



20th Global Symposium for Regulators (Virtual Event, 2020)
The Regulatory Wheel of Change: Regulation for Digital Transformation

Presentations: GSR 2020 Pre-Event:
Regional Regulatory Roundtable for Arab and Africa regions

This PDF is provided by the International Telecommunication Union (ITU) Library & Archives Service from an officially produced electronic file.

Ce PDF a été élaboré par le Service de la bibliothèque et des archives de l'Union internationale des télécommunications (UIT) à partir d'une publication officielle sous forme électronique.

Este documento PDF lo facilita el Servicio de Biblioteca y Archivos de la Unión Internacional de Telecomunicaciones (UIT) a partir de un archivo electrónico producido oficialmente.

هذه النسخة الإلكترونية (PDF) مقدمة من قسم المكتبة والمحفوظات في الاتحاد الدولي للاتصالات (ITU) نقلاً من ملف إلكتروني صادر رسمياً.

本 PDF 版本由国际电信联盟（ITU）图书馆和档案服务室提供。来源为正式出版的电子文件。

Настоящий файл в формате PDF предоставлен библиотечно-архивной службой Международного союза электросвязи (МСЭ) на основе официально созданного электронного файла.

20TH GLOBAL SYMPOSIUM
FOR REGULATORS



01


Evolution of competition policy and regulation in the context of the digital markets

David Rogerson, ITU Expert

Digital services are provided by platforms

- Platforms have emerged and grown rapidly because they substantially decrease transaction costs between two (or more) distinct groups of customers
- Digital platforms have some special characteristics related to two-sidedness:
 - Their appeal to customers is based on offering innovative services which appear to cost them nothing (or very little)
 - The business model relies on customer data (anonymized and aggregated) to create value that can be monetized on another side of the platform (e.g. to advertisers or content providers).
- Digital platforms act as a marketplace, bringing together and reducing transaction costs between distinct groups of customers.

Examples of online and physical platforms

| | | | |
|-----------------------|---|---|--|
| Online Search Engines | <ul style="list-style-type: none"> Search services E-mail Targeted advertising |  | A user enters keywords or key phrases into a search engine and receives a list of Web content results in the form of websites, images, videos or other online data |
| Online Applications | <ul style="list-style-type: none"> Social networks Voice services E-commerce Dating |  | Means of communication, shopping online or finding a match for dating |
| Physical platforms | <ul style="list-style-type: none"> Bars Merchants Supermarkets Publishers |  | Actual places for shopping, trading, socialising or reading the news |

Two-sided platforms display network effects

Cross-group effects

Users experience a higher value if there are more participants on the other side of the platform

(e.g. to allow them to use a payment mechanism)

Users experience a lower value if there are more participants on the other side of the platform

(e.g. they may dislike advertising)

Within-group effects

Users experience a higher value if there are more participants on the same side of the platform

(e.g. they like all their friends to be on the same social media platform)

Users experience a lower value if there are more participants on the same side of the platform

(e.g. bidders for these goods on internet auction websites experience more competition)

Positive

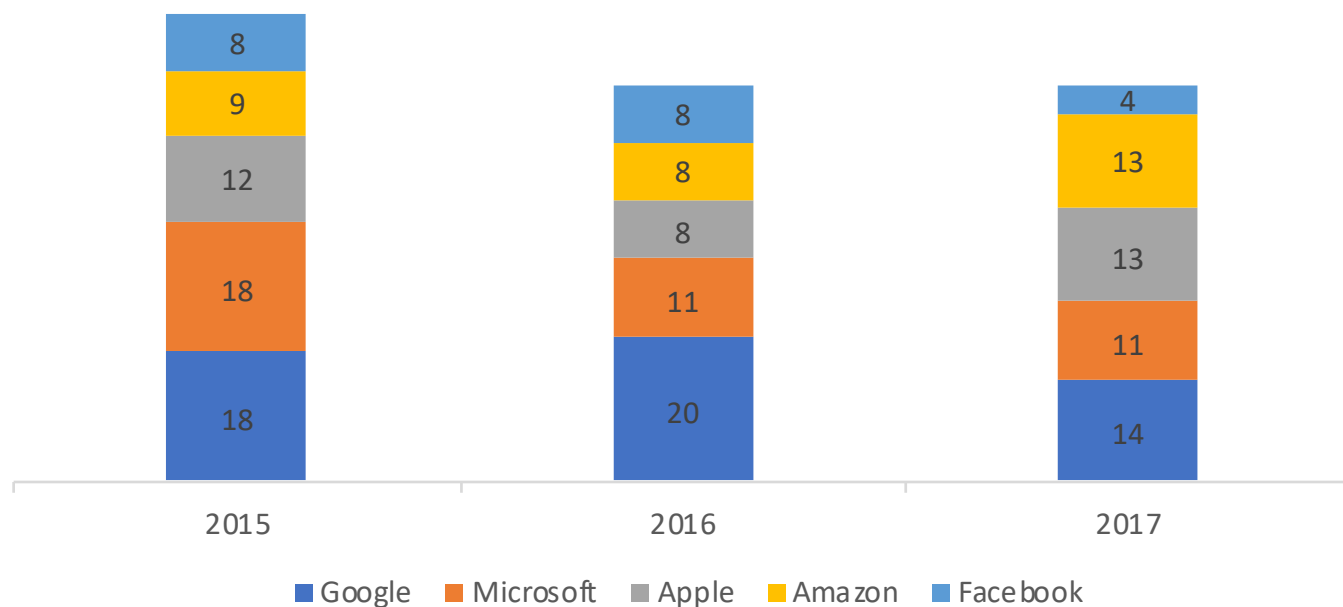
Negative

Overall, positive cross-group effects create a race for scale and a concentration of market power

Scale is often purchased through acquisition

Source: CESifo, "Mergers in the Digital Economy"
(https://www.cesifo.org/DocDL/cesifo1_wp8056.pdf)

Acquisitions number

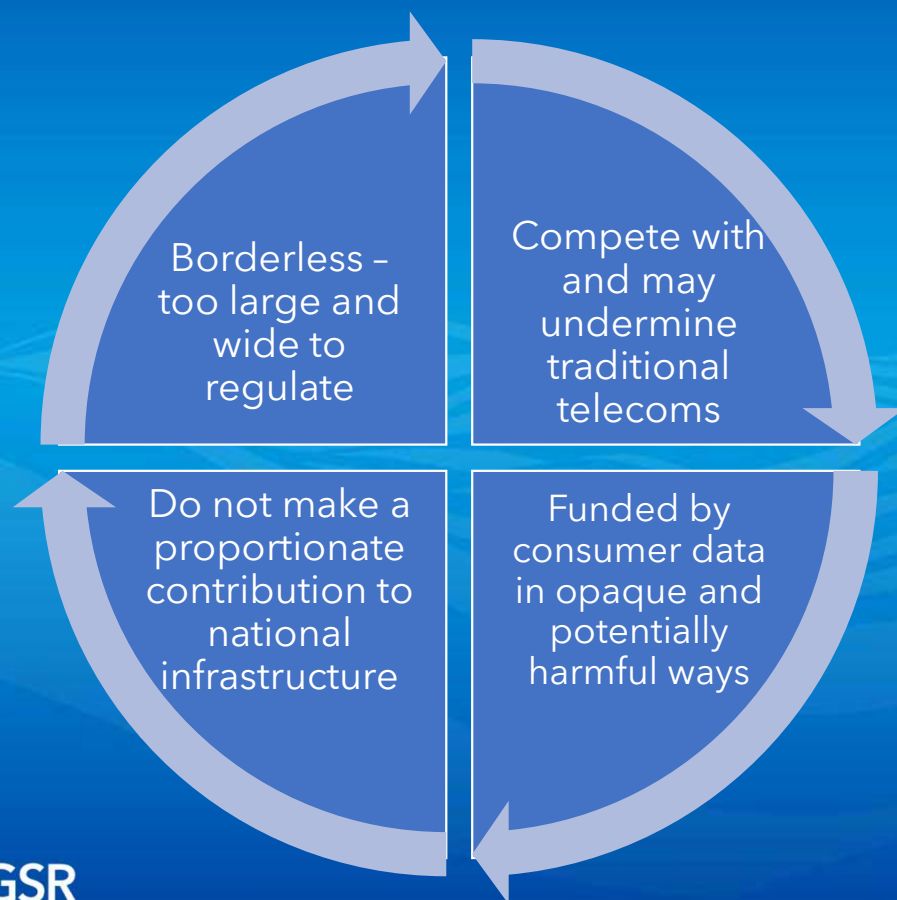


Is excessive market concentration a problem?

| | Global market share April 2018 | Business activity |
|----------|-----------------------------------|------------------------|
| Google | 90% | Search |
| Facebook | 66% | Social media |
| Apple | 45% | Smartphone web traffic |
| Amazon | 37% | Online retail |

Source: The Economist 30th June 2018, "Fixing the Internet", based on data from Global Stats Counter

Regulatory challenges of digital platforms



... but consumers do not usually complain as they like the services offered and the low or zero price they pay.

How might digital platforms be regulated?

- Ex-ante regulation has typically worked by:
 - defining markets, typically using the SSNIP* test
 - determining dominance within those markets.
- Two-sided platforms makes each of these tasks more difficult.
- Ex-post regulation has typically worked by:
 - identifying anti-competitive behaviour from dominant suppliers (e.g. predatory pricing)
 - imposing appropriate remedies.
- With two-sided platforms it is hard to tell the difference between socially-optimal pricing and pricing that has the intention or effect of limiting competition.

* See next slide for details

Can the SSNIP test be used?

- The SSNIP test is the standard approach to market definition – looking at the impact on profitability of a Small but Significant Non-transient Increase in Prices
 - Which price? Given that in a two-sided market there are (at least) two prices, which price should be raised?
 - Profitability: Should we look at what happens to profits on only one side or on both sides of the market?
 - Zero-rating: How can the SSNIP be applied?
 - Feedbacks: Given that in a two-sided market there are network effects, should we include (all?) feedbacks from one side of the market to the other?

Market power is less about market share

- Its common for platforms with strong cross-platform network effects, as well as networks with pronounced direct network effects, to show high levels of concentration.
- Multi-sided platforms often provide one of their products for free or at a subsidized price. In these cases it is not possible to calculate a value-based market share.
- Profitability is an appealing measure of market power because it assesses the extent to which the platform has been able to earn more than a competitive rate of return.
- However rates of return vary over time, and it is well known that in digital platform profits may not show up for a long time.

It is hard to prove anti-competitive practice

- Predatory prices can be hard to detect and current tests don't work:
 - Predation can be successful, weakening competitors without triggering exit.
 - There are non-predatory reasons to price below cost and market may tip to monopoly even absent predation.
- A platform may engage in two-sided anti-competitive predatory pricing if it charges below marginal costs overall (across both sides of the platform) ... although this itself does not prove predation.
- Network effects mean that it may still be possible to recover losses.
- Price structure can also be used in a predatory fashion:
 - Mobile service providers and choice of on-net and off-net prices.
 - Asymmetric media competition (e.g. subscriber-supported versus advertising--supported business models).

Summary

- The regulation of traditional networks will continue because they still control access to the customer ... but regulation needs to focus on infrastructure access to be relevant and effective.
- Regulators should be wary of digital platform providers leveraging their dominance into the market for network access ... but they need to contribute to the costs of deploying and maintaining access infrastructure.
- Regulation should be based on clear principles such as those of net neutrality, whether applied ex ante (rules) or ex post (monitoring agreements and resolving disputes).
- NRAs must collaborate with one another and with competition authorities to ensure consistent and effective regulation of digital platforms.
 - The ITU and Regional Regulatory Associations will play a lead role to ensure coordinated, concurrent regulation.
 - NRAs in developing countries might also build on the work of others that have taken a lead on the approach to digital platform regulation.

Case study: CMA report (UK)

Platforms with Strategic Market Status (SMS)



>90% of search traffic
for the past 10 years



>50% of display
advertising
revenues in 2019

Source: CMA, "Online platforms and digital advertising"
(https://assets.publishing.service.gov.uk/media/5efc57ed3a6f4023d242ed56/Final_report_1_July_2020_.pdf)

- Pro-competition ex-ante regulatory regime under a new regulatory body ("Digital Markets Unit")
- Pro-competitive interventions
 - Consumer control of data
 - Mandated interoperability
 - Third-party access to data
 - Data separation.
- Enforceable code of conduct
 - Fair trading
 - Open choices
 - Trust and transparency

Thank you!

David Rogerson, ITU Expert

dar@incyteconsulting.com;

+44 7746 494475; +44 1324 870429

Thank you!

Join the conversation

#ITUGSR

#RegulationMatters

@ITU_BDTDirector



20TH GLOBAL SYMPOSIUM
FOR REGULATORS



02

Ex-ante and ex-post:
**Why telecommunications and
digital platforms have been
regulated so differently.
And why that's changing.**

Simon Molloy, ITU Expert

Ex-post and *ex-ante* regulation

- *Ex-post* → “after the fact”
- *Ex-ante* → “before the event”

Should we act now (regulate) or should we wait (forbearance)?

Telecommunications and digital platforms (‘big tech’):

**Why have they been
regulated so differently?**

- Very different market structures:
 - telco: natural monopolies
 - digital platforms: 2-sided, multi-sided markets, network effects, economies of scale
- Market structures
 - Telco: known market structures
 - digital platforms: unknown future structures, still evolving
- A desire not to suppress innovation in digital services
- The historical path matters!

Telecommunications and digital platforms ('big tech'):

Different historical paths

Telcos

- originally govt owned monopolies
- natural monopoly well understood (fixed line era)
- need to 'shape' market when liberalizing
- long-standing essential service – continuity critical



ex ante

- set out market rules in advance
- interconnection
- managed entry of competitors
- intervention on pricing
- on going regulation

Digital platforms

- originally private start-up businesses
- highly dynamic period of technological change
- innovation encouraged
- network effects, multi-sided markets not well understood
- eventual market structure/characteristics emerging and unknown



ex-post

- fix problems after they arise
- application of competition to anti-competitive practices
- determine rules by precedence

Contrasting telco and digital platforms: interoperability

TELCO MESSAGING



Works for everyone everywhere

Should interoperability be imposed on platforms?

PROS

- encourages new entrants/competition - lowers barriers to entry
- easier for consumers

CONS

- impractical for technical reasons
- limit innovation and even competition via features



Business Trends

William Dudley

June 30, 2020 · 4 minute read

5G SMS is Very Real and Here to Stay

0 Likes · 375 Views · 0 Comments

If you follow this industry a while, you'll see a great deal written about mobile messaging – or texting / text messaging. When we speak of text messaging, we generally mean SMS. Of course, there is MMS (Multi-media messaging), which has been around since the very early 2000's and RCS, the GSMA standard that is promoted as the next-generation of SMS.



DIGITAL PLATFORM MESSAGING



Platform dependent

Telco and digital platforms: regulatory disparities

Source: Presentation: THE APP ECONOMY IN AFRICA: ECONOMIC BENEFITS AND REGULATORY DIRECTIONS, Victoria Falls, Zimbabwe 2017
- Simon Molloy, ITU Expert

| Area of Regulation | Network Operators | OTT |
|--|--|---|
| Licensing (ECS / ECNS) including Annual Fees, licence obligations and spectrum licence obligations | Yes | No |
| Interconnection and interoperability | Yes | No: OTT providers are per definition "over the top" of the network, and don't require interconnection. |
| Quality of Service | Yes: End-User and Subscriber Service Charter | No: OTT QoS problems generally blamed on network provider, not the OTT |
| Universal Service Obligations | Yes, usually a license obligation. | No |
| Provision of legal intercept | Yes | No: OTT content often encrypted and cannot be intercepted. E.g. WhatsApp does not comply with South African RICA laws. |
| Financial reporting and taxation | Yes: All related laws and obligations apply | No: Offshore operators not obliged to adhere to national accounting standards, financial reporting systems. Most revenue realised outside of South Africa |
| National ownership rules | Yes: National ownership and company structures designed to reverse historical injustices apply | No: Offshore OTT operators not obliged to adhere to South Africa's company ownership rules and their transformative objectives |
| Consumer Protection Act, other National Socioeconomic obligations | Yes: Local operators and service providers must adhere to all personal and public protection laws and other social obligations | No: Offshore OTT operators are not obliged to adhere to any of these laws and related social obligations such as labour laws, skills development levies, etc. |

Digital platforms: big issues

- Size (pure scale, financial power), market dominance, ecosystem barriers to entry, transnationality complicates regulation (need to act at regional level, eg, EU)
- Complexity of multi-sided markets with free service to consumers (but use of market power in advertising pricing?)
- Anti-competitive behavior – preferencing own services/products, strategic cross-subsidisation
- Anti-competitive acquisitions
- Abuses of user data and data as barrier to entry
- Taxation
- Copyright
- Social and political impacts
- Facilitation of illegal activities

Challenges to regulating digital platforms

Each tech company is unique, different collections of services/ products/markets

2019 revenue forecast, as % of total

Alphabet (Google)

Total: \$132.2bn



Facebook

Total: \$70.2bn



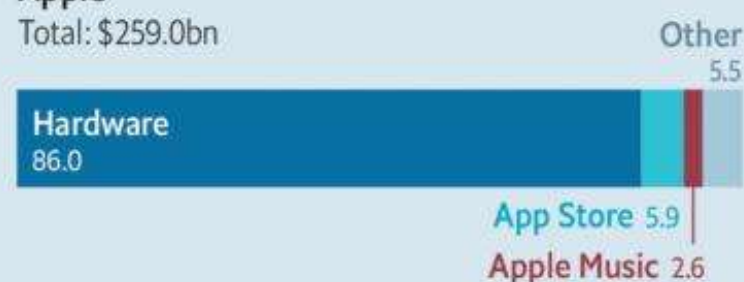
Amazon

Total: \$278.8bn



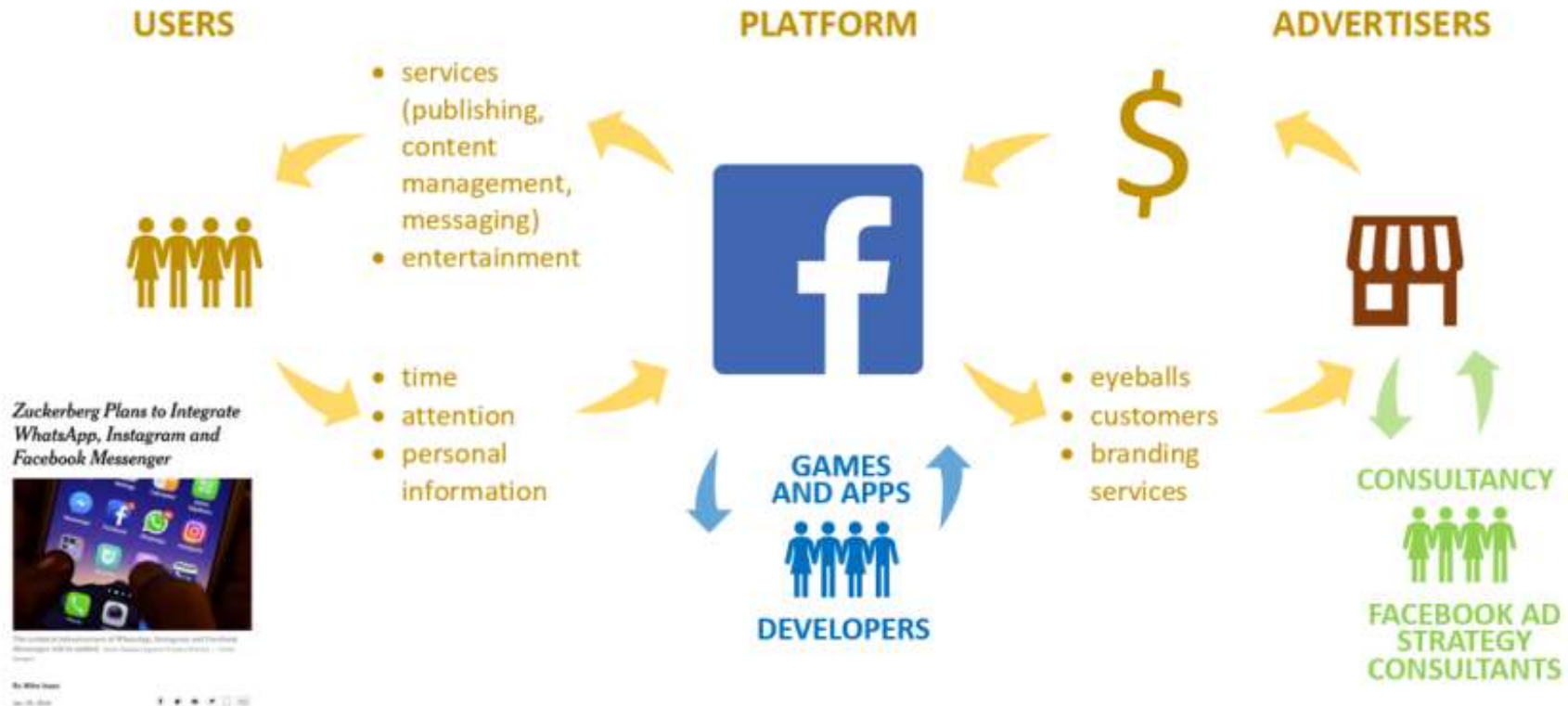
Apple

Total: \$259.0bn



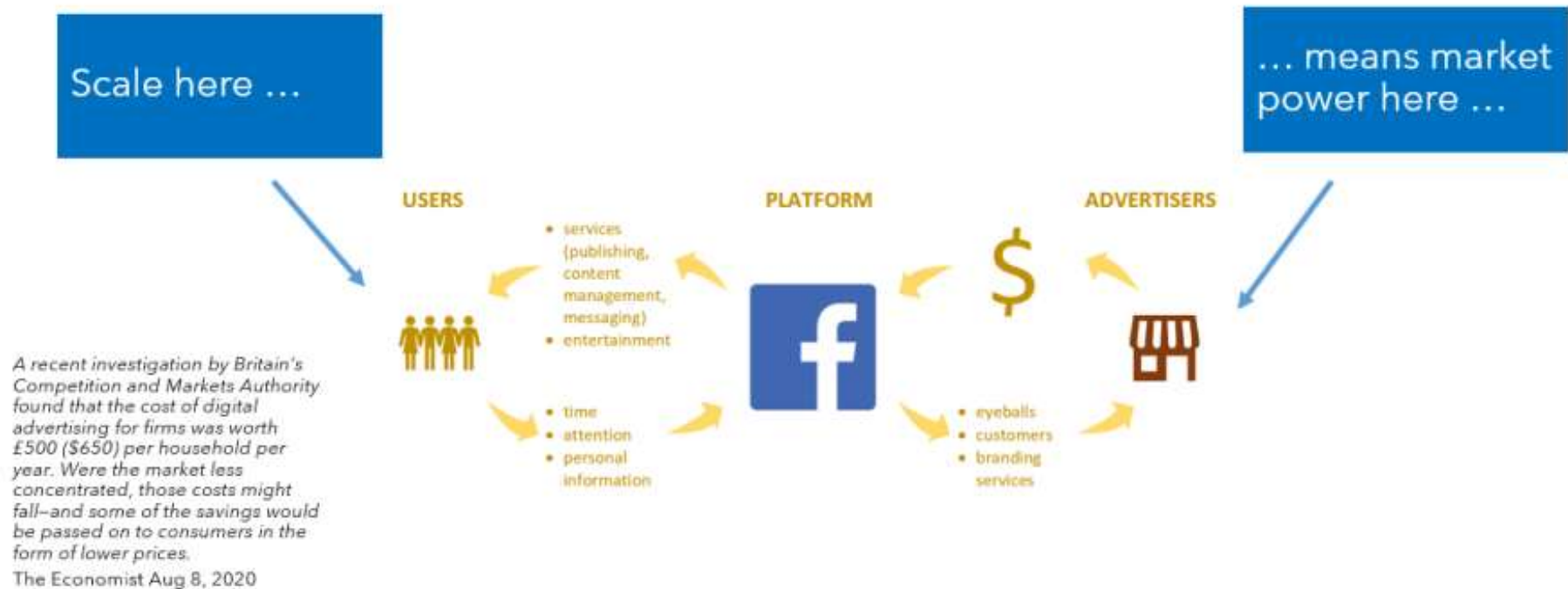
Challenges to regulating digital platforms (2)

Multi-sided markets create complexity and barriers to entry but also create benefits to users

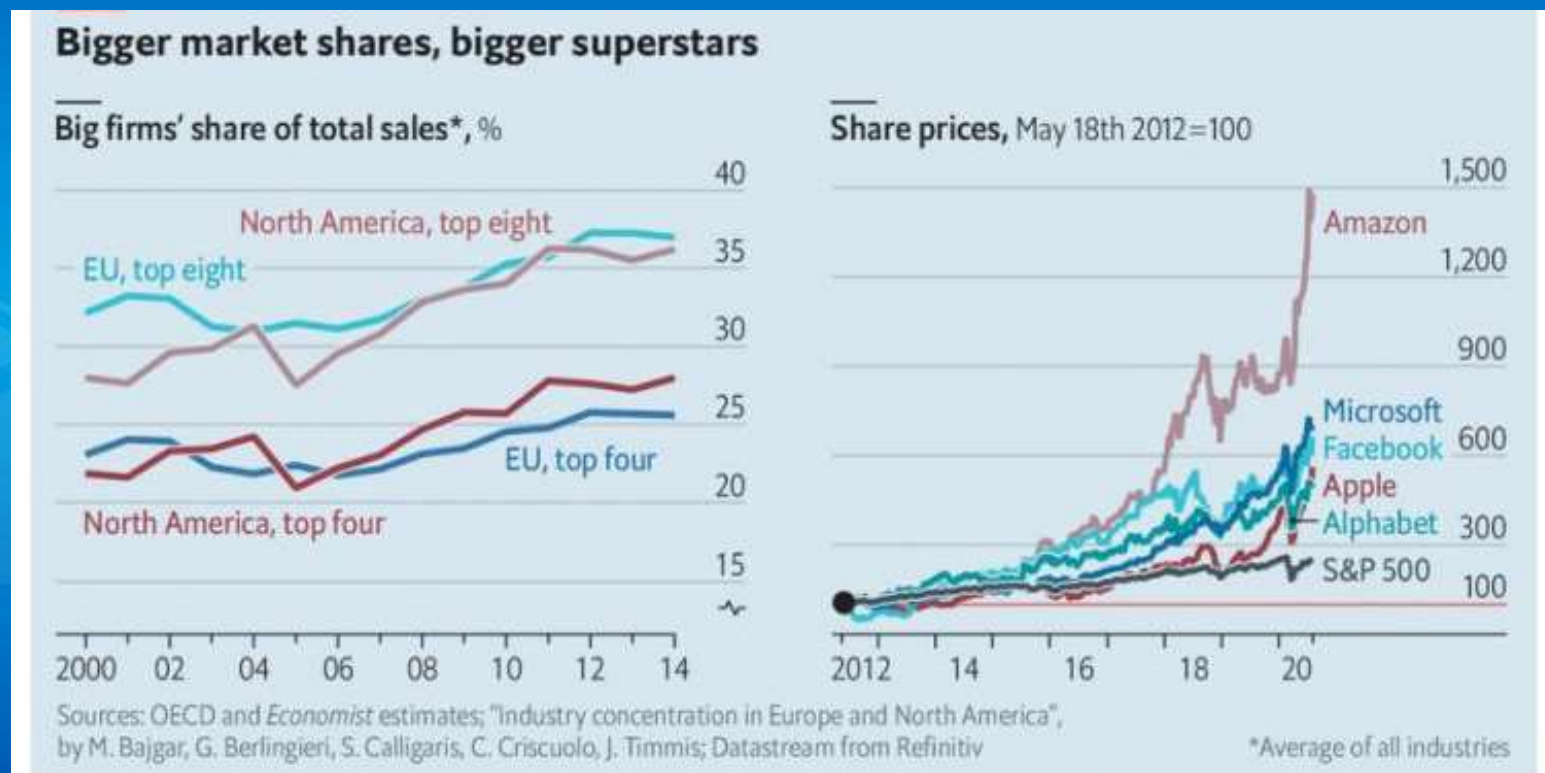


Challenges to regulating digital platforms (3)

Multi-sided markets mean that anti-competitive outcomes do not necessarily occur in what appear to be primary markets. Narrow interpretations of anti-trust difficult to apply.



Challenges to regulating digital platforms (4)



Source: The Economist Aug 8, 2020

Approaches to regulating digital platforms

Approaches break up competition merge with government user data

Structural

- Break up
- Divestment
- Merger constraints



PROS

- addresses scale/dominance
- creates competitors
- make new entrants more viable

CONS

- disruptive/radical/risky
- divested entities may not be viable

Behavior, rules, data

- user data owned by users
- interoperability – services, data
- interconnection
- copyright strengthening



PROS

- serves consumer interests in data protection/ownership
- interop' lowers entry barriers

CONS

- technically difficult (?)
- unintended consequences
- too incremental

Regulating digital platforms : ACCC

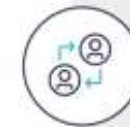
In Australia, The Australian Consumer and Competition Commission has released draft industry code to “address acute bargaining power imbalances between Australian news businesses and Google and Facebook”.

“If the news businesses and the digital platforms cannot strike a deal through a formal three-month negotiation and mediation process, then an independent arbitrator would choose which of the two parties’ final offer is the most reasonable within 45 business days.”

see: <https://www.accc.gov.au/media-release/australian-news-media-to-negotiate-payment-with-major-digital-platforms>

Draft mandatory code bargaining process

The draft code sets rules for negotiations between digital platforms, initially Google and Facebook, and news businesses, including on fair payment for news content.



- The code will require digital platforms to take part in negotiations with news businesses, including on payment for content
- News businesses can collectively bargain with the platforms
- Negotiations on payment for content can proceed to mediation and then binding ‘final offer’ arbitration

NEGOTIATION PROCESS



News business notifies a digital platform that they want to negotiate under the code



Negotiation and mediation takes place for up to three months



If no agreement can be reached on payment for content the news business may choose to proceed to binding final offer arbitration

BINDING FINAL OFFER ARBITRATION

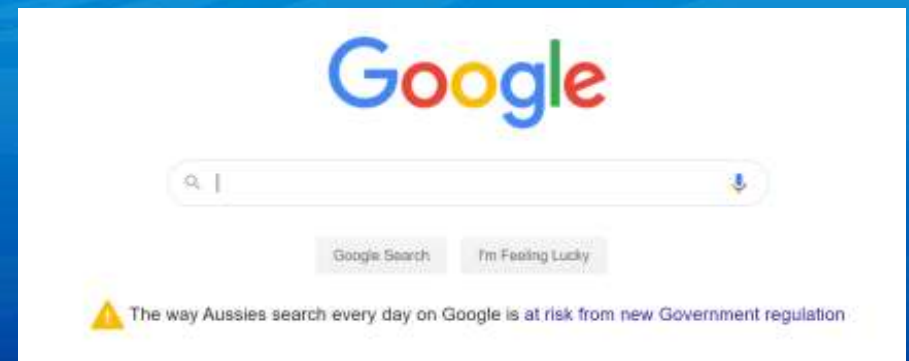
- Each party lodges just one offer with the arbitrator. They can provide one submission in response to the opposing offer
- Within 45 business days of the start of the arbitration process, the arbitrator must choose one of the offers
- The parties can continue negotiating throughout the arbitration process, and arbitration will stop if a commercial agreement is reached



More information, including draft legislation and a Q&A about the draft code, is available at www.accc.gov.au

Regulating digital platforms: ACCC and copyright

In Australia, regulator proposed intervention requiring digital platforms to pay media companies for content draws strong responses.

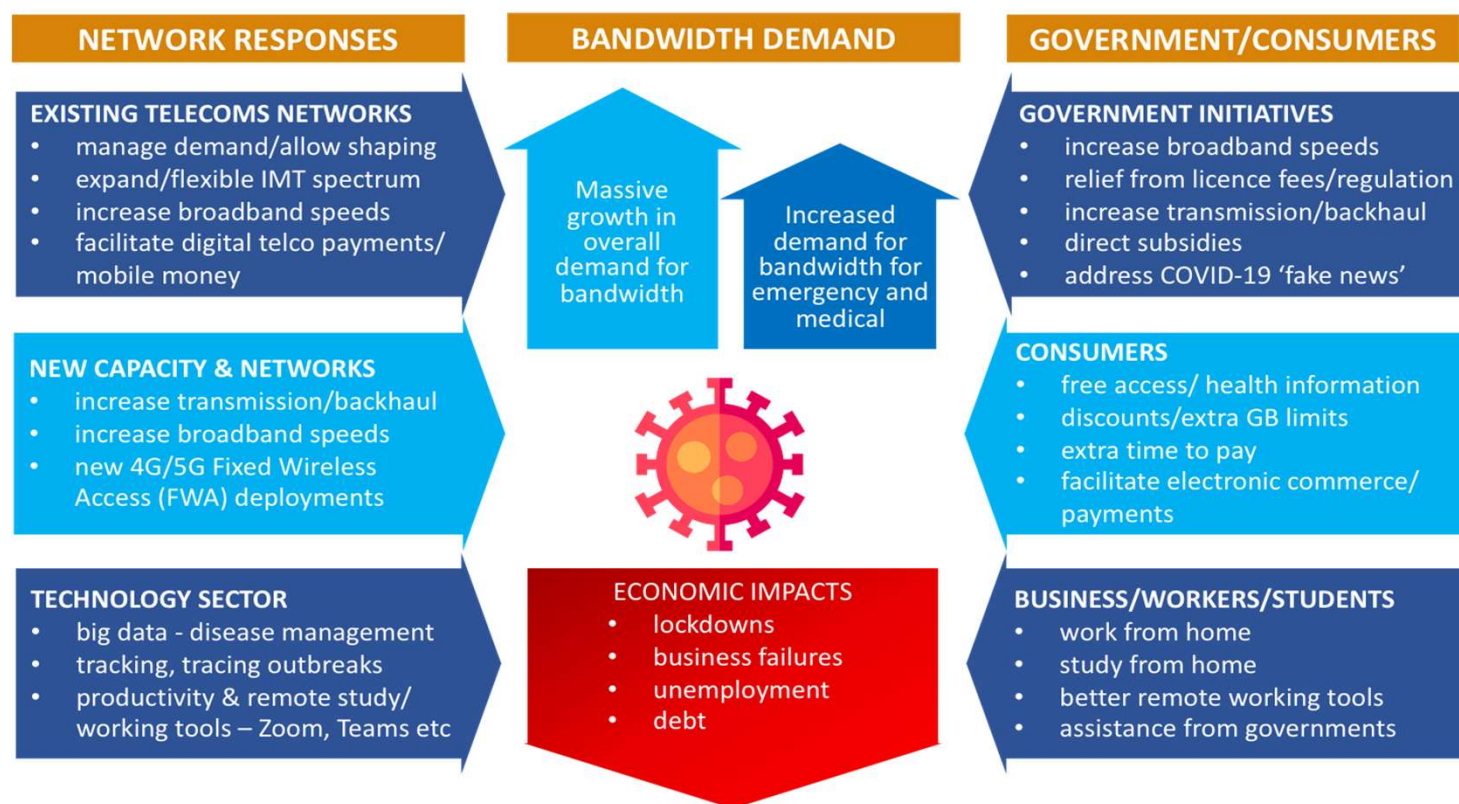


The COVID-19 challenge: Global Network Resiliency Platform

The ITU Global Network Resiliency Platform ([#REG4COVID](https://reg4covid.itu.int/)) is a place where regulators, policy makers and other interested stakeholders can share information, view what initiatives and measures have been introduced around the world designed to help ensure communities remain connected, that we support one another, and that we harness the full power and potential of ICTs during this crisis and to prepare for the medium and long-term recovery from COVID-19.

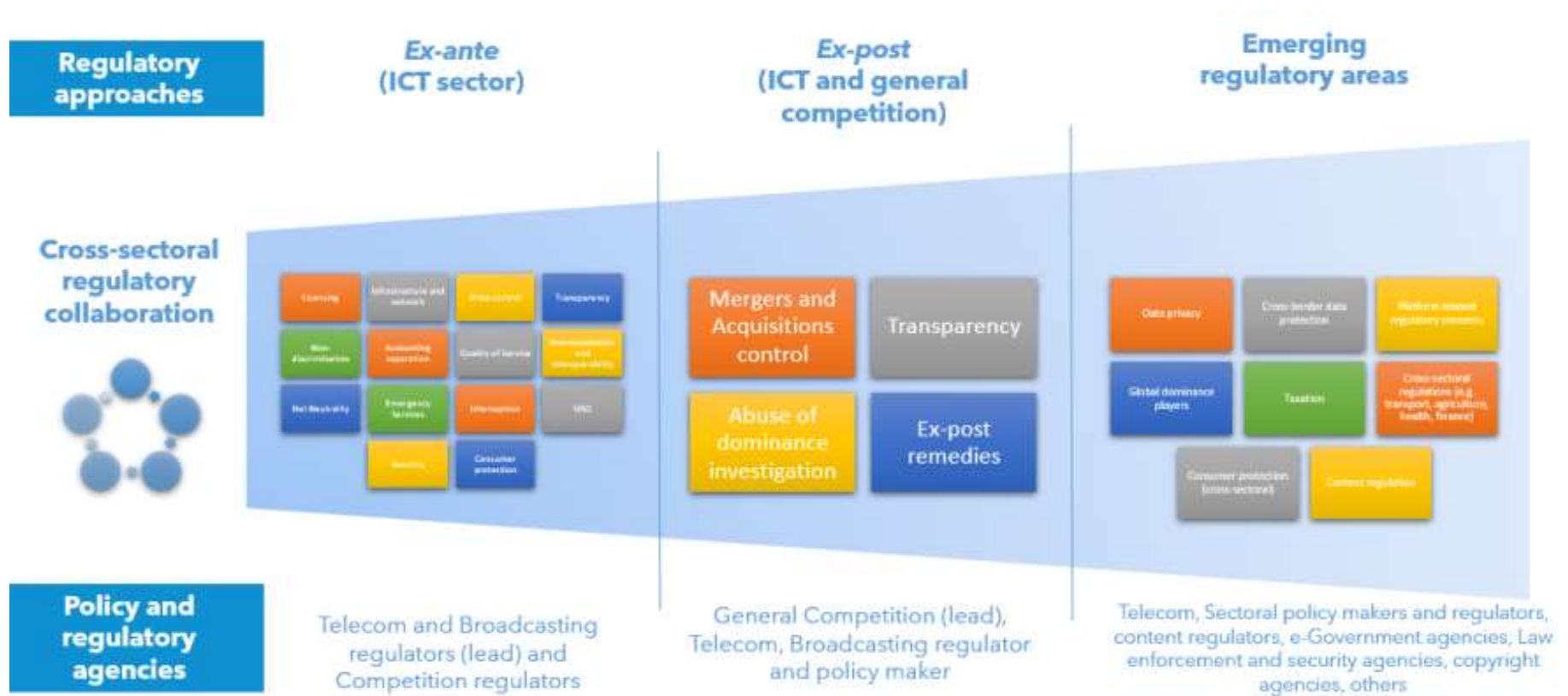


The COVID-19 challenge: stakeholder responses



REGULATORY LANDSCAPE FOR DIGITAL PLATFORMS

Source: ITU-CRC Workshop
 "Regulatory framework for digital applications in Mongolia"
 23-24 October 2018, Ulaan Baatar, Mongolia
 Simon Molloy ITU Expert and Ashish Narayan, ITU Regional Office for Asia and the Pacific



The COVID-19 challenge: impacts competition/regulation

- COVID-19 pandemic has sector competition impacts
- Stakeholder responses have been fast!
- Changes in market power between segments of the communications and technology industries
- It is possible that communications operators may face long-term reduced demand and/or higher costs while at the same time initial indications suggest that the 'big tech' companies such as Google, Apple, Facebook, Amazon, etc. may become significantly stronger under a range of potential future scenarios
- This can arise not only because of their market power but also because of their critical role as the gatekeepers for smartphone operating systems which necessarily must be opened for contact tracing apps, policing COVID-19 fake news and alike
- This will shift the balance of market power between these two segments of the communications and technology industries which may, in turn, require new regulatory settings

The COVID-19 challenge: impacts competition/regulation (2)

- COVID-19 pandemic has highly uncertain outcomes
- If a vaccine is not developed, or takes longer than expected, there will be great demand for contact tracing
 - “This is pandemic happening to a networked world a very important way in which you can contain this kind of contagion is using digital data to map social networks and trace contacts of infected people ... Can you have that kind of policy without loss of privacy?” Niall Ferguson, Munk Dialogues <https://www.youtube.com/watch?v=Z7yxfanc8ns>
 - Ferguson argues that using technology is essential in the case of a sustained pandemic and that the privacy issues can be managed.
- This will require the rapid evolution of user data protection standards and practices
- This may impact regulatory setting for user data management for digital platforms.

Summary

- There are significant regulatory disparities between telco and digital platforms
- Digital platforms are getting bigger and relatively more powerful economically
- Digital platforms are complex and present unique regulatory challenges
- COVID-19 creates significant risks and discontinuities
- In a protracted COVID pandemic, utilisation of contact tracing technologies will be of critical importance
- The use of personal data will need to be highly controlled with strong safeguards for citizens
- New approaches to the management and rights associate with user data may influence future direction of use of user data by digital platforms.

Thank you!

Simon Molloy, ITU Expert

simon.molloy@skc.net.au

+61 414626677

Thank you!

Join the conversation

#ITUGSR

#RegulationMatters

@ITU_BDTDirector

