest recipient of global ad revenue, taking in USD79 billion in 2016, three times as much as the second biggest ad revenue recipient, Facebook, which earnt nearly USD27 billion in ad revenue last year.[4] Falling advertising revenues are endemic for commercial free-to-air television, as the video streaming revolution including players like Netflix and iflix deliver on-demand choices to televisions, tablets and even smartphones. The enormous scale of this impact can be seen below in **Exhibit 1** showing TV's declining share of GDP in Australia over a 50-year period.

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[3] www.accenture.com/us-en/_acnmedia/PDF-50/Accenture-Bringing-TV-to-Life.pdf. One example, is the current receivership of Channel 10, Australia's third terrestrial television network.   See www.news.com.au/finance/business/media/network-ten-secures-30-million-funding-package/news-story/a9603b3e949eb4bee509c29574f9e094

[4] www.recode.net/2017/5/2/15516674/global-ad-spending-charts

Exhibit 1:   TV's declining share of GDP in Australia

TV's declining share of GDP in Australia
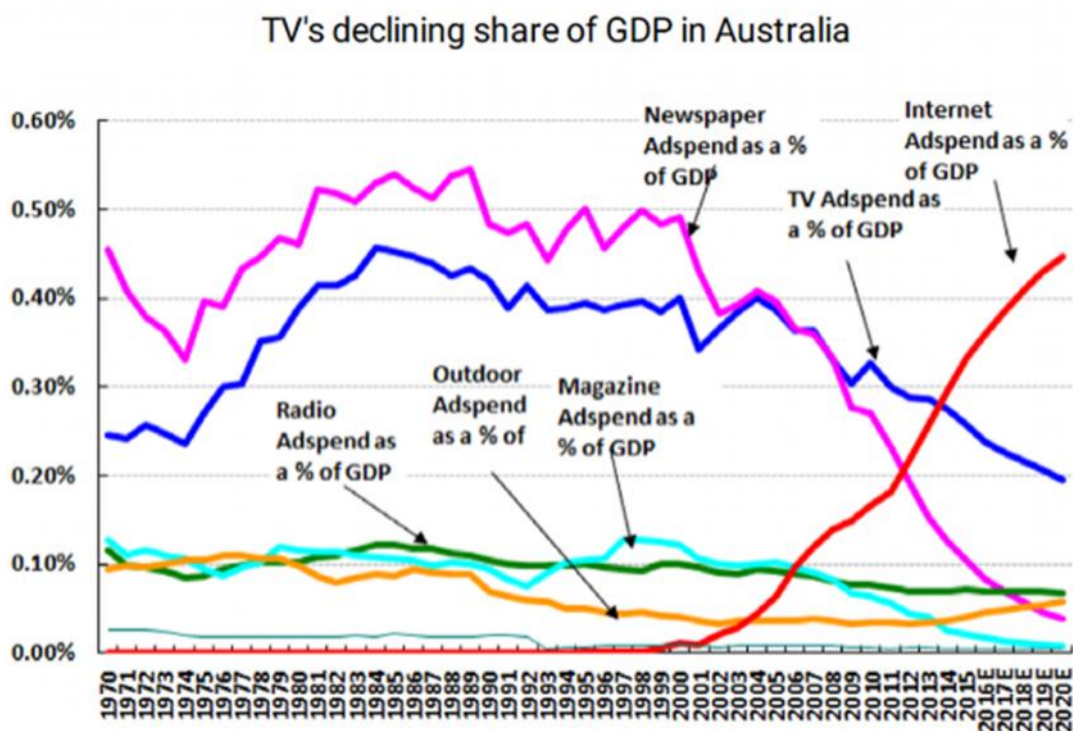
Source: Morgan Stanley Research (E) Estimates

The breadth of social and economic issues arising from this technology-driven upheaval is daunting. Currently digital content creators, both commercial and user-generated, lay predominantly outside the scope of specific national regulation that apply to 'traditional' broadcasters and other content service providers. The nature and scope of regulatory issues encompassed by the impact of digital content on traditional telecommunications and media, particularly broadcasting, seems at best challenging and at worse baffling.[5]

2.2   Empowerment of consumers

The disruption that the app economy and digital content has caused has also, in turn, revolutionized the world and empowered consumers. By the year 2021, there will be 4.6 billion global internet users and 27.1 billion network devices and connections.[6] As shown in **Exhibit 2**, global mobile data traffic is expected to growth to 49 Exabytes per month by 2021, a sevenfold increase over 2016.

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[5]   ITU, *No Longer Over the Top: Communications Regulation in the Brave New World of Online Service Providers and The App Economy'* by Scott Minehane , forthcoming paper 2017

[6]   www.cisco.com/c/en/us/solutions/service-provider/visual-networking-index-vni/index.html?stickynav=1

Exhibit 2: Forecast of 49 Exabytes per Month of Mobile Data Traffic by 2021
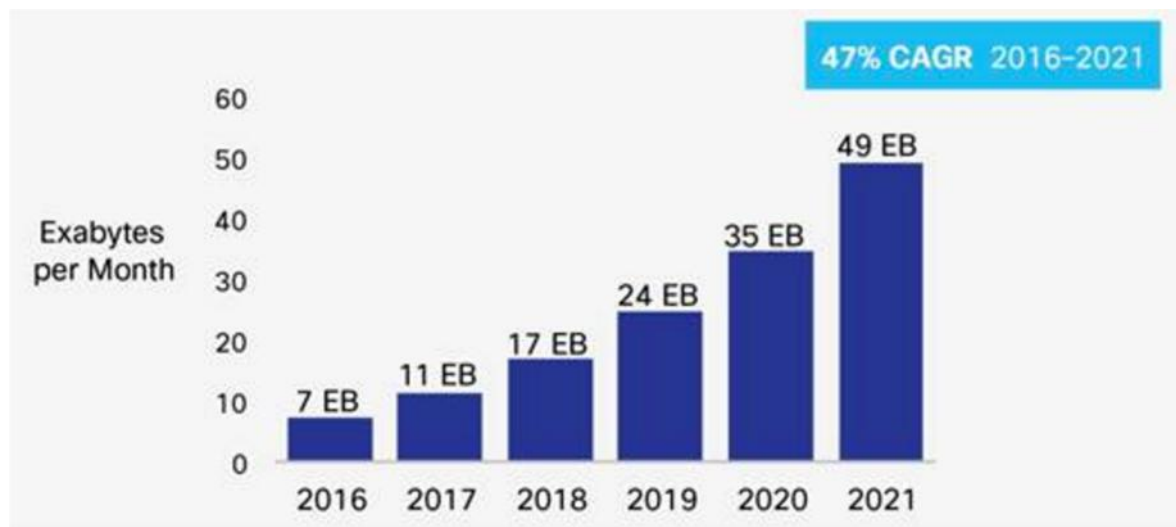
Source: Cisco VNI Mobile, 2017.

These trends alongside disruptive innovations have enabled consumers to become empowered along technological, social, economic and legal dimensions. Social media, especially, has simplified and decreased the amount of effort we need to put into communicating with each other.[7] It has particularly revolutionized the way we interact, arguably, for the better – democratizing power and giving voices to long marginalized communities ensuring digital inclusion. Platforms such as Facebook, Twitter and Instagram have broken information monopolies and curtailed censorship around the world by making it easy to connect with anyone.

At the same time, this unprecedented level of exposure comes with new hazards and regulatory issues that need to be managed in order to safeguard the quality of the consumer's online experience and their ability to harness the positive impact of these new technologies.[8]

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[7]   www.brandba.se/blog/socialmedia/usergeneratedcontent/theempowermentofconsumers

[8]   www.rappler.com/technology/social-media/71115-anatomy-of-a-twitter-black-ops-campaign

3 CHALLENGES FOR TRADITIONAL CONTENT REGULATORY REGIMES IN A DIGITAL ENVIRONMENT

For the purposes of analysis, digital content available to consumers, can be divided into two categories namely:

(i) Commercial content (such as that provided by broadcasters online, as well as OTT providers like Netflix, Hulu, iflix and other regional competitors); and

(ii) User-generated content (such as that available on social media platforms like Facebook, Twitter, YouTube, Snapchat, Sina Weibo and others).

It should be noted however that commercial content and user-generated content platforms are not necessary two mutually exclusive categories. This is because since 2005, YouTube has become the de facto launch pad for the next generation of celebrities. These online stars have millions of subscribers (some 56 million in respect of PewDiePie who is estimated to make over USD15 million per annum)[9] and have a direct relationship with their fans. From comedians to gamers to beauty vloggers, YouTubers have generally built their followings outside of the control of the major media companies, even if they sign commercial deals with those media entities. And there is power and independence in having a huge fan base.

Traditional and new channels are also not mutually exclusive given the introduction of subscription content over social media platforms. One example is Google's 'YouTube Red' subscription service with its offering outlined in **Exhibit 3** below**.**

Exhibit 3:   Google's 'YouTube Red'

Hoping to capitalise on its viral hit, music videos and unique shows, Google has created YouTube Red, a paid monthly subscription service that removes advertisements from all videos on YouTube. The service, which is currently only available in the U.S., Australia, New Zealand, Korea and Mexico, also offers subscribers offline viewing, the ability to listen to videos with the screen off and access to exclusive and original shows and movies 'from some of YouTube's biggest creators'.

This service Google seemingly blurs the lines between YouTube as a platform for user-generated content and a commercial platform, with the service now directly competing with the likes of Netflix and Spotify.[10]

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[9]   For a list, of the top 100 most popular YouTube channels see https://socialblade.com/youtube/top/100/mostsubscribed.

[10]   www.cnet.com/au/how-to/youtube-red-details/

Nevertheless, as will be shown below, each category has its own distinct set of regulatory challenges.

3.1 Specific Challenges with respect to Commercial Content

3.1.1 Issues with Content Regulation

Historically, the main focus of content regulation has been to ensure that community standards are reflected in content that is easily accessible by all members of the public and on the restriction of access to certain content to protect vulnerable members of the community (ie children's television). Access to content can be restricted in three ways, namely:

- Classification and levelling systems, that provide information to parents and responsible adults on suitable content for children and dependents;
- Content codes, that contain rules and guidelines for content providers and distributors that limit certain content or place on restrictions on how certain content can be presented; and
- Industry self-regulation, generally through the development of industry codes that are ultimately self-enforced.[11]

Up until now, the regulation of content has been focused on traditional media platforms – television, radio, film and print – in domestic or regional settings, with rules enforced by regulators and industry. However, the emergence and overwhelming popularity of global digital streaming services such as Netflix, as shown in **Exhibit 4** over, has led to a revaluation of key concepts used in the regulation of content, although a common, unified approach is yet to emerge.

It is also important to note that already in the US, Netflix's subscribers are greater than the number of cable TV subscribers (see **Exhibit 5** over) and its market share in other global markets compared with other subscription and even free-to air broadcasting options is growing rapidly**.**

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[11]   For example www.mcmc.gov.my/skmmgovmy/files/attachments/ContentCode.pdf and www.acma.gov.au/Industry/Broadcast/Television/TV-content-regulation/commercial-television-code-of-practice-tv-content-regulation-i-acma

Exhibit 4: Global Expansion of Netflix.

Netflix's Global Expansion

Availability of Netflix's streaming service

● Available as of December 2015   ● Added in January 2016

Domestic streaming subscribers: 43.18m
International streaming subscribers: 25.99m

as of September 30, 2015

@StatistaCharts   Source: Netflix

statista
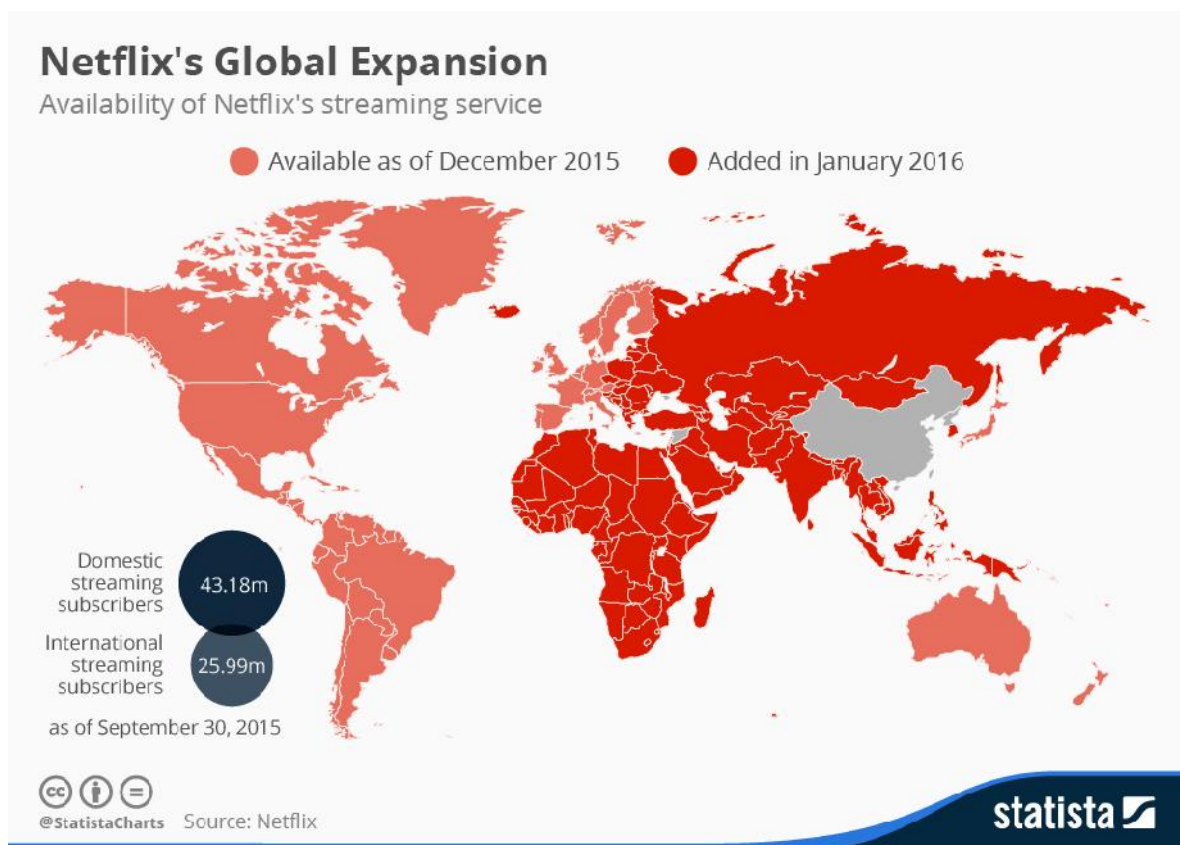
Exhibit 5: Popularity of Netflix in the U.S.

Netflix Surpasses Major Cable Providers in the U.S.

Number of Netflix subscribers vs. cable pay-TV subscribers in the U.S. (in millions)

● Netflix   ● Cable*

	Q1 2012	Q1 2013	Q1 2014	Q1 2015	Q1 2016	Q1 2017
Cable*	52.60	51.04	50.42	49.22	49.11	48.61
Netflix	23.41	29.17	35.67	41.40	46.97	50.85

* includes major cable providers accounting for roughly 95% of cable subscribers and slightly less than half of all multichannel pay-TV subscribers

@StatistaCharts   Sources: Netflix, Leichtman Research Group

statista

Classification systems are usually enforced by the country's telecommunications/ICT authority, or a separate classification board. Content distributors are generally obligated to comply with the classification standards and content codes by either not publishing the content or by denying access to those audiences that do not meet the age requirement for particular content. The contravention and consequent enforcement of digital content standards is generally taken by the regulator, which is then followed by prosecutorial action in court.

As a digital streaming service, it is understandably difficult to have a global product when there are widely differing regional classification systems and content standards. Different countries have different cultures, imperatives, and legal and constitutional frameworks.

For example, many countries have local content quotas for domestic broadcasters to encourage more work for locals in all aspects of television production and part of their cultural policy. However, implementing these quotas on streaming services is much more difficult due to their global nature.

In addition, some countries will place stricter limitations on certain content, based on prevailing cultural and moral standards. For example, regulators in Indonesia and Malaysia prohibit all forms of advertising for alcohol and tobacco products, and Indonesia has also introduced legislation prohibiting all forms of pornography.

In Singapore, the Minister for Communications and Information in January 2017 revealed plans to amend the *Films Act* and the *Broadcasting Act* in 2017 to clarify the application of content regulation to 'over the top' (OTT) video providers.[12] This will mean that strict broadcasting standards such as censoring nudity, references to homosexuality, and extreme language will apply to global players in that market.[13]

Notably, streaming giant Netflix was blocked in Indonesia by Indonesia's largest telco Telekomunikasi Indonesia (Telkom), having been accused of not submitting content for censorship approval and displaying 'violence and adult content'. In addition, the Kenya Film Classification Board has considered a block of its own, stating that the platform posed a 'threat to our moral values and national security' because it had not submitted its shows for local rating. The cost of dealing with these kinds of issues are reflected in the companies' results, which show that Netflix suffered a first-quarter operating loss of USD104.2 million for streaming video outside the U.S., partly because of higher marketing costs, and also showed that it is earning less per subscribers overseas than at home.[14] However, these results are improving.

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[12]   www.straitstimes.com/politics/singapolitics/fast-facts-mdas-licensing-framework-for-websites

[13]   www.techinasia.com/netflix-arriving-in-singapore-asia

[14]   http://deadline.com/2016/01/netflix-blocked-in-indonesia-kenya-threatens-to-block-1201691393/

3.1.2   Issues with Taxation

In contrast to the obligations imposed on national operators, global online service providers and services are often not subject to the same taxation on revenue and profits, despite being involved in the economic life of a particular country. They obtain commercial advantages from not having such operating costs. This is one of the most critical issues for each and every country to address and is arguably a mandatory fix which is required in relation to the regulatory regime applying to online service providers.[15]

As well as not ensuring a level playing field so there are material competition issues associated with selected online service providers not paying taxation and hence operating under a different and more preferential cost regime, this difference in treatment means that many governments are not participating in the success of the online service providers' business model. At the same time, they are losing taxes due to declining revenues of their domestic telecommunications operators and broadcasters.[16]

Often having their principal place of business and registered office in the USA or a low-income tax country or haven, online service providers are able to put in place international tax optimization strategies given the variation in regimes applied by different countries in this regard. The strategies that exploit the difference in treatment of economically equivalent transactions between jurisdictions are known as base erosion and profit shifting ('BEPS'). The Organisation for Economic Co-operation and Development (OECD) estimates that between 4-10% of global revenue from corporate income tax is lost through BEPS by multinational enterprises ('MNES'), including a majority of online service providers.[17]

While these corporate tax planning strategies rely on carefully planned interactions of a variety of tax rules and principles, the overall effect of this type of tax planning is to erode the corporate tax base of many countries in a manner that is not intended by domestic policy.[18] In addition, this sort of activity often also undermines the fairness and integrity of tax systems, with global online service providers gaining competitive advantage over enterprises that operate at a domestic level. Moreover, this sort of activity arguably undermines voluntary compliance by all tax players.[19]

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[15]   An earlier 2015 ITU paper, GSR15 Discussion Paper, *The Impact of Taxation on the Digital Economy* identified the distortive effect of taxes in the digital eco-system on three levels: (i) Potential disparity in tax burdens imposed on telecommunication operators when compared to other operators of the digital eco-system (for example, digital advertisers, social networks); (ii) Taxes on asymmetry among global players in the digital sector and (iii) In country taxation asymmetry between the telecommunication sector and other providers of other goods and services. Available at https://www.itu.int/en/ITU-D/Conferences/GSR/Documents/GSR2015/Discussion_papers_and_Presentations/GSR16_Discussi on-Paper_Taxation_Latest_web.pdf

[16]   www.detecon.com/sites/default/files/detecon_opinion_paper_ott_regulation_options_final.pdf

[17]   OECD, 2015, 'Information brief: summary', see www.oecd.org/ctp/policy-brief-beps-2015.pdf

[18]   http://law.unimelb.edu.au/__data/assets/pdf_file/0007/1550653/Michael-DAscenzo-Spotlight- BEPS-Tax-Avoidance12.pdf

[19]   www.oecd.org/ctp/beps-about.htm

3.2 Specific Challenges with respect to User Generated Content

3.2.1 The Proliferation of troubling content and its Regulation

Social media companies, including Twitter, Facebook and YouTube, have created platforms used by billions of people to come together, communicate and collaborate. While such platforms remain overwhelmingly a positive force connecting the world, people and providing a platform for movements challenging hatred, racism or misogyny these platforms can also be used to spread *inter alia* hate, violence, child sexual abuse and extremism.

A recent study by think tank Demos suggests that hate and extremism is growing in parallel with the exponential growth of all social media, reflected in the fact that YouTube has experienced a 25 percent increase in 'flagged' content year-on-year.[20] Social media sites such as Facebook can be considered a hotbed for terrorist recruitment, incitement, propaganda and the spreading of radical thinking. Twitter, YouTube and encrypted services such as WhatsApp and Telegram are also implicated. YouTube has been perceived as a vehicle of choice for spreading terrorist propaganda for attracting new recruits, with examples such as the 22 March 2017 terrorist attack on Westminster, where YouTube was reportedly inundated with violent ISIS recruitment videos which the platform failed to block, despite them being posted under usernames such as 'Islamic Caliphate' or 'IS Agent' causing concern to policy makers.

Facebook's live video streaming service 'Facebook Live' has also been used as a platform for violent content, with a Thai man livestreaming himself killing his 11-month-old daughter in early 2017. In Cleveland, a 74-year-old man was killed by a stranger who streamed the shooting live on Facebook.[21]

At present, social media companies still heavily rely on their users to report dangerous content for review by moderators in accordance with the site's community standards. Critics argue that this means that they are, in effect, outsourcing the vast bulk of their safeguarding responsibilities at zero expense. In addition, data shows that the main social media companies' responses to these complaints are less than adequate. In March 2016, it was reported that YouTube was deleting 90 percent of reported content and 82 percent within 24 hours; Facebook was taking down only 39 percent of content reported, and 33 percent within 24 hours; and Twitter was removing only 1 percent of reported posts.[22]

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[20]   www.publications.parliament.uk/pa/cm201617/cmselect/cmhaff/609/609.pdf

[21]   www.wtsp.com/news/local/facebook-live-murder-renews-pressure-on-social-media-site/434362974

[22]   www.publications.parliament.uk/pa/cm201617/cmselect/cmhaff/609/60904.htm - footnote-011

In light of this trend, a 2017 report by the Common Home Affairs Committee in the UK argued that social media multinationals are more concerned with commercial risks than public protection. The Committee's investigation found that swift action was taken by the main social media conglomerates to remove content found to infringe copyright rules, however a 'laissez-faire' approach was adopted when complaints involved hateful or illegal content. Referring to Google's failure to prevent paid advertising from reputable companies appearing next to YouTube videos posted by extremists, the Committee's report noted: "One of the world's largest companies has profited from hatred and has allowed itself to be a platform from which extremists have generated revenue."[23]

As it stands, existing broadcasters and news organisations globally are generally held accountable for everything that they broadcast or publish, including during live broadcasts and talkback calls. Despite the rising level of dangerous content prevalent, internationally there is still limited liability for social media platforms who aid users in distributing illegal content, leading to a mismatch of policy and an uneven playing field. [24] Social media companies are seeking to address these issues, however, and seeking flexible and future-proof solutions that change rapidly as technology changes and users increase their use of such platforms – both positively and negatively.

Given the sheer volume of posts, photos and videos uploaded daily, artificial intelligence and big data techniques are being used to aid the automation of removal or blocking of digital content which is undesirable and in breach of national laws and/or in contravention of copyright laws. There are however, limits and manual curation (and removal after objections are received) will still be required. In May 2017, for example, Facebook announced plans to employ a further 3,000 staff to its "community operations" team, which will field reports from users who flag inappropriate material on the site. The company would then have 7,500 workers on its global team.[25]

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[23]   www.theguardian.com/media/2017/may/01/social-media-firms-should-be-fined-for-extremist-content-say-mps-google-youtube-facebook

[24]   www.abc.net.au/news/2017-05-17/facebook-livestream-murder-suicide/8500586

[25]   www.washingtonpost.com/news/the-switch/wp/2017/05/03/facebook-is-adding-3000-workers-to-look-for-violence-on-facebook-live/?utm_term=.bdd809df1450

3.2.2 Facebook Live, YouTube and Copyright Infringement

Social media platforms have also caused copyright infringement issues, especially with live broadcasts of sporting events. In early 2017, two social media users faced fines of up to AUD60,000 or five years' jail for using Facebook Live to stream a boxing match, attracting hundreds of thousands of viewers and consequently infringing Foxtel's broadcasting rights under Australian copyright law. This incident, and others like it including in Spain,[26] are identified as a potential threat to the future viability of live sporting events, and to the sustainability of live television broadcasts generally.[27]

Notably, where YouTube has long had systems in place to detect infringement, the equivalent technologies for streaming content are still in their infancy. Facebook has human moderators to check what is being streamed, but only after videos reach an undisclosed threshold of viewership. There is also a rights management system that copyright holders can use to have illegally posted material removed. Video publishes and media companies can also provide reference streams of live content so that Facebook can check live videos against those reference streams in real time. [28]

In light of this, many television broadcasters have themselves taken a proactive step to tap into the potential of live social media broadcasts in order to increase engagement with viewers in a way that can benefit rather than eat into the viewership of their televised content. In the U.S., Fox Sports and ESPN have begun using Facebook Live to supplement their sports coverage, alongside BBC and Sky in the UK, who have used the platform to provide a behind the curtain look at what they could not otherwise show on TV.[29]

3.2.3 Data Ownership Issues and Protection of rights for user generated content

Historically there has been a power struggle between authors and publishers, musicians and recording labels, or movie producers and media moguls in relation to the negotiation of the ownership of content and performance rights.

It is not too difficult to imagine how this negotiation would play out in case of user-generated content, especially when the user is not even fully cognisant of the value of his or her own content.

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[26] See Mari Luz Peinado, *Un entramado de perfiles de Facebook emite fútbol pirata en directo*, 21 February 2017. Available http://verne.elpais.com/verne/2017/02/17/articulo/1487328698_181222.html

[27] www.news.com.au/technology/online/piracy/facebook-live-stream-of-danny-green-vs-anthony-mundine-fight-to-be-pursued-by-foxtel/news-story/96bb934e57e8c4a09c4af9902292a5aa

[28] www.slate.com/blogs/future_tense/2016/04/12/facebook_live_video_has_a_problem_with_copyright_not_porn_despite_rights.html

[29] www.thedrum.com/news/2016/04/04/how-facebook-live-turning-social-network-sports-broadcaster-future

It is of concern today that the concept of ownership has undergone a fundamental shift in the digital world. For example, if you publish content on the major platforms or, in some cases, even store it in an online "drive" or a "cloud", then you give to the concerned platform or even the device a "worldwide, royalty-free, non-exclusive license to use, distribute, reproduce, modify, adapt, publish, translate, publicly perform and publicly display such content."

In other words, mere use of the service automatically creates property rights for the entity that provides the platform and the user may be left in a disadvantageous position to defend his or her natural and legitimate rights over their own content.

Therefore, there is a need to create a policy framework which should recognise and formalise the ownership, rights and responsibilities of various entities in the value chain. It should also create analogous frameworks for data as in the case of traditional property rights, such as those dealing with inheritance. Furthermore, the issue of data ownership is inextricably linked with other downstream policy frameworks, such as for taxation and competition.[30]

3.2.4 Social Media as a news source

Social media platforms such as Facebook, Twitter and Google have arguably morphed into some of the world's biggest publishers and broadcasters. Where status updates and selfies once dominated, Facebook today has become a portal for news. The 2016 report on digital news from the Reuters Institute for the Study of Journalism found that more than 50 percent of all web users use social media for news each week, with increasing numbers saying it is their main source. While many publishers have linked with Facebook and Google to distribute their news, social media sites are increasingly becoming destinations in their own right.[31] These changes can be tied to many factors including personal behaviour by users, increased activity by news organizations, as well as changes in the platforms' filtering algorithms or content structures.[32]

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[30]   In June 2017, the Australian Government made public the Productivity Commission's final *Data Availability and Use Inquiry Report*. The Report proposes an economy-wide "Comprehensive Right" for consumers to access and use their consumer data. This would include the right for consumers (including small and medium enterprises as well as individuals) to access, edit and transfer their data, and to be notified when it is traded with, or disclosed to, third parties. Available at www.pc.gov.au/inquiries/completed/data-access/report/data-access.pdf

[31]   www.theguardian.com/technology/2015/jun/16/news-outlets-face-losing-control-to-apple-facebook-and-google

[32]   https://web.stanford.edu/~gentzkow/research/fakenews.pdf

With this new role of social media as a news source, a specific concern has been the effect of false stories – or 'fake news' – circulating on the internet. The issue with social media platforms becoming a source of news for consumers is that they have dramatically different structures from and operate in different legal frameworks than traditional media organisations, meaning that content can be relayed among users with no significant third-party filtering, fact-checking, editorial judgment or legal liability. This has been a considerable concern with Twitter. An individual user with no track record or reputation can in some cases reach as many readers as reputable news organisations. This unregulated space has led to the proliferation of sites established entirely to print intentionally fabricated and misleading articles, with the names of these sites often chosen to resemble those of legitimate news organizations.[33] Stories may be popular on platforms like Twitter with twitterbots autonomously performing actions such as tweeting, retweeting, liking, following, unfollowing, or direct messaging other accounts.

The presence of fake news in a market has several negative social costs, including consumers with less-accurate beliefs who in turn may become more skeptical of legitimate news organisations. Even more concerning is the capability for fake news to undermine the ability of elections and the democratic process to select high-quality candidates during a democratic election, as arguably demonstrated during the 2016 U.S. election.

Notably, a number of commentators argue that the results of the U.S. 2016 election were influenced by fake news, with reports finding that the most popular fake news stories during the election period were more widely shared on social media than the most popular mainstream stories. Similar debates on the extent of fake news were debated in the French election.[34] The European Parliament was moved to issue a statement on 'Fake News' and the EU response in April 2017.[35]

While beyond the scope of this paper, it would now seem that all countries will need to address fake news and similar issues by putting in place a range of safeguards, fact checking and perhaps the certification of sites to maintain the integrity of their electoral processes.[36]

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[33]   Ibid.

[34]   See www.20minutes.fr/politique/2065275-20170510-emmanuel-macron-victime-fausse-nouvelle-apl-bourses-etudiantes

[35]

        www.europarl.europa.eu/RegData/etudes/ATAG/2017/599384/EPRS_ATA%282017%29599384_EN.pdf

[36]   This is in addition to putting in place strong cybersecurity measures in relation to their electoral rolls and voting systems given the reported number of cyber attacks on such systems globally.

4 POSSIBLE SOLUTIONS: FRAMEWORKS FOR REGULATING DIGITAL CONTENT

4.1 Regulation of Digital Content Generally

In terms of the general regulation of digital content, there are a number key focus areas where it is critical that country legislation and regulation have been duly considered and addressed. These are outlined below.

4.1.1 Online Child Protection

Global partnerships such as the ITU- UNICEF Child Online Protection ('COP') Initiative, as described in **Exhibit 7,** can aid regulators in this development. The COP Initiatives' high-deliverables across five strategic pillars, outlined in **Exhibit 8**, are designed to be achieved by the ITU and COP members in collaboration.

Exhibit 7:   ITU Child Online Protection Initiative

The ITU launched the Child Online Protection ('COP') Initiative in 2008 within the framework of the Global Cybersecurity Agenda ('GCA'), aimed at bringing together partners from all sectors of the global community to ensure a safe and secure online experience for children everywhere. Partners to the initiative include 10 international organisations, 34 civil social organisations and 13 private sector organisations. The key objectives of the COP are to:

•   Identify risks and vulnerabilities to children in cyberspace;

•   Create awareness of the risks and issues through multiple channels;

•   Develop practical tools to help governments, organizations and educators minimise risk; and

•   Share knowledge and experience while facilitating international strategic partnership to define and implement concrete initiatives.

COP high-level deliverables across five strategic pillars are designed to be achieved by the ITU and COP members in collaboration.[37]

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[37]   www.itu.int/newsroom/press_releases/2008/33.html

A good example of a national regulator employing more efficient and effective complaint services can be seen in Australia with the creation of the Office of the eSafety Commissioner in 2015 in accordance with the *Enhancing Online Safety for Children Act 2015*.[39] The eSafety Commissioner prioritises investigations into online child sexual abuse material and works with law enforcement and the global network INHOPE to remove this content wherever it is hosted. The Office in accordance with the National Classification Scheme[40] also investigates complaints about other prohibited material, for example, content that:

- Promotes in matters of crime or violence;

- Provides instruction in pedophilia;

- Advocates terrorist acts;

- Depicts gratuitous depictions of violence and sexual violence; and

- Is sexually explicit.[41]

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[38]   Refer to www.itu.int/en/cop/Pages/default.aspx

[39]   Available at www.legislation.gov.au/Details/C2015A00024/Html/Text#_Toc415219266%20

[40]   Refer to www.classification.gov.au/About/Pages/National-Classification-Scheme.aspx

[41]   www.esafety.gov.au/

Notably, the eSafety Commissioner has the power to direct a social media organization to take down offensive material, with penalties of up to AUD18,000 (USD13,670) per day for the social media organization if they delay in the request.[42]

4.1.2 Social Media and Online Content Regulation

In light of the perceived ineffectiveness of complaint procedures by the main social media platforms combined with the importance of efficiency in taking dangerous and illegal content down, it is recommended that regulators streamline content regulation and complaint-handling procedures to make them as efficient and effective as possible.

The European Council ('EC') is considering a more demanding approach on social media companies, by approving a set of proposals in May 2017 that would require companies such as Facebook, Twitter, and YouTube to block videos containing hate speech and incitements to terrorism. Under the proposals, social media services would be required to implement mechanisms to block videos that promote terrorism, incite hatred, or contain hate speech. Notably, however, the regulations would not apply to live video platforms such as Facebook Live.[43]

The EC has previously taken more of a self-regulatory approach to these issues, with Facebook, Twitter, YouTube, and Microsoft signing a voluntary 'code of conduct' in 2016 under which the companies agreed to review and remove content flagged as hateful against their community guidelines and national laws within 24 hours.[44] Although a study commissioned by the European Commission in December 2016 found that the main social media companies had largely failed to comply with the agreement six months after its implementation, the result of the second evaluation in June 2017 found that the companies have reviewed 51 percent of reported content within 24 hours, and removal rates increased to 59 percent. The EC argues that these improvements show that a self-regulatory approach can work 'if all actors do their part'.[45]

The UK and France have joined forces in June 2017 to tackle online radicalization with plans that could lead to much stronger action taken against social media companies who fail to remove unacceptable content. Plans include exploring the possibility of creating a new legal liability for social media companies if they fail to remove content. The two countries will lead joint work with the social media companies on this vital agenda, including working with them to develop tools to identify and remove harmful material automatically.[46]

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[42]   https://theconversation.com/factcheck-qanda-what-has-the-childrens-esafety-commissioner-done-in-its-first-year-to-tackle-cyberbullying-64309

[43]   www.theverge.com/2017/5/24/15684168/eu-hate-speech-law-facebook-twitter-youtube-video

[44]   http://europa.eu/rapid/press-release_MEMO-17-1472_en.htm

[45]   www.theverge.com/2017/6/2/15728268/facebook-twitter-youtube-hate-speech-europe-removal

[46]   www.gov.uk/government/news/uk-and-france-announce-joint-campaign-to-tackle-online-radicalisation

Similarly, Germany's Parliament has passed a new law in June 2017 that punishes social networking sites if they fail to swiftly remove illegal content such as hate speech or defamatory fake news, with fines of up to €50 million (USD53.4 million). Under the new law, social networks need to ensure that obviously criminal content – as defined by German Law – will be deleted within 24 hours and other illegal content after seven days.[47]

In South Korea, an end-to-end state regulatory model has been put in place, with rule-making powers, monitoring and the enforcement of content regulation assumed by the state. Here, Korea Communications Standards Commission ('KCSC') can direct internet service providers ('ISPs') to block any content it deems inappropriate or harmful, with limited recourse for appeal if a decision has been made to remove content.

In overall terms, all countries should have a clearly defined process, preferably involving joint work with the social media companies on tools and legal mechanisms required, which could include a decision by judicial officer for the issuance of take-down notices and similar in relation to online material which breaches domestic law. Such judicial mechanisms should be well-communicated to key global and regional social media companies ahead of time so there is no ambiguity as to the legal validity of the order.

4.1.3   Industry self-regulation of content

As pressure from governments heightens globally, social media companies and ISPs have also taken steps to further improve self-regulation of their platforms. Facebook, Microsoft, Twitter, and YouTube have launched a partnership in June 2017 aimed at combating terrorists online. The Global Internet Forum to Counter Terrorism builds on several existing initiatives, which are designed to scrub terrorist recruitment material from the internet and promote counter-narratives to potential recruits. The forum is intended to make it easier for its members to cooperate with each other, as well as with governments, smaller companies, and non-governmental organizations. The forum's scope is meant to evolve over time, but its core goals include:

- Improving technology for detecting terrorist material;

- Creating best practices for addressing 'extremism and online hate'; and

- Sharing information about members' respective counter-speech tools like Google Jigsaw's Redirect Method, which places anti-terrorist advertisements alongside keywords popular with potential ISIS recruits.

It will also partner with the UN's counter-terrorism committee to host a series of workshops.[48]

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[47]   The Law is the Netzwerkdurchsetzungsgesetz (or *NetzDG*). Refer to www.bundestag.de/dokumente/textarchiv/2017/kw20-de-soziale-netzwerke/505074

[48]   www.theverge.com/platform/amp/2017/6/26/15875102/facebook-microsoft-twitter-youtube-global-internet-forum-counter-terrorism

Social media companies have also stated that they are seeking algorithmic solutions to reducing harmful content. Google, for example, said that it was committed to identifying new ways in which technology could be used to identify extreme content. YouTube, Facebook, Microsoft and Twitter have announced a partnership to share 'hashes' to enable each company to scan for terrorist content and enable them to terminate associated accounts. Google also said that it had used 'matching technology' to help prevent the re-uploading of content that violates its policies.[49] There remain serious questions as to the efficacy of such measures especially in relation to non-common Internet languages.[50]

4.2 Possible Approaches with respect to Commercial Content

While the above mechanisms also apply in relation to commercial content, there are also specific rules for Commercial Content and its providers.

4.2.1 Licensing of Internet Content Providers

In a significant departure from the traditional licensing of broadcasters (and of telecommunications network facilities and services), having the mechanism in law to license internet content providers, if desired or warranted, could be considered by industry regulators and Governments.

This can be done in a number of ways including *inter alia* a flexible catch all licensing category (like in Cambodia), deemed class licensing (considered in Malaysia), or specific amendments to licensing rules to require country specific internet news content within the individual licensing regime (as in Singapore – see **Exhibit 9** below). Irrespective of where the content is hosted and/or whether the publisher has a presence in Singapore, an Internet site is required to be individually licensed under the *Singapore Broadcasting Act 1994* (as amended) if it meets the criteria in the *Notification*. Such an approach to licensing provides a country regulator with regulatory tools it may not have previously had because of the hosting location of material.

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[49]   http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/home-affairs-committee/hate-crime-and-its-violent-consequences/written/49839.pdf

[50]   Refer to https://en.wikipedia.org/wiki/Languages_used_on_the_Internet

Under paragraph 3A of the Singapore *Broadcasting (Class Licence) Notification*, sites which **(i)** report an average of at least one article per week in Singapore's news and current affairs over a period of 2 months, and **(ii)** are visited by at least 50,000 unique IP addresses from Singapore each month over a period of 2 months and are notified by the Info-Communications Development Authority (IMDA) will require an **Individual licence.**

Furthermore, if required by the Authority to do so by notice in writing, an Internet Content Provider who is or is determined to be an individual providing any programme, for the propagation, promotion or discussion of political or religious issues relating to Singapore shall register with the Authority under an **Individual Licence.**
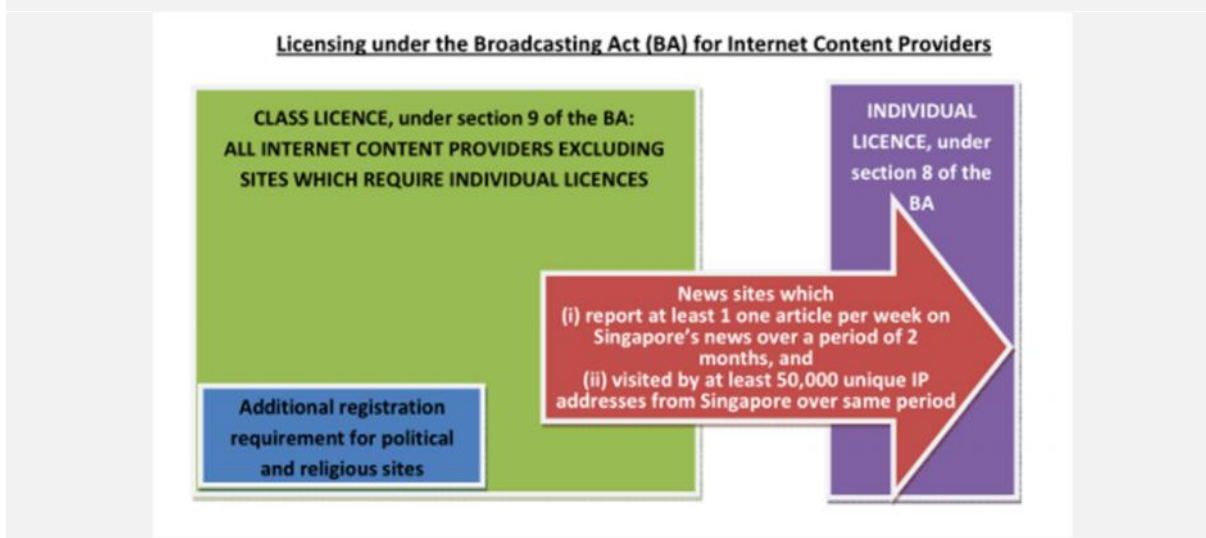
4.2.2 Content Classification Schemes

In terms of commercial content, classification schemes are key. In light of the global nature of digital streaming services, it is recommended that a unified content rating system is attempted either regionally or globally, as seen with the Pan-European Game Information (PEGI) age rating system, which has replaced a number of national age rating systems with a single system now use in 30 countries across Europe, or the International Age Ratings Coalition (IARC) which is a globally unified age ratings classification system. This will make content regulation more coherent for consumers and digital streaming services.

In addition, it is recommended that a self-regulatory classification approach is considered, such as the one currently being piloted in Australia, as detailed in **Exhibit 10**. In taking such an approach, it is hoped that digital streaming services will not be blocked for failing to submit content for censorship approval to the national regulator, and that the classification process will be quicker and more efficient.

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[51] Although class licences are automatically granted, the following groups of class licensees are also required to register with IMDA with 14 days prior notice, namely (i) Political parties registered in Singapore, providing any content on the Internet, (ii) Groups, organisations and corporations engaged in providing any program for the propagation, promotion or discussion of political or religious issues relating to Singapore on the Internet, (iii) Individuals determined by MDA to be engaging in providing any program for the propagation, promotion or discussion of political or religious issues relating to Singapore on the Internet; and (iv) Internet Content Providers who are in the business of providing an online newspaper through the Internet, for a subscription fee, or other consideration.

Exhibit 10:   Australian approach to classifying Netflix content

The Australian Federal Government announced in December 2016 a 12-month pilot of a 'world-first classification tool', designed to streamline the process of classifying Netflix content for Australian audiences. This trial was created in response to what Netflix claimed as 'significant obstacles' associated with classifying large volumes of content in Australia, leading to processing delays that had the potential to result in content being premiered later in Australia than in other Netflix markets.[52]

The pilot will see Netflix itself applying the classification tool to classify its content for Australian audiences, which is expected to lead to content being classified quicker and more efficiently. A broad range of classification decisions will then be reviewed by the Classification Board to assess the integrity of the tool. The Board has the power to revoke classifications made by the Netflix tool and replace them with its own decisions.[53]

4.2.3   Local content rules

The second most important issue in relation to commercial content is what localization is required for cultural and local industry development.

In terms of local content quotas on global streaming services, some regulators believe that the time has come to create a level regulatory playing field that ensures responsible and fair engagement from both domestic and international businesses within the sector.

As part of an overhaul of broadcasting rules, the European Council ('EC') has approved a set of proposals in 2017 that could force internet content TV content providers to devote at least 20 per cent of their catalogues to European films and TV shows. The law would also require promotion of European content on web services' homepages.[54] Influenced by the EU's proposal, Screen Producers Australia ('SPA') in 2017 has called on the Australian Government to consider placing local content quota obligations on streaming services, arguing that these 'big, disruptive businesses' have had time to expand in this market without making any significant investment in local production.[55]

In response, Netflix has warned that the implementation of such rules could distort the market, with the requirement of rigid numerical quotas placing a risk of suffocating the market for on-demand audiovisual media services and may cause new players to struggle to achieve a sustainable business model.

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[52]   www.news.com.au/technology/home-entertainment/tv/netflix-content-in-australia-could-face-delays-company-warns/news-story/a60e2d6753067e71b09fcdd989cd1271

[53]   www.gizmodo.com.au/2016/12/the-australian-government-is-letting-netflix-classify-its-own- shows/

[54]   www.theverge.com/2017/5/24/15684168/eu-hate-speech-law-facebook-twitter-youtube-video

[55]   www.smh.com.au/business/media-and-marketing/screen-producers-australia-calls-for-netflix-local-content-quota-nine-prefers-deregulation-20160529-gp6ef9.html

Netflix is also concerned that the rules on prominence of European content would interfere with its 'personalized' algorithmic approach to surfacing the most relevant content for each user.[56] Having said, that it has become more 'local' globally and in Europe "more European". For example, since 2012, Netflix has ploughed USD1.75 billion into licensed, co-produced and original content on the continent, and is working on 90 original productions both individually and with local partners such as the BBC, Channel 4 and Canal Plus.[57]

In India, the industry view is that Amazon is a more concerted effort than Netflix. In India, Amazon are providing 8 separate programs. The view is that they are really intending to localise their content rather than what could be considered 'window dressing'.

It must also be highlighted that the series provided by OTT streaming services are far from being mere television fillers, with several productions from Netflix, Hulu and Amazon winning critical acclaim and global audiences. For example, at this year's Emmy awards, entertainment magazine Variety noted that the three major streaming services all secured multiple nominations across several series.[58] Netflix secured 93 Emmy nominations in 2017. This quality content is competing strongly with global entertainment titans like HBO.

4.2.4   Recommendations on Taxation

In terms of regulation of both traditional and digital content service providers, the question to be addressed relates to taxation and how global online service providers offering substitutable services can become subject to similar taxation regimes on revenue and profits as broadcasters and local media companies. For this to occur, taxation and related regulations will need to be analyzed and significant updates made in order to ensure that there is not a significant erosion of the tax base. This issue has already been addressed in a number of forums. Collaboration will be required between telecommunications/ ICT sector regulators and domestic taxation authorities. It may also be necessary for small country markets to utilise their membership of regional associations (e.g. ASEAN, GCC, ECOWAS, SADC etc) in order to collectively secure better taxation outcomes.

In relation to income taxes, recognizing that existing tax instruments have not kept up with global economic developments, the 2013 OECD Action Plan on BEPS seeks to close the gaps in international tax rules which allow MNEs to artificially shift profits avoid and paying taxes.[59] The project was the product of broad international cooperation, and was carried out by OECD and non-OECD G20 countries on equal footing.

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[56]   www.ft.com/content/7bed0b3e-fe7a-11e6-96f8-3700c5664d30

[57]   www.ft.com/content/c286c25e-04d5-11e7-aa5b-6bb07f5c8e12?mhq5j=e1

[58]   http://variety.com/2017/tv/awards/emmys-nominations-2017-netflix-hulu-amazon-1202494881/

[59]   OECD (2013), Addressing Base Erosion and Profit Shifting, OECD Publishing. http://dx.doi.org/10.1787/9789264192744-en.

The OECD's BEPS project delivered its final recommendations in October 2015. The final BEPS measures included 15 central actions for nation-states to implement. Central arms of policy and reform that target digital economy business models such as online service providers include:[60]

1. Updating the definition of a 'Permanent Establishment' to strengthen tax treaty provisions, in an attempt to catch corporations that do business in a country without having a taxable presence therein (such as a substantial physical presence or a dependent agent).
2. Reinforcing transfer pricing rules by upgrading the 'arm's length principle' to ensure what dictates results in an economic rather than paper reality, as well as substantially increasing transfer pricing documentation.
3. Bridging gaps among domestic laws by including model rules and provisions to tackle hybrid mismatch arrangements through more effective foreign corporation rules ('CFC') in countries where headquarters are located.

The BEPS agreement was signed on 7 June 2017 aim to improve, tighten the substance, and ensure more transparency in international taxation. While some 67 countries were the initial signatories that number as rapidly increased. As at 9 July 2017, 102 countries had become signatories including China, India, EU, Japan, Australia as well Brunei, Hong Kong, Indonesia, Macau, Malaysia, Pakistan, Singapore, South Korea, Sri Lanka, Thailand and Vietnam in Asia.[61]

In response to this OECD report and growing concerns over global tax avoidance, several countries and regions across the globe have attempted to bring global online service providers under their domestic tax regimes.

For example, soon after Netflix's introduction into Australia at the beginning of 2015, the Australian Federal Government proposed to amend the Goods and Services Tax (GST) law to ensure digital products and services receive equivalent tax of 10 percent, whether they are provided by Australian or foreign entities. This was originally rejected by Netflix as they argued that the service was provided from the US. Consequently, after litigation digital products and services such as Netflix will be taxed from 1 July 2017. This approach of the Australian Government is an attempt to level the playing field for domestic businesses in Australia and to close a 'digital tax loophole'. This scheme will cost the Australian Tax Office (ATO) AUD1.5 million to establish, and is forecast to raise AUD150 million from Australian consumers in its first year of operation and AUD200 million in its second year. In addition, the *Multinational Anti-Avoidance Law* (MAAL) applies to 'significant global entities' including online service providers and their transfer pricing practices came into effect in Australia on 11 December 2015.[62]

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[60]   OECD, 2015, *Executive Summaries*, see www.oecd.org/ctp/beps-reports-2015-executivesummaries.pdf

[61]   www.oecd.org/tax/beps-about.htm

[62]   www.ato.gov.au/business/international-tax-for-business/in-detail/doing-business-in-australia/combating-multinational-tax-avoidance---a-targeted-anti-avoidance-law/

Similar taxation laws aimed at targeting the digital economy have been introduced in the European Union (EU), South Africa and Japan following the OECD recommendations.[63] At the beginning of 2015, the EU begun to overhaul its consumption tax (value added tax or VAT) to extent it to providers of broadcasting and electronic services based on the location of their customers, instead of where the companies set up their head offices. Digital downloads and services sold to European retail consumers are taxed VAT rates of up to 27 percent, making the digital retail economy a significant source of tax revenue. The complexity and variation of VAT regimes in different EU member countries, however, has create huge challenges for the EU and digital companies.[64]

The topic of online service provider specific taxes has also been widely discussed across the Latin America. Colombia has recently passed new tax rules in January 2017 targeting online service provider services such as Netflix, Uber, Spotify and Airbnb. Article 180 of the regulation stats that issues of credit, debit and prepaid cards must apply a 19 percent value added tax ('VAT') to electronic or digital services purchased through foreign providers.[65] In addition, another 4 percent tax has been applied to large mobile data packages. In addition, Paraguay is preparing a new law to regulate the country's growing Internet-based TV service to level the playing field between local cable companies and online services such as Netflix. Similar taxes have been planned or implemented in Argentina as well as in Brazil.[66]

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[63]   http://theconversation.com/the-netflix-tax-coming-to-a-country-near-you-40475

[64]   www.ey.com/Publication/vwLUAssets/EYDigital_products_and_services_in_2015/$FILE/Digital_VAT_Campaign_Brochure.pdf

[65]   http://nextvnews.com/ott-services-included-colombias-tax-reform/

[66]   www.telecompaper.com/news/brazil-seeks-more-regulation-for-ott-services--1163845

5 CONCLUSIONS AND ISSUES FOR DISCUSSION

5.1 Conclusion

In conclusion, what was forecast 20 years in '*Content is King*' has become a reality, especially in the last five years with the proliferation of affordable smartphones and increasingly ubiquitous wireless broadband networks. This has resulted in the traditional content delivery models of newspapers, and broadcasters facing disruption by digital content providers. This paper has outlined the great potential of digital content to foster an inclusive and informed society. There are, however, inherent risks of digital content platforms which must be recognised, and important safeguards which must be addressed to improve the quality of the consumer's online experience and their ability to harness the positive impact of these new technologies.

During the debate on optimal regulation four things should be emphasised. These are namely:

- Firstly, the "democratisation of information", that is, the trend of allowing the public increased access to information which started in the 1850's has a momentum that cannot be stopped especially in a world of ubiquitous broadband. It is therefore likely that attempts to restrict information of value to society are doomed to failure;

- Secondly, it is impossible to prevent any one particular individual from going rogue or being influenced negatively online. Given this, laws should not try to regulate for the exception but rather formulate models which provide for individual responsibility and increased community utility;

- Thirdly, while artificial intelligence and big data analytics will aid the automation of removal or blocking of digital content which is undesirable and in breach of national laws and/or in contravention of copyright laws, there are limits and manual curation (and removal after objections are received) will still be required; and

- Lastly, Government and regulators need to act sooner rather than later to secure the tools required to regulate digital content which is breach of national laws. It is not sufficient for a regulator in 2017 to say that it does not have the regulatory tools to require the removal or blocking of digital content which is undesirable and in breach of national laws and/or in contravention of copyright laws. Part of having those tools may be establishing domestic law processes or mechanisms (e.g. a court with a cyber jurisdiction or a special Commissioner with certain special delegated powers in relation to take-down orders for content that, for example, involves terrorism or child pornography) which is consistent with international norms and is readily understood by global internet players.

Importantly, the optimal approach to regulation in this new digital environment is not more regulation, but rather, better regulation.

5.2 Recommended Actions

The key recommended actions in relation to managing of digital content are as follows:

(i) Ensure that country law (via an amendment if required) permits the regulation of undesirable content in breach of domestic law including appropriate take-down procedures. Exemplar models include the ITU's Child Online Protection model and Australia's e-Safety Commissioner. It is critical to engage with and communicate how those rules apply to global online service providers including *inter alia* Facebook, Snap, etc. There should be an agreed single point of contact;

(ii) Review legacy country classification systems to ensure that they are workable in relation to digital content and as required amend or reimagine them for digital distribution and consumption by consumers;

(iii) If there are existing local content rules for current broadcasters consider whether they are appropriate going forward (for example, replace mandatory rules with tax and other incentives) and whether any similar or indeed any local content targets should apply with respect to Internet content;

(iv) If your country currently regulates newspapers and other media, then review legacy regulation regimes to assess whether appropriate going forward and consider whether mechanisms like that which have been put in place in Singapore maybe be suitable in relation to online newspapers, broadcasters etc; and

(v) Look at the required legal and regulatory tools, including self-regulation, to ensure a level playing field to the extent possible for domestic broadcasters and global online service/ content providers in terms of taxation, including committing to *inter alia* BEPS taxation reforms and ensuring that any value added taxes apply equally to domestic and international competitors.

5.3 The future and issues for discussion

5.3.1 Augmented and Virtual Reality

When considering the regulation of digital content, one must also look into the future to ensure that regulatory frameworks are as future-proofed as possible. Although virtual and augmented reality are arguably some time away from mass-market adoption,[67] once these really come to market, they may change the world just as much as the iPhone has done over the past decade.

The regulation of these new technologies may be even more challenging than the regulation of current technologies available to consumers. In light of these future changes, it is proposed that a generic model of content regulation that is flexible with technologies and innovations, such as that outlined in **Exhibit 11** with respect to violence, should be broadly considered.

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[67] However, the world's largest pornography site on the Internet, Pornhub already hosts VR pornography for use with Google Cardboard and Oculus Rift. See www.pornhub.com/vr

Exhibit 11: Proposed Generic Model of Content Regulation to Violence

Under the proposed system, the level of restriction able to be exercised by regulators, under either a classification system or self-regulatory codes, would be dependent on three criteria, namely the level of violence, the pervasiveness of the particular media, and the intensity of the particular media/technology.

The first variable – level of violence – would mean that realistic violence would be rated higher than mild depictions. The second variable – pervasiveness – is the degree to which the particular media has the capacity to spread and permeate through society. User-generated content as available on social media is, to some degree, unavoidable in our society. Conversely, it could be argued that content available on Netflix or another subscription service is not as pervasive because one must buy a subscription to the service before being exposed to the film or television program. The last variable – intensity – is an acknowledgement of the disparate impacts of different publications, technologies and media. As a guide, the level of interactivity (i.e. the interaction between consumer and the medium) would be a key determinant of intensity. New media, like that of virtual reality, would rank the highest on this scale, meaning that virtual reality programs with even a low level of violence may arguably need to be more highly regulated in the public interest.[68]

5.3.2 Ensuring the preservation of culture, domestic news reporting and sports

There are growing global concerns that the increasing adoption of digital content could fatally undermine (i) firms and institutions that drive and support local customs and culture; (ii) domestic news reporting and quality journalism and (iii) domestic sports competitions.[69] There are no easy solutions but a number of countries are considering ways to address this disruption including the introduction of levies on search engines.[70]

Certainly, news outlets have become increasingly dissatisfied with how online service providers like Facebook and Google are consuming the digital advertising market and gaining more control over the online distribution of news. While nearly all newspaper and content publishers have shifted their attention to increasing digital revenue (including requiring subscriptions, setting up paywalls, driving online advertising etc), most are still seeking profitable solutions that will work in the long term.

In the United States, the News Media Alliance[71] has recently been formed, with members including The New York Times, The Wall Street Journal and The Washington Post, as well as scores of regional papers like The Star Tribune of Minneapolis, in order to bargain as a group. It has taken on many advocacy positions including calling for legislation to address the impact of digital duopoly with Facebook and Google.

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[68] See Scott W Minehane, academic paper submitted as part of LLM requirements University of Melbourne, 1993. Paper available online at www.windsor-place.com.au/content/post_grad_paper.html

[69] For example, football competitions like the English Premier League (EPL), the Bundesliga, La Liga, Serie A, and Ligue 1 and other European football competitions are more popular than domestic football competitions. The increasing payments for such sports broadcasting rights reduces the monies available for domestic sport.

[70] See www.ft.com/content/e3d652da-6ad4-11e6-a0b1-d87a9fea034f?mhq5j=e1

[71] www.newsmediaalliance.org

Facebook itself is working on new tool that could help drive subscriptions to news organizations that publish articles directly on the online service, an effort to improve the relationship between it and media companies.[72] The tool would be added to Facebook's Instant Articles product, which allows publishers to post news articles that can be read within Facebook rather than on the publisher's website.

Another legitimate purpose of national authorities regulating the digital content space is to protect and nurture their emerging local digital content industries. These local industries support a nation's culture by telling 'local stories' in the vernacular language. Such companies are competing with global media titans like Facebook, Google, etc., leaving little advertising dollars left for local players. Although those global providers offer more choice to consumers, they are (with few exceptions) often perceived to contribute very little to a country.

<center>**- END -**</center>

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[72]   See www.nytimes.com/2017/07/19/technology/facebook-subscription-instant-articles.html