Policy and regulatory issues in the mobile internet

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Abstract

This paper argues that mobile is both a medium and a media delivery platform. Changes in handset devices and levels of literacy will affect who has access to what content and there are key equity issues to be addressed.

The underlying business model for both mobile internet and apps raises key questions about the ability of online advertising to be the basis for diverse media, particularly in developing countries.

Access to mobile as media can be affected in a number of different ways, including governments' power to shut down SMS and the internet, commercial companies exercising control over access to content, the terms under which users get access to services, privacy for the user, and issues governing what types of content can be published.

There are considerable disparities between how different media are regulated and the temptation for lawmakers is to try to control mobile media more tightly than the internet. However, it is argued that whatever its faults, the internet represents a "gold standard" for freedom of expression and that lawmakers and regulators should seek to emulate its success when looking at mobile media.

Lawmakers and regulators need to be prepared to step in and protect citizens both from attempts to restrict the right to freedom of expression and communication and anti-competitive behaviour that might lead to restrictions of this kind.

1. Rationale

The mobile phone is rapidly becoming media, both as a primary source for content and as a platform for delivery of content. With rapid changes in what a mobile phone can actually do, millions of people are using it to access the internet and upload and distribute content. In many developing countries, a mobile phone is the technology device most likely to be owned by people after a radio, but unlike the latter, most people will carry the mobile phone with them almost everywhere.

In the countries of sub-Saharan Africa, a number of national surveys show that between 10-20% of those questioned said that they used their mobile phone to obtain news and information in the last week.[1] This is modest alongside the more predictable 70-90% result on the same question for radio and television but very close to the percentage who cite newspapers in response to the same question. The mobile as a medium is relatively young, particularly in developing countries, and may yet catch up with and overtake other media, particularly as local content becomes more widespread.

But not all mobile phones are equal and the distinctions between different types of phones are important in understanding its role as media. In broad terms, there are three different types of mobile handsets: the smartphone, which is a small handheld personal computer (PC); the feature-rich phone, which has more limited functionality but can access the internet; and the basic phone, which has voice and SMS.

In the countries of sub-Saharan Africa, as in much of the developing world, the majority of mobile handsets are basic phones, which means that short message service (SMS) or text messaging is the most important form for communicating text content. However, although the limited number of characters possible on SMS can be used inventively, it does limit what can be communicated. The limitation makes it best at conveying the equivalent of news headlines in real time. It is also worth noting that, although there are systems that combine voice and text,[2] in general, SMS use is limited by literacy levels. Therefore, who has access is clearly an issue.[3]

The full impact of mobile as media is felt when mobile owners have access to some version of the internet on their phones. This means they can view both moving and still images and read more extensive text. Furthermore, the addition of cameras to a great many mobile handsets means that users can author their own media, taking pictures of what is happening around them and posting text accounts.

In addition, there is peer-to-peer media where users swap news, ideas and opinions through widely used sites like Facebook and Twitter. It is often argued that one-to-many media is being replaced by peer-to-peer media of this kind but actually the two seem to operate in a symbiotic way, feeding off each other. Nevertheless, there are concerns – often expressed by journalists who feel

[1] See country data on audiencescapes.org

[2] Examples include CGNet Swara in Chhattisgarh, India and the FreedomFone system developed and used by the civil society organisation Kubatana in Zimbabwe.

[3] A selection of different countries' adult literacy levels (as a percentage of the population) illustrate the point: Mali (26.2%), Benin (40.5%), Nepal (56.5%), Ghana (65%), Kenya (73.6%), India (74.04%), Peru (89.6%) and China (93.3%).

threatened by peer-to-peer media – that there are no quality or accuracy controls over this kind of content: rumour and inaccuracy travel faster on mobile phones than the corrections can.

According to ComScore,[4] in 2010 27% of mobile owners in the USA had some sort of smartphone. This number was much higher amongst people aged 24 to 35. There is widespread agreement that in developed countries well over half of mobile phone users will have a smartphone in the not-too-distant future. In addition, there are considerable numbers of feature-rich phones. In other words, access to the mobile internet is going to be pretty much the majority experience in developed countries.

The pattern in developing countries will be somewhat different. For example, in sub-Saharan Africa (see Figure 1), the pattern that emerges is one where smartphones and feature-rich phones will form just over half of the user base in three to five years time. Therefore, in these countries mobile as media will be a hybrid of internet and SMS use, with the later remaining an important media channel.

However, this will create a mobile digital divide between those who have access to phones providing a wider range of services (smartphones and feature-rich phones) and those who do not (basic phones). And this will be one of an increasingly complex set of divides based on device ownership and device access: few in many developing countries will have access to PCs and tablets and therefore access to the wider functionality of the internet. Smartphones are extraordinary devices but they are not, for example, ideal for larger amounts of text entry. And a mobile data connection does not always have the speed and stability of a fixed connection.

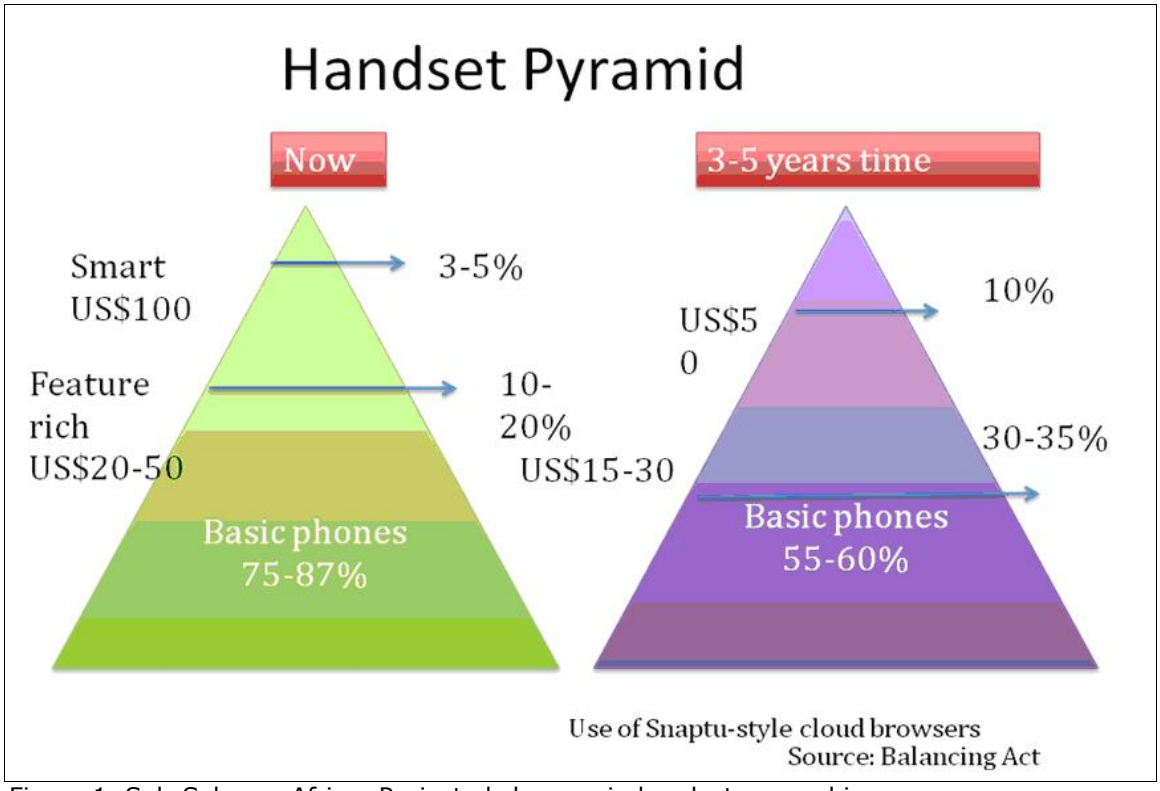

Figure 1. Sub-Saharan Africa: Projected changes in handset ownership

[4]Com Score 2010 – US Digital Year in Review www.slideshare.net/rmlins/comscore-2010-us-digital-year-in-review-6864615

It would be logical to see mobile internet access as simply a sub-set of overall internet use: it is, after all, just another form of access using a different device. The same might also be said for the use of tablets like the iPad. However, the rules and processes that have governed the internet so far are very different from those applied by the mobile operators who control access to the internet on their networks. Indeed, the very nature of the networks over which the internet and mobile internet are delivered differs.

From its university origins, the internet was designed to be open to users through publicly available standards, making it easy to access and largely free at the point of delivery.

Traditional telephony (out of which mobile telephony emerged) is a highly centralising technology. The "intelligence" in the network is located centrally (the switch) and usually controlled by one organisation. In its historic form, largely "dumb" devices (telephones) were attached to the network and these had only a limited set of functions. More recently, the functional attributes of devices attached to the network have increased considerably, but this functionality is run centrally. The telephone network's root and branch structure means that traffic flows to and from exchanges in ways that reinforce this pattern.[5]

Mobile operators have sought to work through proprietary systems that allowed them to control who had access to their networks and how they were charged for access. Therefore, early content efforts by mobile operators were "walled gardens" (like AOL in the early days of the internet) for which operators could charge, and users had no easy access to the wider internet.

With the arrival of applications-based access to the internet ("apps"), a new form of hybrid internet has been born, and it is only one symptom of a broader struggle between the traditional values and business assumptions of the mobile operators and the values and assumptions of those who operate the internet. Mobile operators fear a loss of control over what are termed "value-added services" (like charging for content) and that they will end up with becoming the "dumb pipe" (moving data around at low, commoditised prices).

On the internet side, free at the point of delivery means that the business model is largely one paid for through advertising. And there is no doubt that Google has a position of considerable market power in terms of internet advertising, both on the PC and the mobile. Its way of operating has increasingly separated other media owners from their traditional sources of advertising revenues. Although the argument is self-serving, media owners observe with some justice that there would not be traffic for content without them spending the money they do on creating content: Google is not a significant content producer but a search engine and aggregator.[6]

The way that internet advertising operates through Google makes it extremely hard for smaller, niche online content (with traffic in the tens or hundreds of thousands) to raise sufficient revenues to survive. If all of the above is true for the internet, it is doubly true for the mobile internet where again Google is a dominant player. These are not simply moral arguments about values but are also practical arguments about how in financial terms diverse media will survive and flourish online.

[5]Arguments advanced in infoDev Open Access Models Washington: infoDev 2005 www.infodev.org/en/Publication.10.html

[6]Although it must be acknowledged that Google Maps and Street View are forms of content.

The issue of scale of traffic and revenues is particularly acute in developing countries where online markets are significantly smaller and therefore, online advertising revenues through Google are correspondingly lower.

Positions on both sides of this divide are often more nuanced[7] but it is this clash of values and business models that means that policy makers and regulators have to ensure in a defensive sense that users do not lose existing gains that have been made since the internet launched. But, in a positive sense, they also have to ensure that mobile as media can contribute to the widening of freedom of expression in an increasing range of countries rather than the tightening of those rights.

2. Mobile as media: Different ways it can be affected

Much of this paper deals with the mobile internet and therefore many of the issues raised overlap with issues affecting access to the internet on any device.

Given the many major issues this paper looks at, inevitably it seeks to summarise rather than deal with them at length. Some of the issues like censorship and net neutrality are huge topics in themselves but only need summarising in relation to their impact on mobiles. However, the bibliography at the end of the paper provides references and documents that allow for a wider exploration of different topics.

2.1 Governments' power to shut down SMS and the internet

This section looks at the political framework that governs whether the service operates or not and the reasons given for closure. One of the most recent closures of both SMS and internet in a country was in January 2011 in Egypt. What this demonstrated was that significant parts of the country's economy are internet-dependent, so if a government shuts down the internet, it also shuts down many parts of the economy.

In the wake of Egyptian political activists' use of Facebook and Twitter to organise protests, other governments have become more nervous and are adopting a more targeted approach. For example, in Uganda in April 2011, the government appears to have blocked both Facebook and Twitter: users trying to access them got a message saying "Server not found". [8]

But the majority of attention by developing country governments has been paid to the use of SMS messaging to spread campaign news and organise protests and the much less admirable use, to organise inter-communal violence. Developing country governments are much more likely to fear SMS communications because the number of people able to send and receive messages is much larger than those who can receive the internet on their mobile phone.

The Indian government put in place bans of various kinds on SMS messaging in Kashmir for security reasons.[9] MTN Cameroon was asked by the government to close its Twitter via SMS service in the wake of events in Egypt for "security reasons". The ban was lifted in April 2011.

[7]The Google-Verizon attempt to bridge various issues illustrates this point. Interestingly, mobile internet was exempted from the proposed framework discussed.

[8]thenextweb.com/africa/2011/04/21/ugandan-government-tries-to-block-facebook-and-twitter

[9]www.medianama.com/2010/04/223-indian-government-bans-sms-in-state-of-jammu-kashmir

The worst example of this kind of SMS banning was that of the Ethiopian government after the contested elections in 2005. The ban remained in force for two years. In Ethiopia, the opposition party Kinijit was particularly effective at using text messaging to mobilise its supporters and get them to the polling booths. When the election result was announced the government took fright, contested what had happened and then moved quickly to shut down SMS service to ensure that the opposition party could not use it again to oppose them. With no acknowledgement of why it had been banned, subscribers simply received the following message two years later announcing its re-opening: "[Wishing] you [a] happy Ethiopian Millennium. And now the SMS service is launched."[10]

During food price riots in Mozambique in September 2010, both mobile phone operators in Mozambique, M-Cel (government-owned) and Vodacom,[11] bowed to pressure and suspended their text messaging services, but then said that they had not done so, according to the local news agency Agência de Informação de Moçambique (AIM).[12]

On 6 September 2010 people who used prepaid M-Cel and Vodacom cards found it was impossible to send text messages. Since the Maputo riots of 1-2 September had been mobilised via text messages, it was immediately suspected that the government had ordered the companies to halt text message service. When the Transport and Communications minister was asked about the matter, he denied giving any such order, and both M-Cel and Vodacom assured AIM that the interruption in messaging service was entirely due to technical problems. However, when interviewed by the independent television station TIM, Fernando Lima, chairperson of the media company Mediacoop, which publishes the weekly paper Savana and the daily news sheet Mediafax, displayed a copy of the letter which the regulatory body had sent to the two operators. The closure was short lived and normal service resumed quickly.

As reported by Josh Goldstein and Juliana Rotich in a case study on the use of digital technologies in the post-election violence in Kenya in 2008,[13] the Kenyan government considered closing down the SMS messaging system that was being used to send hate messages encouraging inter-communal violence.[14] Michael Joseph, the then CEO of Kenya's largest mobile provider, Safaricom, said in a subsequent interview that the country's mobile phone providers convinced the government not to close down SMS service and instead allowed the mobile operators to send out messages of peace and calm, which Safaricom did to all of its customers. It was also reported that a list of more than 1,700 contacts of individuals who created or forwarded SMS messages to incite ethnic violence had been compiled and was awaiting action by the government.[15]

However, the government did ban broadcasting and this gave coverage by Kenya's bloggers a new prominence as one of the few ways left open to discover what was happening. It also gave birth to

[10]www.balancingact-africa.com/news/broadcast/issue-no89/regulation-policy/sms-ban-in-mozambiqu/bc

[11]It has minority shareholders associated with both of Mozambique's political parties.

[12]www.poptel.org.uk/mozambique-news

[13]cyber.law.harvard.edu/publications/2008/Digitally_Networked_Technology_Kenyas_Post-Election_Crisis

[14]irevolution.net/2009/02/17/isa-2009-digital-technologies-in-kenyas-post-election-crisis

[15]Kenya had no law allowing prosecution for hate speech but its Parliament is reported to be working on one.

the Ushahidi project,[16] which helped track and map violent incidents in the country using both PCs and mobile phones.

The internet in Kenya was also used for the same kind of hate messages. For example, "the Kenyan online community, Mashahada,[17] became overwhelmed with divisive and hostile messages," which prompted the moderators to "shut down the site, recognizing that civil discourse was rapidly becoming impossible." However, David Kobia, the administrator of Mashahada, decided to launch a new site a few days later explicitly centred on constructive dialogue. The site, "I Have No Tribe",[18] promoted a more constructive discourse and demonstrates "that one possible response to destructive speech online is to encourage constructive speech."

On September 2010, the Allahabad High Court in India deferred its verdict on the Ayodhya title suits, a 60-year dispute between Muslims and Hindus regarding a religious site. Violence between Hindus and Muslims can flare up around such events in India, and intelligence agencies believed that "anti-social elements" could use text messages and SMS-based networks to incite rioting.

A Home Ministry official told The Hindu newspaper that intelligence agencies and law enforcement officials would be monitoring SMS and MMS to seek out those fomenting tensions,[19] and bulk SMS and MMS services – defined as more than ten messages a day for individuals and 100 for companies – were banned for several days.[20] This decision effectively shut down SMS GupShup, an SMS-based social messaging network with 36 million users, for that period. Again the government was anxious to control any potential for inter-communal violence.

The examples above illustrate that the new mobile means of communication and the access to the internet that they enable are neither intrinsically good nor bad but become so through the use that is made of them.

Mobile operators can be pressured by governments to shut down the service and have to take the income "hit" from that decision: their rights are not protected in any way. You can hardly sue the government or the regulator for loss of trade if they are the hand that gives you your licence to do business. So clearly there is an issue that affects both citizens and mobile operators that needs to be addressed.

Governments can also play on the differences between different media to close down new mobile media channels. For example, Kubutana.com supplied a voicemail message service to the opposition Movement for Democratic Change (MDC) party in Zimbabwe. The service, known as MDC-T, allowed MDC activists to phone in and listen to voice programmes by pressing a numeric menu. In an interview in June 2010, Broadcasting Authority of Zimbabwe Chief Executive Obert Muganyura said MDC-T's toll-free audio service was illegal under the Broadcasting Services Act, and mobile provider Econet was forced to withdraw the service. Muganyura said at the time: "According to the law, broadcasts that are provided through cellular systems require a licence (...).

[16] www.ushahidi.com

[17] www.mashada.com

[18] www.ihavenotribe.com

[19] On 24 September 2010, a 24-year-old man was arrested for sending an inflammatory SMS about the verdict under the name of a Muslim member of the Legislative Assembly.

[20] www.thehindu.com/news/national/article777241.ece

There are services that have been offered by some institutions, including MDC-T, where the public can dial and receive audio programmes." So suddenly mobile media became broadcast media and could be restricted.[21]

2.2 Commercial companies exercising control over access to content

Mobile companies and mobile operating systems (OS) companies (including Apple, Google and RIM) have, in several cases, become "gatekeepers" for what can appear on their delivery platforms. This section focuses on commercial terms of entry, and section 2.5) below covers legal frameworks that govern access to different types of content.

Mobile operators and mobile OS companies themselves have a dual role in terms of mobile as media. They can be content producers (commissioning and publishing content for their users) and distributors (delivering on behalf of other content providers). For their part, content providers currently have four routes to users:

i. They can send SMS (or MMS) information services to subscribers (push services) or only to those who request the service (pull services). In this case, the income from the SMS messages sent is split among the content provider, the SMS aggregator (who works on behalf of the mobile operator) and the mobile operator.

ii. They can supply content to mobile operators who run "walled gardens", a content zone that is only accessible to their users, or have services that only their users can access. The income for accessing those services will be split between the mobile operator and the content provider.

iii. They can put information up on the internet, which will only be accessible to those with feature-rich and smartphones. In this case, most of the services are free at the point of delivery and can be supported by advertising revenues.

iv. They can create an app-based service that can be accessed only by the smartphones that support that particular app. In this case, the content provider gets a small sum per user and may also have advertising support. A viable business model usually requires high volumes of users and this may not be available in all countries. The apps can, in general, be downloaded from an "app store". By virtue of the rules governing access to it, the app store is in effect a walled garden.

The mobile operators and the mobile OS companies have the potential to act as "gatekeepers": in the case of the mobile OS companies, they can – and have – banned apps from their competitors. For example, Apple's App Store banned an app for a magazine about Android, something which is perhaps understandable in a highly competitive market.

But more worrying was the banning of Pulitzer Prize-winning cartoonist Mark Fiore by Apple. According to a 21 December 2009 email reprinted by Laura McGann at the Neiman Journalism Lab,[22] Apple rejected Fiore's iPhone app NewsToons because it "contains content that ridicules

[21] www.balancingact-africa.com/news/en/issue-no-510/telecoms/mdc-t-gets-into-hot/en

[22] www.niemanlab.org/2010/04/mark-fiore-can-win-a-pulitzer-prize-but-he-cant-get-his-iphone-cartoon-app-past-apples-satire-police

public figures and is in violation of Section 3.3.14 from the iPhone Developer Program License Agreement which states: Applications may be rejected if they contain content or materials of any kind (text, graphics, images, photographs, sounds, etc.) that in Apple's reasonable judgment may be found objectionable, for example, materials that may be considered obscene, pornographic, or defamatory." Apple attached screenshots of the offending material, including an image depicting White House gate crashers interrupting an Obama speech. Two other grabs included images referencing torture and various political issues. In the event, Apple reacted to the bad publicity surrounding the case and asked Fiore to resubmit his app to the store.[23]

Because of Apple's caution in relation to its relationship with the mobile operators, it has tended to tread extremely carefully, as the response from its spokesperson when asked about material of a sexual nature makes clear: "Whenever we receive customer complaints about objectionable content we review them. If we find apps that contain inappropriate material we remove them from the App Store and request the developer to make any necessary changes to their apps in order to be distributed by Apple."

There are two issues here: firstly, there is an inconsistency in terms of what may appear in a newspaper (a satirical cartoon) or a movie (sexual content) or on the internet and what may not appear on mobiles; secondly, these decisions are being taken by commercial entities, rather than being governed transparently by public law. In the case of Apple, it has said that it does not want certain types of content associated with its brand. Again there is a problem that conflates mobile as media and as distribution channel. It is entirely legitimate that a media owner chooses what is published but this is not the same as a media delivery platform acting as a "gatekeeper".

But exactly the same set of "gatekeeping" issues exist in relation to SMS services, except that the criteria and process of refusal will be more likely to be described as a "commercial decision". There seem to be no instances of this occurring as far as can be established, but if mobile operators increasingly become both media content providers and media delivery platforms, it is only a matter of time.

Therefore one of the key issues is: what rights do content providers have in relation to access to mobile media platforms? One easy response is that if one mobile operator refuses to carry some content, then the content provider can always go to another operator. Competition might obviate the need for any wider controls. But the difficulty with this approach is that many countries have only two operators and both might have government-related shareholders.

Furthermore, even in more competitive markets, sometimes one operator is dominant. For example, in Kenya, Safaricom has around 80% of all mobile customers. If it refused to carry a particular content (and there is no sign that it has done this), then the other operators would only allow the content provider to communicate with a relatively small section of the population.

The key issue is that SMS and apps are media channels but there are almost no ground rules governing either access to them by content providers or users and under what circumstances different types of content can be excluded. Furthermore, if in the future a majority of media users

[23]www.wired.com/epicenter/2010/04/apple-bans-satire

access media via a tablet or mobile handset, what are the rules governing this access? Inevitably, smaller publications and dissident voices might easily be excluded.

This future debate has an echo of a long forgotten set of arguments about what kinds of publications might be distributed in print form:[24] in other words, if the media delivery platforms that deliver to most audiences are a duopoly or triopoly, who provides rules about governing access for content providers? If one measure of the health of a democracy is the diversity of voices in its media, who provides safeguards in terms of access to audiences for smaller, less powerful content providers?

Without a transparent set of rules, government, mobile operators and OS companies can all take action in a less than transparent way (see the Mozambique example above) and there are no processes through which such actions can be challenged.

2.3 Terms under which service is supplied to user

Net neutrality is a principle that advocates no restrictions by internet service providers (ISPs) and governments on content, sites, platforms, the kinds of equipment that may be attached, and the modes of communication.

It has been advocated based on concerns with what ISPs and broadband providers might do on several fronts. In some instances, they have blocked particular websites and particular service protocols – particularly voice over IP (VoIP) and other peer-to-peer (P2P) applications – and in some instances they have blocked out competitors.

Net neutrality advocates believe that telecoms companies (including mobile operators) will impose a tiered service model, whereby those paying more will get better speeds. Or they could sell capacity bundles whereby a user gets a certain amount of data access for a given sum and then pays at a much higher rate for any data over the fixed amount. In this way, it is claimed, they will remove competition, create artificial scarcity and oblige subscribers to buy their otherwise uncompetitive services.

On content access and speeds, the director general of the UK's public broadcaster (the BBC), Mark Thompson, has said that the continued success of online TV services such as the BBC's iPlayer could not be guaranteed if internet service providers introduced a "fast lane" that would allow them to charge customers for receiving content more quickly.[25]

Opponents of net neutrality argue that broadband service providers have no plans to block content or degrade network performance for particular categories of users. They argue that the best solution is to provide greater competition among providers, which is currently limited in many areas. An underlying bone of contention is that the newer generation of bandwidth-hungry services and applications requires considerably more investment in larger networks. Because of this some ISPs have argued that content providers should pay some of the costs through some form of charging system to either users or content providers.

[24]Dave Berry, Liz Cooper and Charles Landry Where is the other news? The Newstrade and the Radical Press (London: Minority Press Group, 1980)

[25]www.guardian.co.uk/media/2011/jan/19/mark-thompson-internet-bbc

The Internet Protocol (IP) by design contains parameters to request differentiated levels of service, and even today the internet is not the level playing field that net neutrality proponents want to protect. Delay-sensitive applications such as voice[26] and live video are given priority over data applications that do not require transmission at the same speed. Calls via the internet to national emergency numbers may be given an even higher priority. The BitTorrent P2P application that is used to share large amounts of data (often of copyrighted material) is widely given reduced bandwidth or even blocked entirely. And in most countries it is normal for ISPs to offer tiered broadband packages with different amounts of bandwidth, where users exceeding their monthly limit are either throttled to dial-up speed or pay extra for additional bandwidth used.

Nevertheless, many of the issues raised by net neutrality advocates touch on concerns that need to be taken seriously and particularly so in the context of mobile providers.

When mobile networks were launched, they were not designed to carry the internet. Their primary purpose was to allow voice communications using the lowest possible overhead in terms of capacity and spectrum: in other words, they were "narrow pipe" networks. Over time, equipment vendors have upgraded mobile networks so that they can carry increasingly large amounts of data. The new generation of smartphones (iPhones, Android-enabled phones and the latest generation of Blackberry phones) all encourage users to make far greater use of internet-based services that drive up the need for more capacity on the networks.

However, mobile transmission networks between base stations have not always been upgraded as fast as the growing level of internet traffic. As a result, only a relatively small amount of data users combined with heavy voice traffic results in the collapse or degradation of the service provided. The latest upgrade to data capability, Long Term Evolution (LTE),[27] potentially offers a great deal more capacity, but the issue will be: do the operators have the network transmission capacity to handle it? If it turns out that they do not, then it is likely that they will "ration" the new potential capacity through their pricing.

Clearly the mobile OS companies' creation of app markets goes against the idea of the internet being free at the point of delivery, but since users have a choice as to whether to use the free internet or buy a paid app, the issue is not currently one that requires attention. It would only be so if mobile operators were to prioritise access speeds for apps-based services or in some way privilege their use. There is currently no sign that they will do so.[28]

There are clearly concerns arising from the net neutrality debate that may yet be addressed. The European Commission announced in April 2011 that it plans to investigate whether European mobile operators are managing wireless internet traffic to discriminate against competitors or consumers who use data-intensive services.

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[26]For example, MPLS networks are used to ensure a certain level of voice quality that cannot be ensured over the internet.

[27]Estimates vary but it is unlikely to take off before 2012.

[28]Although the plans of KPN Mobile in the Netherlands for deep packet inspection are a worrying indication of where things might go.

www.telecomtv.com/comspace_newsDetail.aspx?n=47649&id=e9381817-0593-417a-8639-c4c53e2a2a10&utm_campaign=DailyNews240511KPNinhotwater&utm_medium=email&utm_source=TTV-Daily-News-Alert

European Union Telecommunications Commissioner Neelie Kroes said she was so far unconvinced that there was a serious problem of this kind or that new legal consumer safeguards were needed. She added, however, "The Commission does not have evidence to conclude that these concerns are justified at this stage but should be borne in mind in a more exhaustive, fact-finding exercise."[29] Critics of the fact-finding exercise point out that mobile operators often do not connect Skype as it competes with their own voice business.

The review will ask regulators from EU member states to examine whether a European telecommunications law that takes effect in May 2011 is sufficient to ensure an open internet. The law requires operators to disclose traffic management practices to consumers, gives consumers the right to switch operators in a single day, and gives national regulators the power to set minimum levels of service for mobile internet operators.

On the charging side of SMS services, there are concerns that need to be addressed about how push services are charged for. In developing countries, mobile operators or their content providers will sometimes supply services and deduct the amount from the user. The latter may have chosen to use a service once but be unaware that he or she is still being charged. In 2006 in China, the regulator tightened up the regulations governing ringtones[30] to ensure that users got a message reminding them of the fees they would be charged.[31]

2.4 Privacy for the user

> "The spies of the Cold War would have seen smartphones as the best bugs ever invented: a tracking device which records its location down to a few feet, with a camera and microphone, and which the target actively tries to carry around with them. It's a covert operative's dream come true. In fact, it's quite possible to activate a phone's microphone and use it as a bug."[32]

Mobile networks store records of phone locations but access to these records may well be covered by legislation. For example, in the UK the police and other organisations have to obtain a court order under the Regulation of Investigatory Power Act. Obviously there may be concerns in countries where there is no clear framework covering access to these records and where bribery may be used by private individuals to obtain them.

It was revealed in April 2011 by security researchers that the Apple iOS 4 keeps track of where the user goes and saves every detail of it to a secret file on the device which is then copied to the owner's computer when the two are synchronised. The file contains the latitude and longitude of the phone's recorded coordinates along with a timestamp, meaning that anyone who stole the

[29] www.nytimes.com/2011/04/19/technology/19data.html

[30] The same principle applies to content services.

[31] However, the case of the Philippines regulator NTC imposing restrictions on push SMS service illustrates some of the complexities that arise.

[32] arstechnica.com/open-source/news/2011/04/for-paranoid-androids-guardian-project-supplies-smartphone-security.ars

phone or the computer could discover details about the owner's movements using a simple program.

Simon Davies, director of the pressure group Privacy International, said: "This is a worrying discovery. Location is one of the most sensitive elements in anyone's life – just think where people go in the evening. The existence of that data creates a real threat to privacy. The absence of notice to users or any control option can only stem from an ignorance about privacy at the design stage."

Like Apple and Google, Microsoft also collects records of the physical locations of customers who use its mobile operating system. Windows Phone 7, supported by manufacturers including HTC, LG, Nokia and Samsung, transmits to Microsoft a miniature data dump including a unique device ID, details about nearby Wi-Fi networks, and the phone's GPS-derived exact latitude and longitude.

However, there are differences in how the mobile OS companies treat this data. Microsoft does not save location histories directly on the device, whereas Apple stores considerably more location data, and Google's Android OS records only the last few dozen locations. The debate about what is held and why is continuing as this is being written: the US Senate Judiciary Subcommittee on Privacy, Technology and the Law is conducting hearings on the subject.

According to Privacy Inc,[33] one concern is that location databases are extremely useful for police or civil litigants: requesting mobile phone location information from wireless carriers has become a staple of criminal investigations, often without search warrants being sought. It is not clear how often legal requests for these records have been sent to mobile OS companies.

Another area of privacy concerns is the hacking of mobile voicemail messages. In a very high-profile case, Murdoch-owned News International in the UK admitted that it had employed private detectives to hack into the phones of royalty, politicians and high-profile celebrities. It has been acknowledged that News International may not have been alone as a media company in doing this. Although the case is ongoing, News International has apologised unreservedly to those whose cases meet "specific criteria". While saying it will continue to challenge unjustifiable cases, News International says it is instructing its solicitors to set up a compensation fund.

At a seemingly more trivial but nonetheless important level, it is important that there are clear rules governing what mobile subscribers can be sent. As a new frontier in communications in the developed world, this is just beginning to receive attention. In January 2011, the Communications Commission of Kenya (CCK) – the industry regulator in Kenya – warned operators and content providers about increasing unsolicited text messages, saying they are illegal and an infringement of personal privacy.[34] The warning came in the wake of the growing number of telemarketing business operators who have swamped mobile phone subscribers with SMS messages on deals and offers for their services and products without first seeking the consent of the subscribers.

[33]news.cnet.com/privacy-inc

[34]www.balancingact-africa.com/news/en/issue-no-538/telecoms/kenya-regulator-move/en

2.5 Issues that affect content

In a way, restrictions on content express broader conflicts about both politics and values in a society. However, it is important that both mobile as a new medium and its use as a channel for internet access are at the forefront of opening up freedom of expression, rather than simply being a closed and more tightly controlled channel than other media.

The grounds on which content can be banned from publication are many and various but can broadly be summarised as follows:

i. Issues of racism (sometimes defined as hate speech)

ii. Issues of sexual and violent content (sometimes defined as public morals and obscenity, covering portrayal of violence and sexual conduct)

iii. Issues of accuracy and fairness (sometimes defined through libel and defamation laws)

iv. Issues of privacy (a person's private life not having a direct public interest)

v. Issues of protecting children

vi. Issues of protecting health (in the depiction of smoking, drug abuse and alcohol use)

vii. Issues of reputation of a public figure (for example, Thai royalty or the president of a country)

viii. Issues of security (sometimes defined under anti-terrorism law).

Mobile as a medium and content delivery platform is affected by two broad types of restrictions on content: firstly, any effort by governments that includes filtering of the internet and secondly, broader laws that cover all media on the basis described above. Much has been written about internet filtering and its use by the government of China has made it well known globally.[35]

Filtering is one of the preferred methods of controlling internet content by governments. For example, from 2006, the Iranian government has used the content control software SmartFilter to censor local Persian-language sites and block prominent English-language sites such as The New York Times, YouTube, Facebook and others. Sites will be blocked if they "insult sacred concepts of Islam, the Prophet and Imams," and if they spread "harmful and deviated beliefs to promote atheism or promote sinister books."

The key issue in terms of controlling mobile content is how the rules governing it relate to other media and the practical means of enforcing controls. The key issue here for a number of countries is where "holes" appear in terms of laws or regulations on expression that are not covered by existing law but have serious consequences. The examples of hate speech in the Kenyan post-election violence described above are one example. The exact form of law, regulation or self-regulation may be debatable but there is usually widespread agreement that it may be necessary.

[35]For a fuller review of the topic, see Ronald Deibert et al., eds. Access Denied: The Practice and Policy of Global Internet Filtering (Cambridge: Harvard College, 2008)

However, the further we move along this spectrum, there will be far greater disagreement and much less consensus. What adult sexual content is available is very much the subject of the norms that exist within different societies and when these norms are successfully contested, the rules change. Content control for security reasons can be seen as a necessary response to an internal or external threat or it can simply be an excuse for controlling all discussion: a lively debate ensures the line is drawn more carefully.

These are general arguments about censorship and what can be published that might be applied to all media. But in practice, they are applied differently to different media, which is discussed in the next section. The concern is that whereas the relatively liberal controls applied to the internet have extended the boundaries of what can be discussed, this may lead governments, mobile companies, mobile OS companies and others to insist that the rules governing content on mobiles should be more tightly drawn to avoid controversy.

2.6 How regulations are applied to different media

As different media have appeared, the regulations and legislation applied to them have been different. For example, in most countries, the control of what can be broadcasted is considerably tighter than what can be published.

There seem to be two underlying reasons for this disparity. Firstly, television and radio were more widely used than print media and operated in what was seen as real time: in other words, anything might happen unless there were clearly established rules. Secondly, both radio and television could be "chanced upon" by a viewer or listener (in other words, a push service) who might hear or see something they considered offensive: an adult made a conscious choice to buy a newspaper (a pull service), whereas a child walking into a room and seeing a programme did not. Hence the use of controlled hours for adult programming that is described as "before and after the watershed" in the UK. Broadcasting and radio were highly regulated from the beginning of their existence.

By contrast, the internet grew out of a completely different context in which its primary purpose and value was the distribution of knowledge and ideas. In reality, its growth was spurred by adult content and gambling, but with this came all sorts of other developments. Because it was never "licensed" by government, it sat within existing laws but also outside of them by the nature of its international governance and operation. Arguably, therefore, the internet sets a "gold standard" in terms of freedom of expression precisely because the most liberal of country legislation (wherever that can be found) allows it to operate more freely.

The problem for regulators and governments is that the neat boundaries between different media have begun to disappear with the impact of convergence. A newspaper is both printed and online. Mobile TV airs programmes that are both covered by broadcast regulation and are not. YouTube (and other online video delivery platforms) offer video material that some would argue is the equivalent of broadcasting.[36] Indeed, many broadcasters see themselves as chafing under a far tougher regime than their online equivalents.

[36]www.guardian.co.uk/media/2011/jan/19/jeremy-hunt-online-tv

As section 2.1 above illustrates, some developing country governments have differentiated between controlling the use of SMS and not necessarily controlling the internet on the basis that one is a mass medium and the other is not yet one. For example, postpaid subscribers in Kashmir can use SMS but prepaid subscribers cannot. Cameroon's government chose to close down Twitter by SMS for a period but not Twitter on a PC. Other governments have sought to control certain types of internet software (Facebook, Twitter) that are available on PC, mobile and tablet because they see them as politically threatening to their own survival.

3. Conclusions

As Lisa Horner points out in her paper,[37] under a human rights approach to communication the primary goal of regulation and policy should be to fulfil human rights, and the paper sets a framework for how this can be pursued. The conclusions of this paper look at how these rights are affected both by models of commercial practice (governed by competition law) and individual violations of these rights (governed by various forms of law including those covering privacy and censorship).

It is important to think about the economic and social dividends provided by the mobile internet as the starting point from which to think about how mobile content regulation will work. US Federal Communications Commission (FCC) Chair Julius Genachowski has said that in creating a framework for the internet, the FCC "would closely monitor the development of the mobile broadband market and be prepared to step in to further address anti-competitive or anti-consumer conduct as appropriate."[38]

The default position in the treatment of mobile as both a medium and a content delivery platform is that there should be the maximum level of freedom of expression (as with the internet) for pull services: in other words, those services that adults choose to access. Content supplied by mobile OS companies need only be governed by national laws covering content, not by the companies themselves acting as "gatekeepers".

Self-regulation with clear rules and guidelines offers a useful starting point for this discussion, rather than assuming all issues of controversy have to be settled by national laws. Attitudes as to what content is acceptable change over time and self-regulation allows for easier negotiation of these changes:

3.1 Issues of market power and the business model: Wider public debate and research need to be carried out on issues of dominant power in the online advertising market, the financial terms under which both online advertising and apps operate, and the impact of the current model on both niche media and media in developing countries;

3.2 Ground rules for closing SMS and internet: The default assumption must always be that these channels of communications are kept open except in the direst of emergencies. Any closure must be applied for transparently through the courts and be subject to legal appeal. The assumption must also be that any closure is kept to a minimum period of time

[37] www.apc.org/en/node/12431

[38] www.fcc.gov/document/federal-communications-commission-chairman-julius-genachowski-remarks-preserving-internet-f

stated in the court application. Governments must also accept some form of liability for lost trade in asking for a closure. Hate speech can be dealt with through appropriate legislation.

3.3 Access for content providers to distribution platforms: No form of communication that might be made in other media (press, radio and television) should be prohibited by arguing that mobile operates under a different standard. For platform distributors, the key reference point for distributing content should be the laws governing that content, and they should not seek to act as "gatekeepers". Regulators and policy makers need to ensure that there is healthy competition between distribution platforms (apps and SMS) and that there are no undue barriers to market entry. The only exemptions should be argued for on the basis that they do not meet existing legal requirements. Issues of age can be dealt with in ways already put in place for internet content.

3.4 Protection of personal privacy: Mobile OS companies need to ensure that users are aware of the information that their handset gathers on them and can opt out of certain functions if they want to do so. Users also need to have the same set of choices and protection against spam messaging. All users need to be protected under existing law against predatory actions by media groups and any media regulation needs to outlaw the practice.

3.5 Public interest service requirements: Without necessarily imposing a heavy financial burden on operators, there is no reason why certain forms of public interest service requirements should not be imposed. In developing countries, once the network roll-out process is largely complete, there is no reason why public obligations on operators might not be changed in form. There are two ways in which this might usefully be done. Firstly, regulators might insist that mobile operators offer a certain amount of public service-type messages (at a concessionary price) to not-for-profit organisations. Secondly, the regulators themselves might take a part of the universal access revenues and use it to fund "public interest" content.

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