



**ITU Regional Workshop for CIS**  
**“Calibrating the Policy, Legal and Regulatory Environment to Enable  
Digital Economy”**  
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**Competition and regulatory policy issues**

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## Introduction

We will discuss:

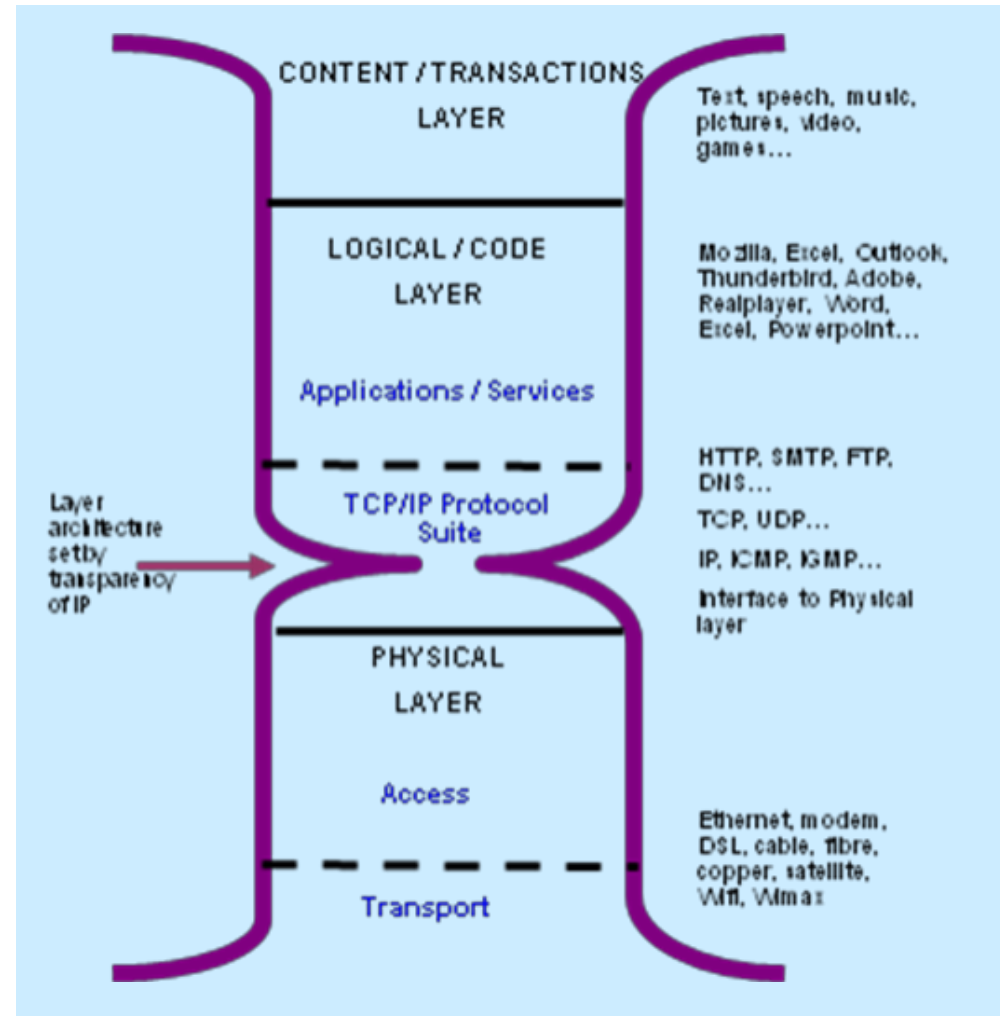
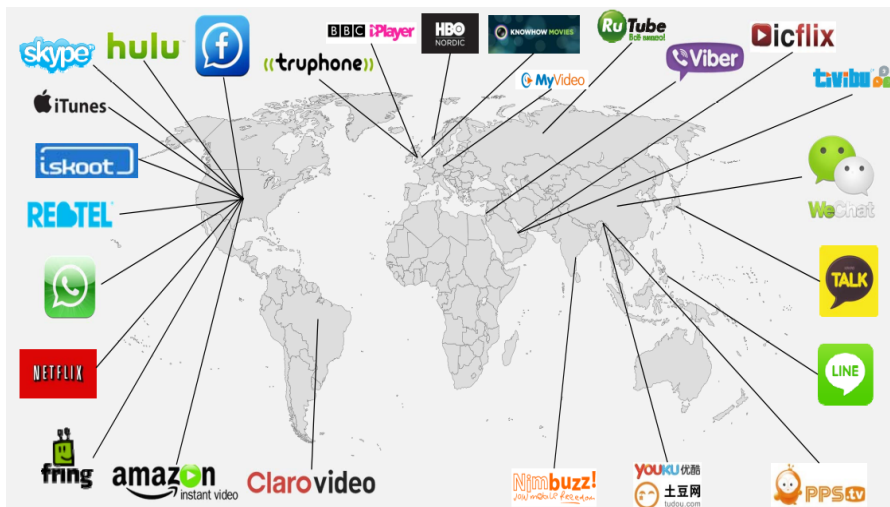
- Network architecture and business models
- Impact on regulatory frameworks
- Competition in broader digital services markets
- Regulatory barriers to digital strategies

## Internet architecture and business models

### Hour glass layers of IP networks

Independence of services and apps from the operator, 'end-to-end argument' and 'permissionless innovation'

Redistribution of computing and media functions across data centres, handheld devices and national borders, resulting in huge data-driven global innovation



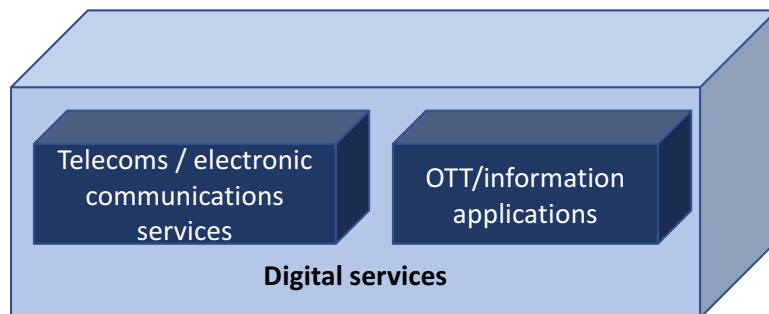
## Sector-specific and cross-sector regulation out of kilter

Similarity of functionalities from user experience and substitution effects on traditional telecom revenues

Imbalance in ongoing restrictions on traditional telecom services in the internet value chain

Regulate only network connectivity services, and treat everything else as an application? Shift to a broader notion of 'digital services'?

How to achieve public goods not secured by the market (universal service, emergency service, QoS)?



	Internet-based or 'OTT' services	Traditional telecommunications services
<b>Commercial services</b>	VoIP among PCs and smartphones	Publicly available telephone services and VoIP to the phone
	Instant messaging	SMS, MMS
	E-mail services not conveyed by operators	E-mail services conveyed by operators
	E-commerce, web-based content Hosting services Search engines	Internet access
<b>Cross-sector obligations</b>	Intermediary liability regime Cross-sector privacy rules Consumer protection rules Content specific regulation (copyright, media pluralism, etc.) Competition law	
<b>Telecom sector obligations</b>		Interconnection Access Net neutrality Universal service Security and integrity Emergency calls Sector-specific privacy rules Legal interception

## Example of interconnection

Interconnection enables competition by sharing network effects (value increases as number of connected members increases)

Regulation counters the incentive for larger network not to interconnect with smaller network

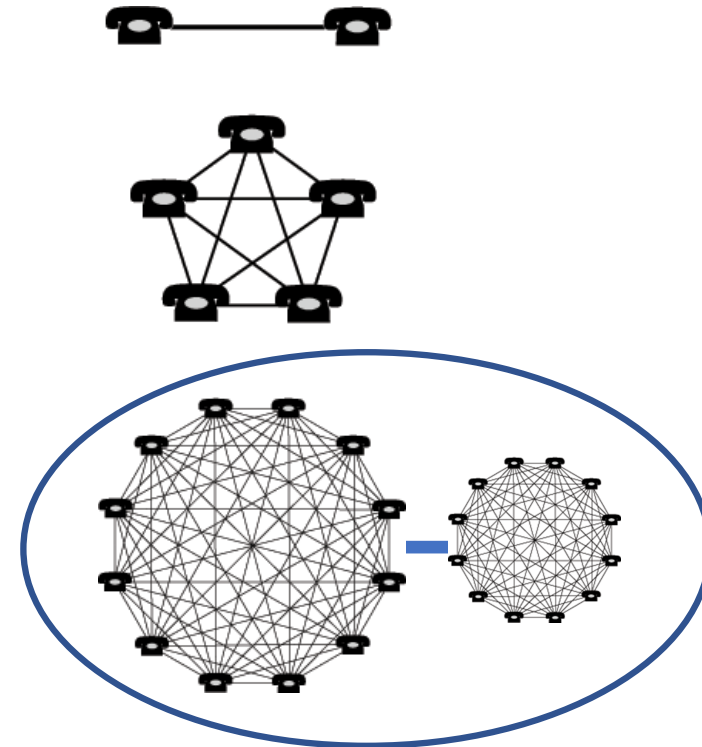
Interconnection price regulation addresses risk of anticompetitive network effects

Basis in 'dominance in termination of calls on the operator's own network'

Increasing availability and use of reliable alternatives puts pressure on termination pricing

Potential relaxing of interconnection rate regulation?

Might dominant communications apps one day be required to be interoperable with others?



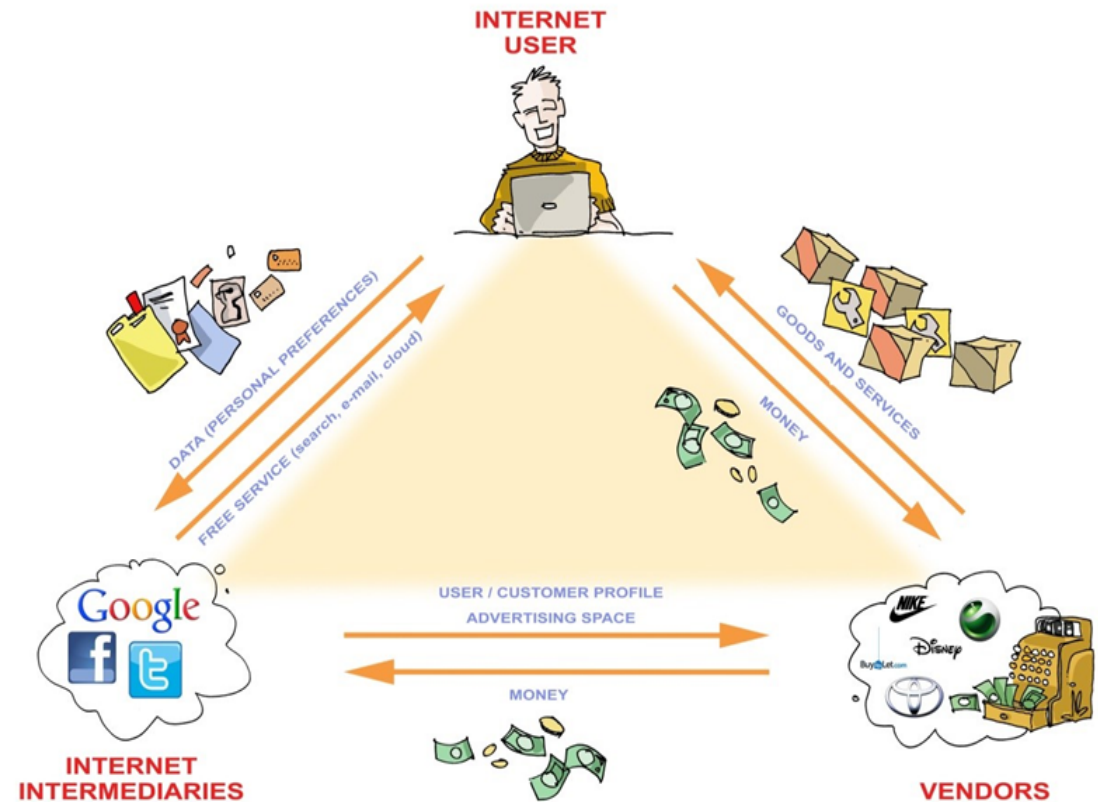
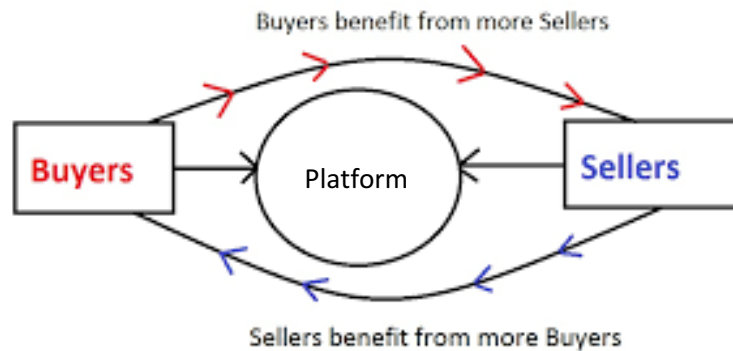
## Looking more broadly at digital service markets

Markets are multisided (i.e., two or more groups interacting through a platform, e.g., TV)

Ability to set prices for services on both sides of the market, pricing some as “free” or cross-subsidised

Rethink merger notification thresholds, the hypothetical monopoly test and market power?

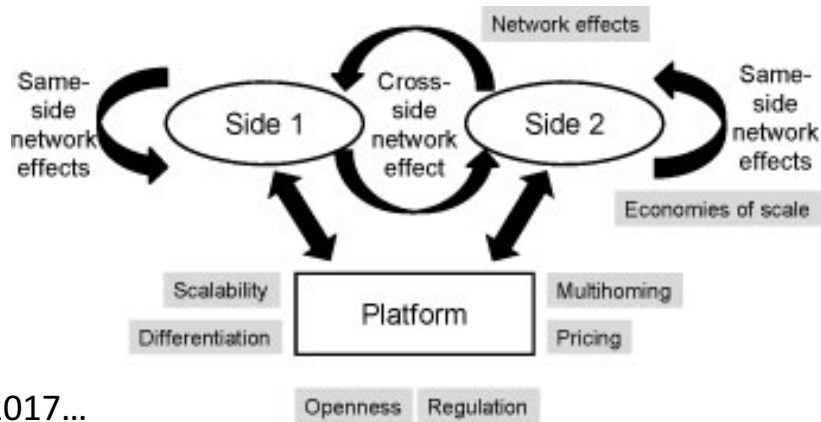
Rethink underlying focus of antitrust on pricing, e.g., include monopolisation of data, privacy, QoS as facets of competition?



Source: Geneva Internet Platform

## Market power in a data driven sector

Feedback loops, cross-side network effects, winner-takes-all, customer lock-in

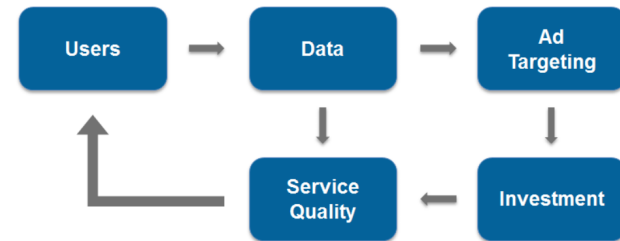


In 2017...

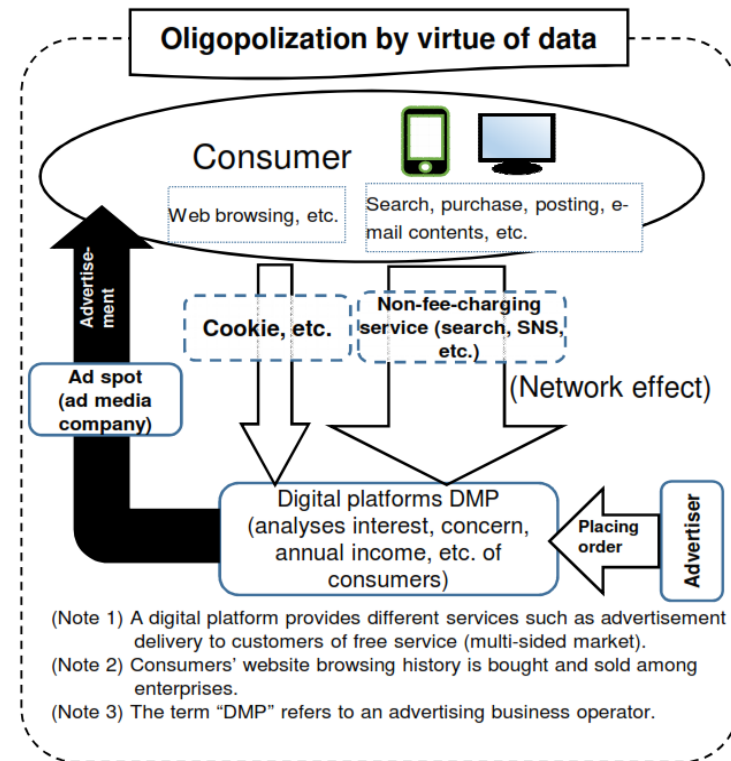
Facebook fined €110 million for misleading European Commission on use of WhatsApp data in merger

German Bundeskartellamt investigating Facebook may treat data violation as abuse of dominance

Japanese Fair Trade Commission considering rules on data and competition



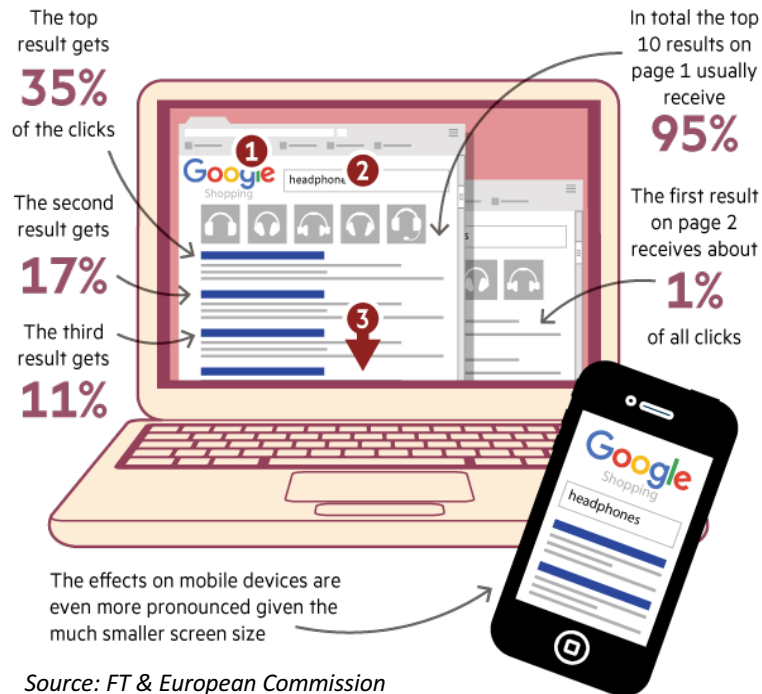
Source: OECD



Source: Japanese Fair Trade Commission

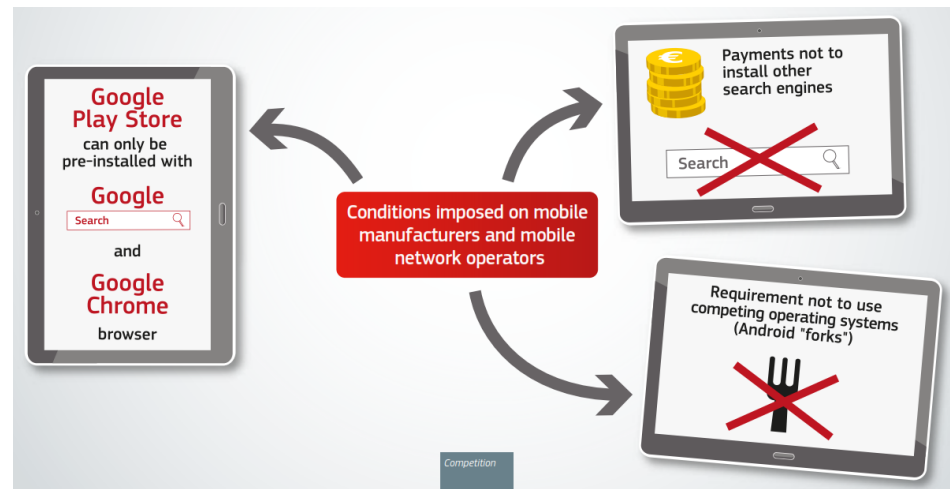
## Control over competitors' access to users

In 2017 ... at the **search function level**, Google found to have 90% of European search market and fined a record €2.4 billion for abuse of dominance by demoting competitor ads in search results



In 2017... at the **operating system level**, ₣438 million (€6.2 million) settlement with Russian Federal Antimonopoly Service over default installation of Google apps and search engine on Android phones, will enable access for rival search engines such as Yandex

Ongoing European Commission investigations of pre-installation of Google apps and exclusive Google search bar on Android phones in Europe under Mobile Application Distribution Agreements (MADAs) with manufacturers



Source: European Commission



## Regulatory barriers to digital strategies

Legacy sector-specific restrictions on telecom operators' use of customer data

Excessive data localisation impeding cross-border supply chains, and the ability to centralise data storage and processing across borders for cloud computing and Big Data strategies

Restrictions on pricing of access to digital services (e.g., absolute prohibitions on zero rating)

Restrictions on network management to assure QoS for bandwidth-intensive digital services (e.g., scope for network slicing in 5G)

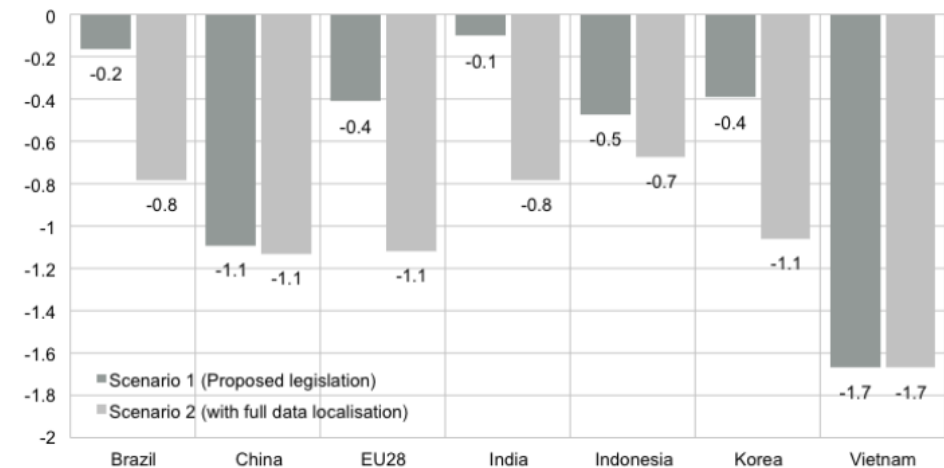
Restrictions on transferring value among customers and off the network (mobile payments)

Is there a role for mobile operators in digital identification?

## Requirements in data regulation packages

	Brazil	China	EU28	India	Indonesia	Korea	Vietnam
Data localisation requirement	No	Yes	No	Partial	Yes	Partial	Yes
Consent required for data collection	Yes	Yes	Yes	Yes	Yes	Yes	No
Consent required for transfer to third parties	Yes	Yes	No	Yes	No	Yes	No
Right to review	No	No	Yes	Yes	Yes	Yes	No
Right to be forgotten	Yes	Yes	Yes	No	No	Yes	Yes
Breach notification	No	Yes	Yes	No	Yes	Yes	No
Impact assessment	No	Yes	Yes	No	No	No	No
Data privacy officers	No	No	Yes	No	No	Yes	No
Sanctions for non-compliance	Yes	Yes	Yes	Yes	Yes	Yes	No
Government access required	Yes	No	No	Yes	No	No	Yes
Data retention requirement	Yes	No	No	Yes	No	No	Yes

## Simulations of impact of data localisation on GDP (changes in %)\*



\*UNCTAD estimates that data localisation increases computation costs for SMEs by 30 – 60%

Source:  
Bauer et. al

## Conclusion

Policy makers, sector regulators, competition authorities and data protection regulators will need to constantly review their approaches to electronic communications and broader digital services to ensure coherent regulatory regimes that enable investment, competition and innovation