
Online platforms: key features and ongoing regulatory actions

Digital Humanism, Summer School 2022, Vienna 21 September 2022

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Introduction

Online platforms

The special case of labour platforms

Regulation



Definitions

European Commission broad definition from the 2016 Communication on online platforms: *online spaces where users are brought together by a platform operator in order to facilitate an interaction (exchange of information, a commercial transaction, etc.)*

Definition from the economic literature: “platforms are two-sided (or multisided) markets, if they can affect the volume of transactions by charging more to one side of the market and reducing the price paid by the other side by an equal amount; in other words, the price structure matters, and platforms must design it so as to bring both sides (or many sides) on board”

Beyond market power

New sources and types of power beyond concepts upon which existing regulatory frameworks are built

Market power is a key element but not the only one

The power held by platforms concerns consumer protection, use of personal data, and the structuring of media.

According to some, platforms have acquired societal and infrastructural power becoming institutional ecosystems

Examples: expansion into public transport, healthcare, education.

The COVID-19 crisis has made the societal and infrastructural role taken up by platforms even more apparent

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Platforms as two-sided and multisided markets

Online
platforms are
two- or
multisided
firms

Two- and multisided firms sell access to customers

A traditional firm buys “raw material”, makes stuff, and sells it to consumers.

A two-sided firm recruits one type of customers and makes those customers available to another type of customers. The customers **are** the raw materials.

The demand by one group depends on the demand by the other group for the special kind of firms

The demand by one group for the business depends on the interest (and therefore the demand) of the other group.

The demand of each group is dependent on the demand by the other group.

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Boston Restaurants, New England Restaurants

Change Location >

Make a Free Restaurant Reservation

1 Select Location: Choose Area to Start

2 Refine (optional): All Cuisines

3 Select Date, Time & Party Size: 08/20/2011 7:00 PM 2 people

Enter Restaurant Name **Find a Table**

Not Ready to Reserve? See all 767 Boston restaurants >

Welcome, David

3 Upcoming Reservations >
Restaurants to Review >
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Local Deals and Events

- Greater Boston Convention and Visitors Bureau AMERICAN EXPRESS RESTAURANT WEEK BOSTON August 14-19 & 21-26 \$33 Dinners
- Earn Free Meals Faster - 1,000-Point Tables
- OpenTable Mobile: Free Apps For Your Phone!
- Find Boston Private Dining Venues

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New Restaurants

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Boston restaurants that recently joined the OpenTable network

Restaurant	Location	Joined
Pasta E Pomodoro	North End / Waterfront Italian	Joined 08/17/2011
Rang Indian Bistro	Stoneham Indian	Joined 08/17/2011
Deck FortyTwo	Providence Seafood	Joined 08/16/2011
The Nimrod Restaurant and Jazz Lounge	Falmouth Contemporary American	Joined 08/16/2011
Passage To India	Cambridge Indian	Joined 08/12/2011

See all Boston restaurants that are new to OpenTable >

You Might Like

Boston restaurants to try or try again based on your dining history

- oya**
★★★★★ 93 Reviews
Leather District | Japanese
- Mistral - Boston**
★★★★★ 308 Reviews
Back Bay | French

OpenTable Diners Are Saying

Boston restaurant reviews from diners

Exchange Street Bistro
★★★★☆ 38 Reviews
Malden | American

We really enjoyed the pre fix menu they had for for 3 courses. Each course was great. coconut shrimp, rib eye and ice cr... More >

The OpenTable Blog: Dining Check

Tune In to Dallas-Fort Worth | Capitalize on D.C. Restaurant Week:

OpenTable solves a transaction cost problem

We Eliminate the Hurdles of Phone Reservations



Restaurant pays, diners use it for free

Diners don't pay and get "points" that give them discounts on next meals: the price on this side is actually negative

Restaurants pay monthly subscription for the reservation software and a fee for each butt in a seat as they say in the restaurant business.

In 2016 it had 40,000 restaurants and 16 million users

More restaurant attract more diners, more diners attract more restaurants

OpenTable is a two-sided platform (market)

It provides a “**platform**” that enables diners and restaurants to find each other and get together; the platform is “virtual” and depends on cloud, web, and mobile apps.

The **platform** is an **intermediary** between restaurants and diners.

Such a platform is sometimes referred to as a “**two-sided market**”.

Platforms can have more than two sides. Facebook has six.

platforms create value by reducing transaction costs

Platforms enable
two or more
types of
customers,

who could
engage in
mutually valuable
exchange

to find each
other though
search and
matching

to transact,

and to thereby
create and
exchange value.

They reduce or eliminate marketplace *frictions* and *transactions costs*.

Other Examples

COMPANY	CUSTOMER SIDE A	CUSTOMER SIDE B	CUSTOMER SIDE C
Uber	Drivers	Passengers	
Apple iOS	Phone users	Application Developers	
YouTube	Uploaders of video	Viewers of video	Advertisers
Sony PlayStation	Console users	Game Developers	
Facebook	Friends who send messengers	Friends who receive messengers	Advertisers
Google Search	Searchers	Advertisers	Websites
London Stock Exchange	Liquidity providers	Liquidity takers	
Monster	Job seekers	Employers	
Daily Telegraph	Readers	Advertisers	
Centro in Oberhausen	Retail Stores	Shoppers	
PayPal	People and businesses who send money	People and businesses who receive money	App developers
Match.com	Men	Women	

Economics of externalities and network effects

Externality: Impact of one person on another that doesn't get recovered in price.

- Negative is bad (neighbor plays loud music at night).
- Positive is good (neighbor has beautiful flower garden).

Network effect: Impact of one more participant on a network on the value to another; this is a type of externality.

- Direct (within- group) network effects occur when the benefits to a user increases with the number of users. This type of network effects is relevant for example for social networks and messenger apps
- Indirect (cross-group) network effects occur when the benefits to users on one side of a multi- sided market increase with the number of users on the other side of the market. This type of network effects is relevant for example for online marketplaces and app stores

Profit-maximizing price for one side can be less than marginal cost

Traditional microeconomic theory finds that $P \geq MC$

Multisided platform theory finds that on one side of platform the ***profit-maximizing*** price can be less than MC or even less than 0.

Multisided platform empirics finds that $P < MC$, including “free”, is common in fact.

Examples of
pricing
structure

Platform	Money Side	Subsidy Side	Typical Price on Subsidy Side
Video game consoles	Game publishers pay royalties	Consumers pay marginal cost or less for console	Below cost
Online marketplaces	Sellers often pay commission	Buyers usually do not pay	Free
Uber	Drivers pay a fee	Riders do not pay	Free
Airbnb	Hosts pay 12% fee	Guests pay 4% fee	Below cost
Search engines	Businesses pay for advertisements	Searchers do not pay	Free

Single versus multi homing

- *Single homing*: consumers use only one platform
- *Multi homing*: consumers use 2 (or more) platforms
- Strategies to limit multi homing:
 - Exclusivity agreements
 - Loyalty programs
 - Switching costs



Factors
influencing
platforms
growth

Cause	Effect on Size/Concentration
Indirect network effects	+
Scale economies	+
Congestion	-
Platform differentiation	-
Multi-homing	-

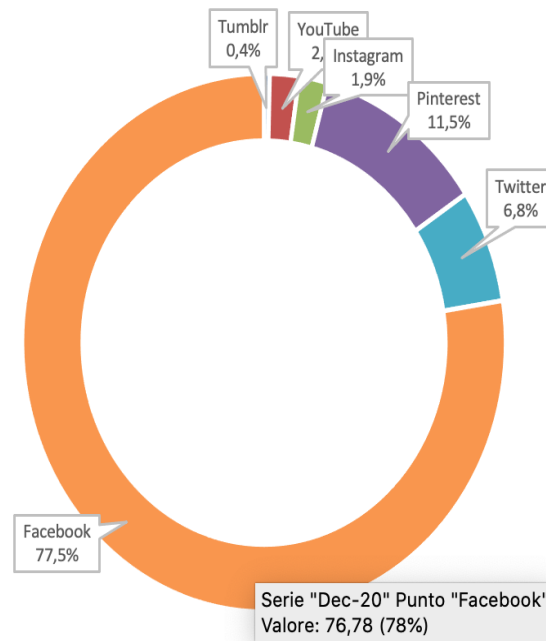
Platforms: launch versus maturity

- Winner-takes-all dynamics create a situation where digital platforms aim for dominance as a survival strategy. Hence, the digital platform's strategic imperative in its formative years is to achieve scale through network effects
- During the launch phase, they will prioritize the growth of the sides rather than profits.
- During the maturity phase, the successful platforms are likely to prioritize sustaining their power and prioritize profit.
- Once the platform market has tipped, platform firms that will have reached asymmetric power over customers or business partners and have reached uncontested positions of gatekeeper power may simply lack the will to self-regulate

Online platforms: a few statistics and facts

Traffic share

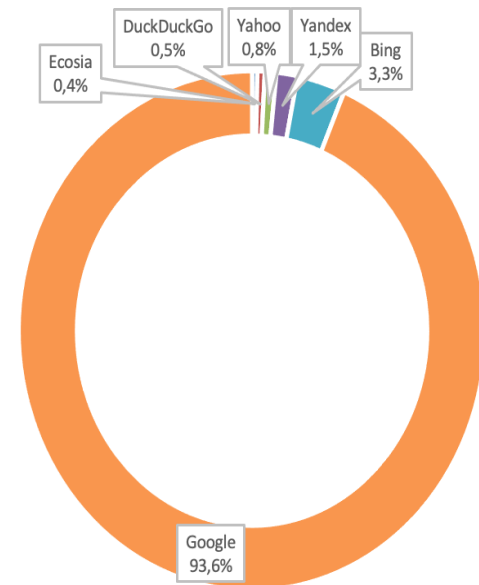
Social media platforms in Europe December 2020



Source: Statcounter. →



Search engines in Europe December 2020



Source: Statcounter. ¶





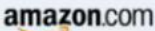






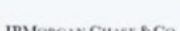
Share of digital ad revenues

	2016	2017	2018	2019
Google	32.8%	33.0%	32.4%	32.3%
Facebook	14.1%	16.2%	17.7%	18.7%
Alibaba*	6.6%	7.8%	9.0%	9.2%
Baidu	4.3%	4.2%	4.3%	4.5%
Tencent	2.2%	3.0%	4.0%	4.9%
Microsoft (Microsoft and LinkedIn)**	2.3%	2.7%	3.1%	3.5%
Yahoo	1.6%	1.4%	1.2%	1.1%
Twitter	1.2%	1.0%	0.9%	0.9%
Amazon	0.7%	0.8%	0.9%	1.0%
Verizon (AOL and Millennial Media)	0.7%	0.7%	0.6%	0.5%
Pandora	0.6%	0.5%	0.5%	0.5%
IAC	0.5%	0.4%	0.3%	0.3%
Sina	0.4%	0.4%	0.4%	0.5%
Snapchat	0.2%	0.4%	0.7%	1.1%
Sohu.com	0.5%	0.4%	0.4%	0.3%
Yelp	0.3%	0.3%	0.3%	0.3%
Other	31.1%	26.7%	23.2%	20.4%
Total digital ad spending (billions)	\$190.57	\$223.74	\$259.84	\$297.41

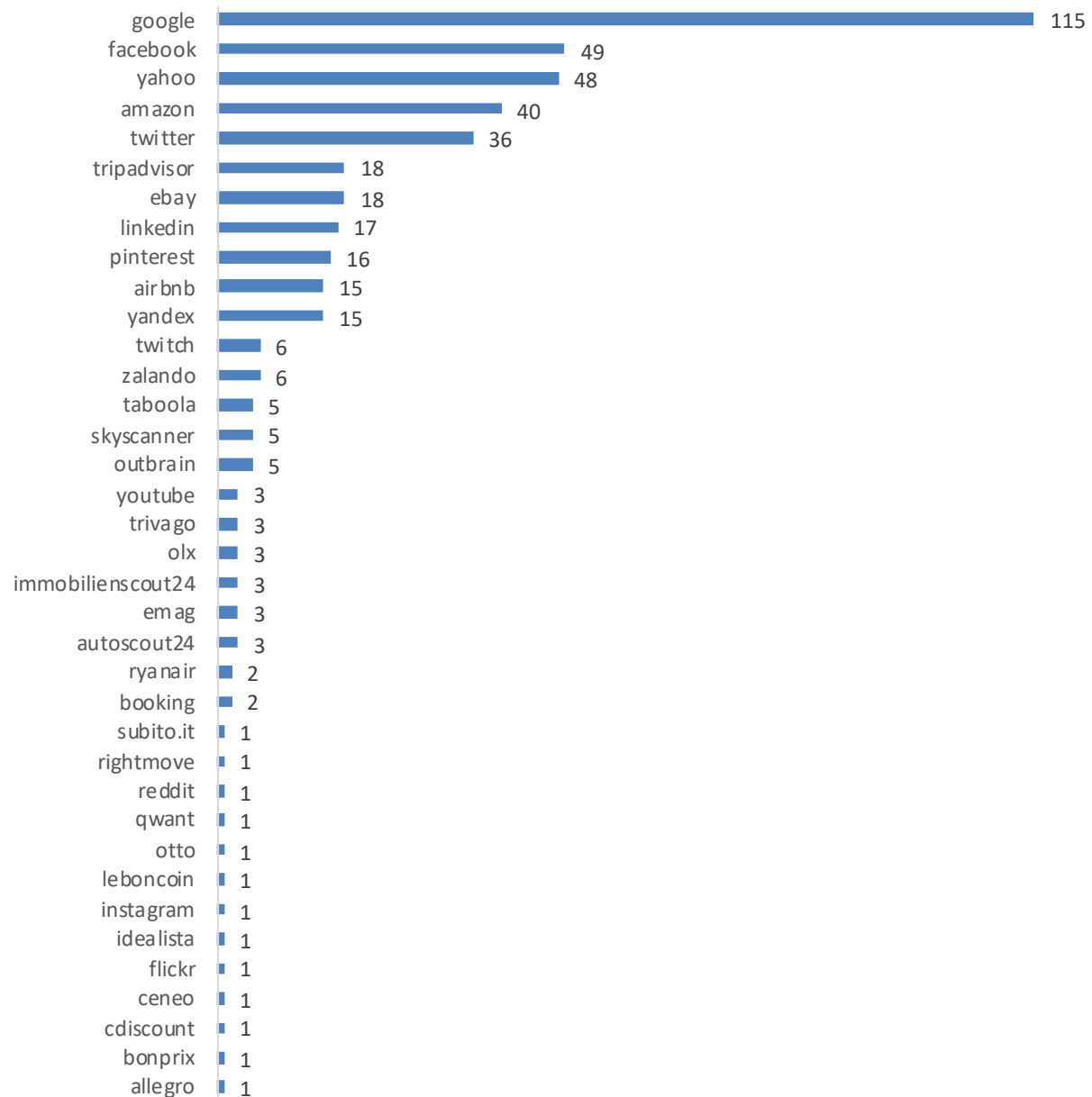
Large
platforms
market
capitalisation

Market capitalisation of largest companies included in the S&P 500 index, Nov 2020

A horizontal bar chart displaying the market capitalisation of the top 10 largest companies in the S&P 500 index as of November 2020. The bars are teal and arranged in descending order of value. Each bar is accompanied by the company's logo on the left and its name and market capitalisation value on the right.

	Apple	\$2,030b
	Microsoft	\$1,621b
	Amazon	\$1,573b
	Alphabet	\$1,192b
	Facebook	\$783b
	Berkshire Hathaway	\$547b
	Walmart	\$423b
	Visa	\$409b
	Johnson & Johnson	\$393b
	JPMorgan Chase	\$354b

Acquisitions by platforms 2013-2020



Source: own elaboration based on Crunchbase data

Growing concentration

- Top 7 platforms account for 69% of the total EUR 6 trillion valuation of the platform economy
- They have several hundred millions of users
- Total net revenues of these platforms (of billions of euros) double and triple over a few years.
- New market operators that may want to enter or expand in digital markets where a gatekeeper is present may find it extremely difficult to overcome some of the inherent barriers to entry or expansion without access to a sufficiently large users base

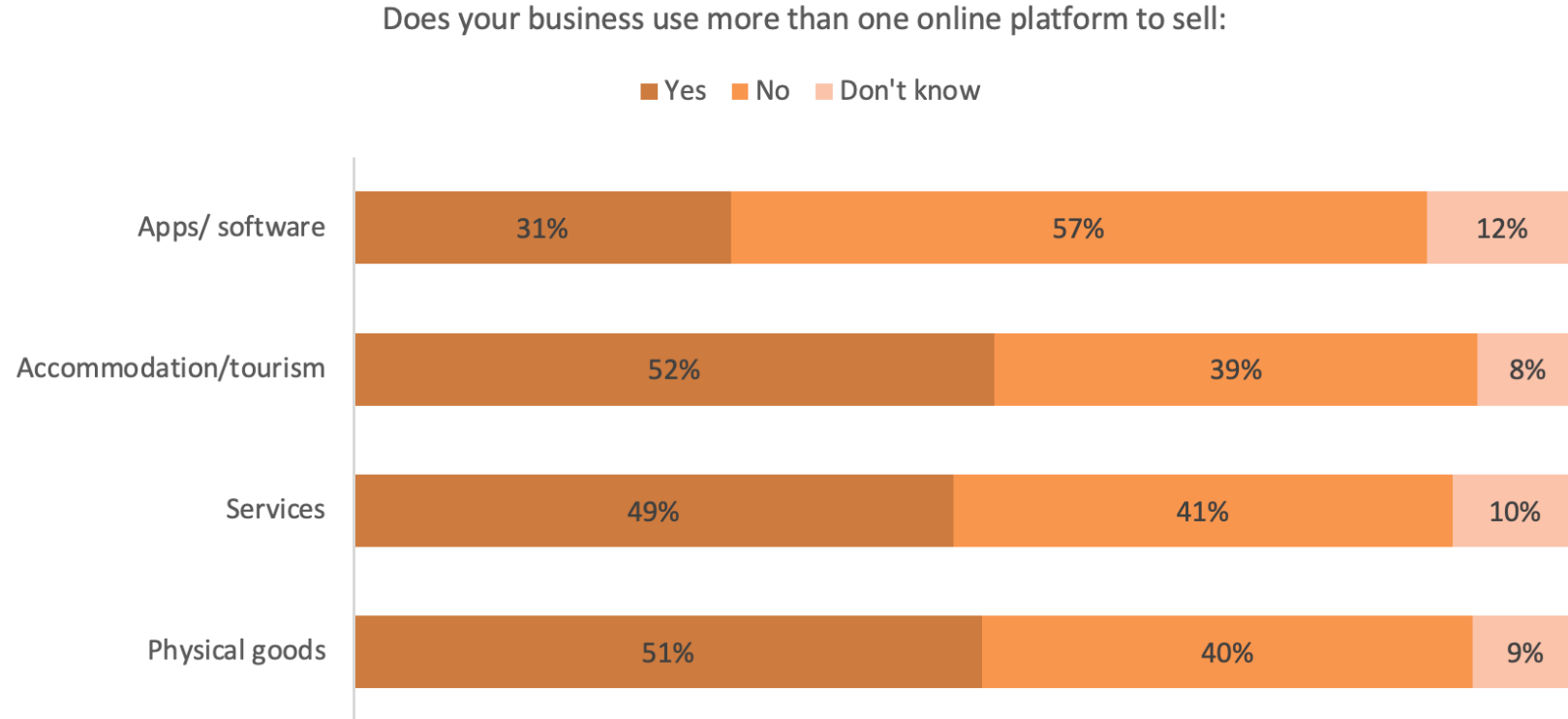
Businesses dependence on platforms

According to the Observatory's estimates, around half of enterprises derived more than 25% of their revenues from online platforms. For almost 10% of companies, online platform sales exceed 75% of all revenues;

Of SMEs in the EU that sell online, more than eight in ten rely on search engines as a mean of marketing their products or services.

in some cases more than 50% of goods sold on a marketplace come from third-party sellers.

Business dependence: % of company doing multi-homing



Source: PPMI Survey. Second wave (October 2020). Physical goods N=1424, Services N=1415, Accommodation/tourism N=747, Apps/software N=656.

Online platforms sources of power

Network effects and switching costs

Network effects facilitates the rapid growth of platforms and create barriers to entry for new competitors

it is not enough for a new entrant to offer better quality and/or a lower price than the incumbent does; it also must convince users of the incumbent to coordinate their migration to its own services. Network effects could thus prevent a superior platform from displacing an established incumbent. This depends on several factors: multi-homing, data portability, and data interoperability

Several factors may increase the cost or inconvenience of multi-homing or switching between platforms. For example, consumers or businesses may not be able to transfer their 'reputation capital' (e.g., ratings, trust scores) from one platform to another due to a lack of interoperability.

Exploiting behavioural biases



Behavioural biases (default options, short-term gratification, etc.) increase switching costs and create lock-in



Platforms operators may actively exploit psychological weaknesses of platform with the help of so-called 'dark patterns'



For example, they could design user interfaces in a way to make their digital products addictive




Platforms hold detailed information on the behaviour of their users and routinely perform experiments to learn more.




Consumer data collected on a platform or even across a digital ecosystem allows companies to engage in microtargeting individual consumer preferences with personalized offers

Data as a source of power

large pools of data held by incumbent platforms are the single biggest barrier to entry in the digital economy



A data-rich platform improve its offering by targeting and personalising service, and generate higher revenue by offering more targeted advertising to business users



As gatekeepers platforms access to large pools of data providing information about the preferences and behaviour of individual users, and also accumulate 'social data', i.e. information that may shed light on other people's behaviour (e.g. traffic patterns).

More on data

In the age of artificial intelligence and machine learning, personal data collected on the behaviour of one set of consumers has predictive value for the behaviour of other consumers

Owners of two separate but complementary datasets can reach a higher level of value and insights from their data if they pool the two sets

Once a sufficiently large sample of behavioural observations has been compiled to produce robust predictions, that data sample can be used to predict the behaviour of agents outside the sample

Data collection and analytics play a key role in the intermediation function of platforms and in generating network effects

Platforms put data at the core of their business model and specialise in transactions that require substantial datasets to do an efficient matching between users.

Infrastructural power

Google Maps provides a cartographic infrastructure that serves as a basis for a plethora of private and public services

Healthcare is another area being entered by platforms: health data collected via smartphone apps and wearables are becoming a key element of the emerging digital health care infrastructure

Summer of 2020: introduction of Covid-19 tracing apps, for which many national governments were dependent on the cooperation of Apple and Google

Apple and Google backed a decentralised solution which made several national governments switch their plans from centralised to decentralised app



Power over society and democracy

- Platforms are becoming infrastructures, which are assuming a critical role in public and private lives
 - They are systems of governance defining the rules and parameters of action in an increasingly digitally mediated everyday life
 - As intermediaries between politics and the people, platforms are restructuring the public sphere. Facebook, YouTube, Twitter and Instagram have become the new gatekeepers or custodians to the massive, heterogeneous, and contested public realm they have brought into being
 - The rise of platforms as new intermediaries implies a shift in opinion power, traditionally understood as the media's capacity to influence public will formation
 - Mass media do no longer control their channels of communication and are becoming dependent upon increasingly powerful digital intermediaries
-

In sum

Power held by certain players in the platform economy transcends our current understanding of market power

The power exercised by some digital platforms is not limited to control over markets or control over the price and quality of products and services offered to consumers

Digital platforms are now also acting as gatekeepers of public interests through their ability to impose their own rules on how businesses can reach consumers, their ability to steer consumer behaviour and consumer choice, and their ability to influence democracy through the algorithmic curating of public discourse and through their control over how human rights and freedoms can be exercised

Policy concerns

Market power, concentration, entry barriers, lock-in

Data and privacy concerns, extraction of behavioural surplus

Monopoly on data and European data dependency

Behavioural bias: a fourth market failure leading to hyper-nudging

A hybrid between a firm and a market: quasi-institutions?

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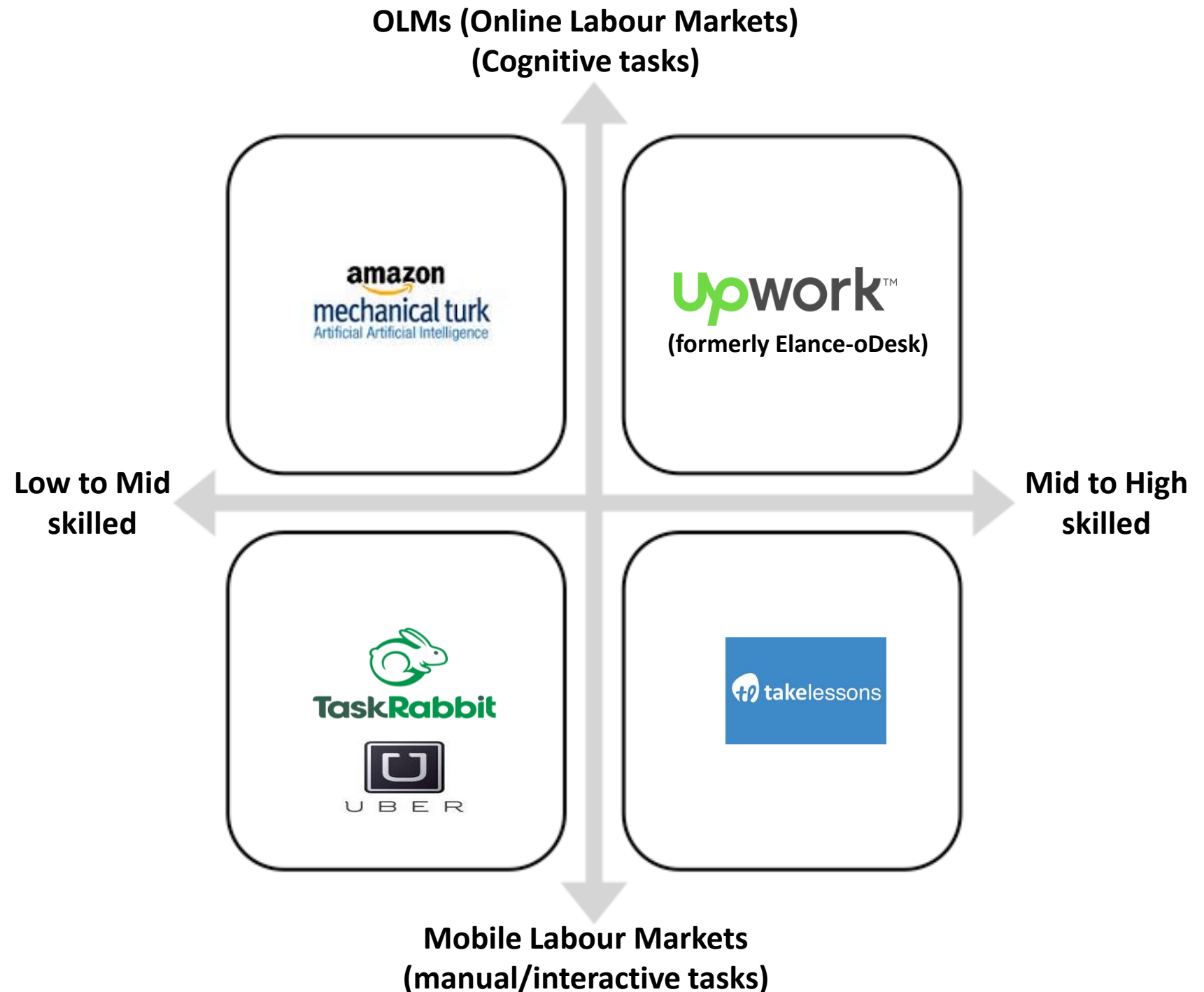
Definition: Online and Mobile Labour Markets

Two Sided Online and Mobile Labour Markets are digital platforms:

- *that work as digital marketplaces for contingent work;*
- *where services of various nature are produced using the labour factor;*
- *labour and the produced services are exchanged for money;*
- *the matching is digitally mediated and administered although performance and delivery of labour can take different forms;*

Labour platforms Typology

- **Quadrant (1) or OLM micro-tasking.** Electronically transmittable cognitive micro- tasks paid per piece are traded in markets such as MTurk, Clickworker, Crowdfunder, and many others
- **Quadrant (2) or OLM tasking.** Electronically transmittable tasks (and in some cases full self-contained projects) paid with fixed contract per deliverable (more often) or per hour (less often) are traded in markets such as Upwork, and Freelancers
- **Quadrant (3) or MLM physical services.** Tasks requiring physical delivery of mostly manual services requiring low to medium levels of skills and paid with fixed contract per task (more often) or per hour (less often) are traded in markets such as TaskRabbit
- Quadrant (4) less relevant



On demand workers

Socio-demographics: young and highly educated

- Young (but in UK 16% > 55) and highly educated (but differences by platforms)
- Possibly women > men (UK: 54% vs. 46%) but not in all platforms (Gigwalk is opposite)
- The myth: they are mostly students (in UK only 10%)

Motivation: extrinsic ones dominate

- Myth: the generosity of the crowd, killing time, and having fun
- Money is the main drive (UK 81% are the main breadwinners in their households)
- Flexibility and autonomy come second (depending on platforms, they are also a myth)

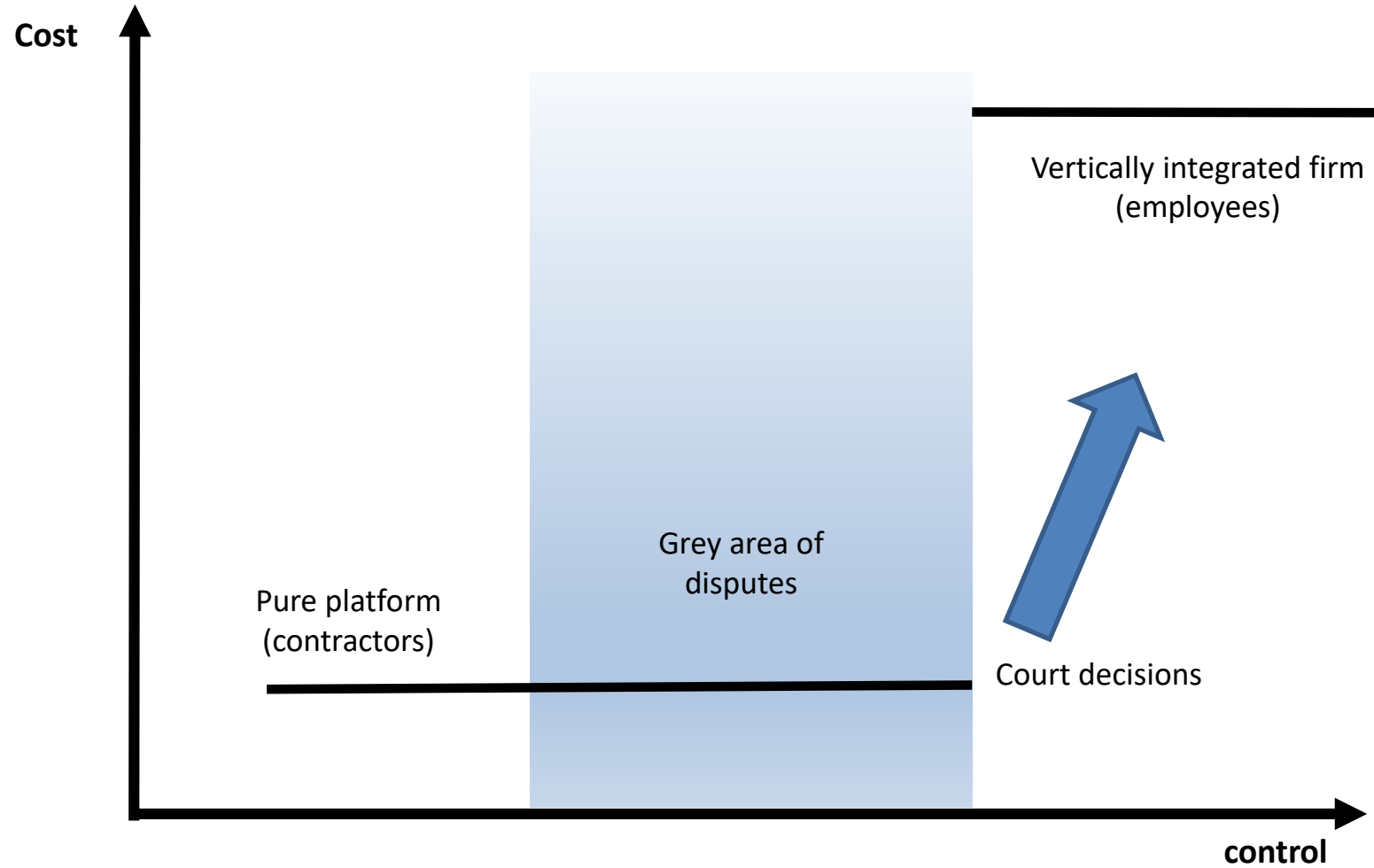
Earnings: below or just above minimum wage

- In Amazon Mechanical Turk about 5 \$ per hour, in Upwork up to \$ 16 per hour
- In MLMs on average \$ 8 to \$ 12, Uber drivers \$ 9 per hour (net)
- UK data: majority makes < £ 20,000 gross per year, only 7% makes > £ 55,000

Working conditions

- Various forms of asymmetries (i.e., Algocracy)
- No form of social protection and insurance
- Flexibility, autonomy, and work-life balance might turn out to be a myth

Contractors or employees?



Algorithmic management

- Ethnographic and quantitative analyses have uncovered in digital labour platform forms of algorithmic management and surveillance, creating asymmetries of power and information for the 'workers'
- The pillars of this system are: assignment algorithms, surge price algorithms, and semi-automated evaluation (i.e., drivers' acceptance rate plus the ratings received by the passengers)
- These match three aspects typical of human resources management: work allocation, information, and evaluation
- In platforms on-demand workers can be controlled even by measuring their productivity in terms of keystrokes
- Some platforms include virtual office applications which ensure tight control of contractors (i.e., with regular screen shots and activity logs)

Algorithmic management in digital labour platforms

The real-time data generated by drivers and riders is used to specify their pricing strategy

The allocation of tasks on delivery platforms is automated and work schedules and destination are shaped by ratings, the number of hours worked, and orders accepted during specific days and time slots.

Digital labour platforms facilitate the continuous control and monitoring of workers and some of these monitoring processes are automated. Freelance platforms lay down that the workers are often required to install or meet certain software and hardware requirements

The evaluation of performance through the use of algorithms is yet another way of redefining work relationships and replacing human supervision. There is little transparency about how the rating is determined and the relative weight of the different indicators used in the algorithms to evaluate workers performance.

Platforms continuously try to discipline workers using two main mechanisms. First, platforms use incentives and rewards to discipline workers. Second, disciplining is often also achieved through punishing when workers digress from performing the task by restricting access to work or deactivating them temporarily or permanently.

Policy questions

What are the possible implications of these new labour markets for employment and wages?

Do they justify a regulatory intervention? If yes, in what areas (i.e., taxation, liability, insurance, social protection)?

What would be the costs of curbing innovation and losing on improved labour market efficiency as a result of regulatory interventions?

Introduction

Online platforms

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Regulation

The Digital Service Package

It comprises the Digital Market Acts (DMA) and the Digital Service Act (DSA)

Together they aim to create a safer digital space where the fundamental rights of users are protected and to establish a level playing field for businesses

DSA primarily concern online intermediaries and platforms. For example, online marketplaces, social networks, content-sharing platforms, app stores, and online travel and accommodation platforms

The Digital Markets Act includes rules that govern gatekeeper online platforms. Gatekeeper platforms are digital platforms with a systemic role in the internal market that function as bottlenecks between businesses and consumers for important digital services

Rationale: what is the problem DMA

A few online platforms embedded in their ecosystem are structuring players, as private rulers

Intermediate the lion's share of transactions between consumers and businesses

have a major impact insofar as they control access to and have gained an entrenched market position in digital markets.

weak contestability of and competition in platform markets

unfair business practices vis-à-vis business users

These problems are driven by market failures that preclude self-correction. Digital market features can strengthen entry barriers to gatekeeper markets.

Business relations are characterised by particularly strong levels of dependence and imbalanced bargaining power.

Rationale:
what is the
problem DSA

<i>Main problems</i>	<i>For whom is this a problem?</i>	
	<i>Main types of digital services concerned</i>	<i>Other stakeholders primarily affected</i>
1. <i>Serious societal and economic risks and harms of online intermediaries: illegal activities online, insufficient protection of the fundamental rights and other emerging risks</i>	Illegal activities and risks to fundamental rights: all types of online intermediaries, with particular impacts where online platforms are concerned Other emerging risks: primarily related to online platforms	Citizens and consumers Businesses prejudiced by illegal activities Law enforcement
2. <i>Ineffective supervision of services & insufficient administrative cooperation, creating hurdles for services and weakening the single market</i>	Mostly as regards supervision of online platforms , with particular challenges where platforms cover a large part of the single market	Citizens National authorities
3. <i>Legal barriers for services: preventing smaller companies from scaling up and creating advantages for large platforms, equipped to bear the costs</i>	In particular online platforms as primarily targeted by the legal fragmentation, but also other online intermediaries	Businesses depending on online intermediaries

DMA and DSA synopsis

	DMA	DSA
Objective	To enable competition by making it easier for new platforms to enter the market	To enable transparency, user safety, and platform accountability
Addressees	“Gatekeeper” platforms with turnover of at least €6.5bn; activities in at least 3 EU countries; at least 45 million monthly active end users and 10,000 yearly active business users (both in the EU); having met these thresholds in the last three years. Alternatively, an investigation can determine applicability.	Intermediaries (covering conduit providers, caching providers, hosting providers), online platforms; special rules for “very large” online platforms with more than 45 million monthly active users
Types of provision	7 prohibited practices that harm competition, 11 practices that are problematic for competition and require further examination when gatekeepers engage in them	Liability rules; transparency reporting obligations; due diligence obligations
Enforcement	At the EU level, through the Directorate-General for Communications Networks, Content and Technology	Primarily through national regulators, aided by newly proposed European Board for Digital Services (EBDS) as independent advisory group
Sanctions	Fines of up to 10% of global turnover, structural separation in case of systematic non-compliance	Fines of up to 6% of global turnover; in extreme cases: restriction of access to platforms

DMA



reduce the harm of concentrated digital markets by making them easier to enter



Target are large platforms (gatekeepers) meeting quantitative thresholds



Otherwise the EU can initiate investigation to designate a platform as gate-keepers, considering users' lock-in and network effects

DMA: who are the gatekeepers

Has a strong economic position, significant impact on the internal market and is active in multiple EU countries

Has a strong intermediation position, meaning that it links a large user base to a large number of businesses

Has (or is about to have) an entrenched and durable position in the market, meaning that it is stable over time if the company met the two criteria above in each of the last three financial years

EU can also initiate investigation to designate a platform as gate-keepers, considering users' lock-in and network effects

DMA: expected benefits



Business users who depend on gatekeepers to offer their services in the single market will have a fairer business environment.



Innovators and technology start-ups will have new opportunities to compete and innovate without having to comply with unfair terms



Consumers will have more and better services to choose from and fairer prices

DMA: for gatekeepers Do's



allow third parties to inter-operate with the gatekeeper's own services in certain specific situations



allow their business users to access the data that they generate in their use of the gatekeeper's platform



provide companies advertising on their platform with the tools and information necessary for advertisers and publishers to carry out their own independent verification of their advertisements hosted by the gatekeeper



allow their business users to promote their offer and conclude contracts with their customers outside the gatekeeper's platform

DMA: for gatekeepers Don'ts

Treat	treat services and products offered by the gatekeeper itself more favourably in ranking than similar services or products offered by third parties on the gatekeeper's platform
Prevent	prevent consumers from linking up to businesses outside their platforms
Prevent	prevent users from un-installing any pre-installed software or app if they wish so
Track	track end users outside of the gatekeepers' core platform service for the purpose of targeted advertising, without effective consent having been granted

DMA: Enforcement and sanctions

- Commission to carry out market investigations: qualify gatekeepers, update the obligations, tackled systematic infringements
- Fines of up to 10% of the company's total worldwide annual turnover, or up to 20% in the event of repeated infringements
- Periodic penalty payments of up to 5% of the average daily turnover
- In case of systematic infringements, additional remedies may be imposed on the gatekeepers after a market investigation.
- If necessary and as a last resort option, non-financial remedies can be imposed. These can include behavioural and structural remedies, e.g. the divestiture of (parts of) a business

DMA: the issue of data for competition

GDPR does not address the importance of data for competition, and the DMA attempts to address this issue.

Level the playing field by preventing personal data from being shared inappropriately and by establishing access to data relevant for competition.

Gatekeepers may not combine personal data from different sources.

If enacted properly, the DMA may limit the granularity and comprehensiveness of datasets compiled by companies like Facebook and Google.

Among others, the DMA requires gatekeepers to offer real-time data portability to both business and personal users, real-time data access to business users, and de-personalized search engine data to any competitor.

DSA: objectives



Better protect consumers and their fundamental rights online

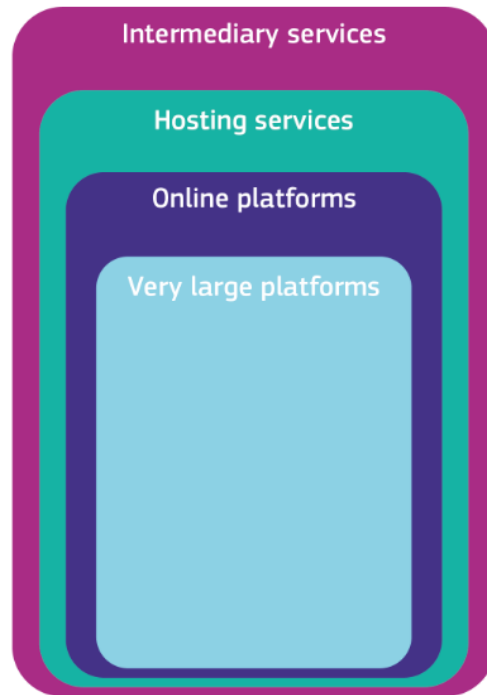


Establish a powerful transparency and a clear accountability framework for online platforms



Foster innovation, growth and competitiveness within the single market

DSA: targets



- **Intermediary services** offering network infrastructure: Internet access providers, domain name registrars, including also:
- **Hosting services** such as cloud and webhosting services, including also:
- **Online platforms** bringing together sellers and consumers such as online marketplaces, app stores, collaborative economy platforms and social media platforms.
- **Very large online platforms** pose particular risks in the dissemination of illegal content and societal harms. Specific rules are foreseen for platforms reaching more than 10% of 450 million consumers in Europe.

DSA: Expected benefits

Citizens

- Better protection of fundamental rights
- More choice, lower prices
- Less exposure to illegal content

Business users

- More choice, lower prices
- Access to EU-wide markets through platforms
- Level-playing field against providers of illegal content

Society at large

- Greater democratic control and oversight over systemic platforms
- Mitigation of systemic risks, such as manipulation or disinformation

DSA: key concrete provisions

- improves the mechanisms for the removal of illegal content and for the effective protection of users' fundamental rights online, including the freedom of speech.
 - It also creates a stronger public oversight of online platforms, in particular for platforms that reach more than 10% of the EU's population.
- measures to counter illegal goods, services or content online
 - new obligations on traceability of business users in online marketplaces
 - effective safeguards for users, including the possibility to challenge platforms' content moderation decisions
 - ban on certain type of targeted adverts on online platforms
 - transparency measures for online platforms on a variety of issues, including on the algorithms used for recommendations
 - obligations for very large platforms and very large online search engines to prevent the misuse of their systems by taking risk-based action and by independent audits of their risk management systems
 - access for researchers to key data of the largest platforms and search engines, in order to understand how online risks evolve

DSA for very large platforms

Very large platforms with more than 45 million monthly active users have additional obligations to fulfil.

These platforms are required to conduct annual risk assessments regarding illegal content, negative effects on fundamental rights, and intentional manipulation of their services.

Crucially, they need to subject themselves to independent audits concerning their transparency and due diligence efforts

But can the EU build a working, independent auditing regime for tech platforms?

Another important proposal requires very large platforms to give regulators and scientists access to platform data via databases or application programming interfaces (APIs)

DSA: obligations

	Intermediary services (cumulative obligations)	Hosting services (cumulative obligations)	Online platforms (cumulative obligations)	Very large platforms (cumulative obligations)
Transparency reporting	•	•	•	•
Requirements on terms of service due account of fundamental rights	•	•	•	•
Cooperation with national authorities following orders	•	•	•	•
Points of contact and, where necessary, legal representative	•	•	•	•
Notice and action and obligation to provide information to users		•	•	•
Reporting criminal offences		•	•	•
Complaint and redress mechanism and out of court dispute settlement			•	•

DSA: obligations

	Intermediary services <i>(cumulative obligations)</i>	Hosting services <i>(cumulative obligations)</i>	Online platforms <i>(cumulative obligations)</i>	Very large platforms <i>(cumulative obligations)</i>
Trusted flaggers			•	•
Measures against abusive notices and counter-notices			•	•
Special obligations for marketplaces, e.g. vetting credentials of third party suppliers ("KYBC"), compliance by design, random checks			•	•
Bans on targeted adverts to children and those based on special characteristics of users			•	•
Transparency of recommender systems			•	•
User-facing transparency of online advertising			•	•

DSA: obligations

	Intermediary services <i>(cumulative obligations)</i>	Hosting services <i>(cumulative obligations)</i>	Online platforms <i>(cumulative obligations)</i>	Very large platforms <i>(cumulative obligations)</i>
Risk management obligations and crisis response				•
External & independent auditing, internal compliance function and public accountability				•
User choice not to have recommendations based on profiling				•
Data sharing with authorities and researchers				•
Codes of conduct				•
Crisis response cooperation				•

Platform workers directive

ensure that people working through digital labour platforms can enjoy the labour rights and social benefits they are entitled to.

ensure that people working through digital labour platforms are granted the legal employment status that corresponds to their actual work arrangements

They will also receive additional protection as regards the use of algorithmic management (i.e. automated systems that support or replace managerial functions at work).

The Directive increases transparency in the use of algorithms by digital labour platforms, ensures human monitoring on their respect of working conditions and gives the right to contest automated decisions. These new rights will be granted to both workers and genuine self-employed

Two opposing views

- Regulating the platform economy would stifle innovation
- De-regulation or self-regulation by platforms
- Current attempts: protectionism in disguise
- Impossibility statement: technological developments too complex for regulators
- Advocates of common carriage / public utility regime
- Competition policy to break down monopolies
- Need of regulatory innovation: new definition of market power
- Consider data implications of M&A

Precautionary principle vs cost-benefit approach

- Uncertainty not risk
- Adoption of precautionary principle to pre-empt damages to individual and society
- Radical renewal of competition policy to be applied to curb the power of dominant platforms
- Precautionary approach has been criticized as 'the law of fear'
- Regulation defended on the principle of the worst scenario, then a lack of regulation can be defended by the same argument when the consequences of strict regulations are potentially very negative;
- The precautionary principle claims that dangers should not be downplayed, but this builds a negative public discourse that would block innovators

Digital constitutionalism?

- The GDPR, and the new list of Acts: DSA, DMA, AI Act, Data Act, Data Governance Act
- This digital policy activism has been seen as part of an attempt to build a sort of digital constitutionalism by the EU, framed in the rhetoric of digital sovereignty and of the Brussels effect
- One risk is of overshooting and of creating problem of coherence among the various act
- Another risk that of excessive regulation creating more uncertainty and more administrative burden for innovative SME

Europe | Charlemagne

Is the EU overreaching with new digital regulations?

It leads the world in making rules for big tech, but enforcing them is another matter



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Unfair practices on business users

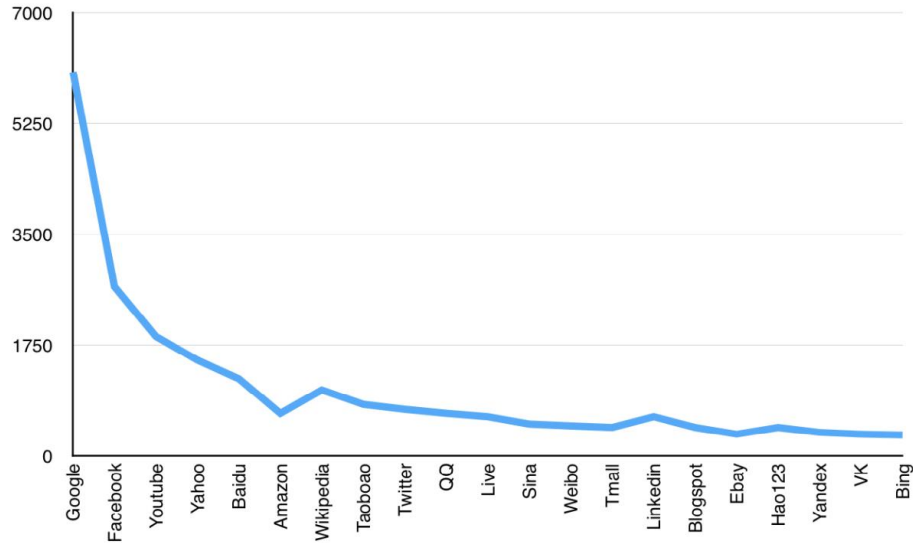
- Strong market positions and economic power, enabling them to create ecosystems for which they set the rules by which other economic players should abide.
- If rules are unfair, they can be detrimental to business users, and limit SMEs online visibility and associated sales:
 - ‘Anti-steering’ provisions prevent business users from directing acquired consumers to offers other than those provided on the platform
 - Imposition of the platform’s ID services, which is a lock-in strategy where the user is required to sign up/register with an email service of the gatekeeper’s core platform services when using another of its products (e.g. an operating system, social network).
 - The broad category of ‘self-preferencing’ refers to practices in which a usually vertically integrated gatekeeper acting in the dual role of providing core platform services to business users and at the same time competing with them when providing ancillary services applies more favourable conditions to its own services compared to the third-party services hosted on the gatekeepers’ platform

The data economy and digital transformation have fuelled a debate on technological sovereignty and strategic autonomy. In the past years strategic autonomy has acquired importance and has been mentioned by several world leaders, often in relation to digital technologies

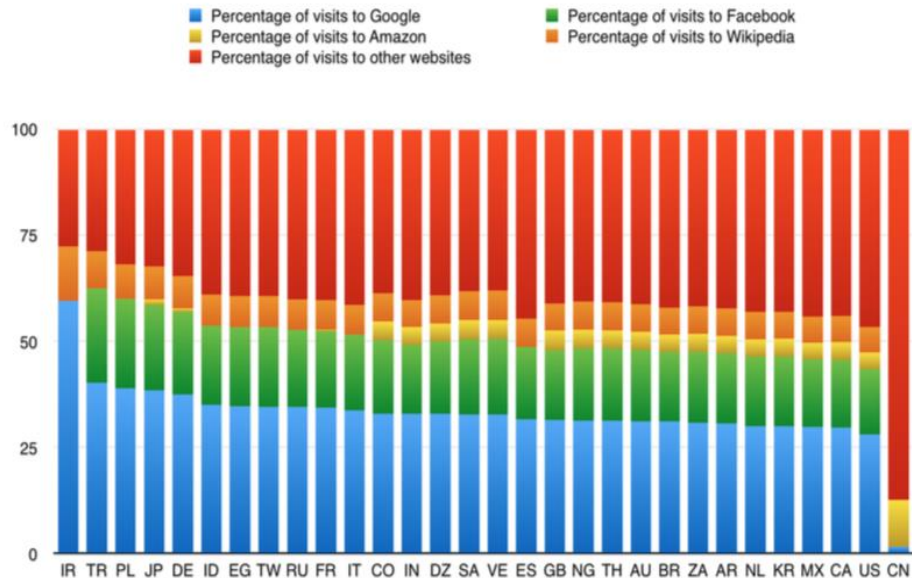
The German Economy Minister Peter Altmaier has been reported as arguing that a Europe-run cloud system could restore our digital sovereignty and counter unfair competition from state-controlled and state-subsidised companies from third countries (read China) and by market dominant online platforms (read US)

Europe data dependencies (Faravelon et al. 2016)

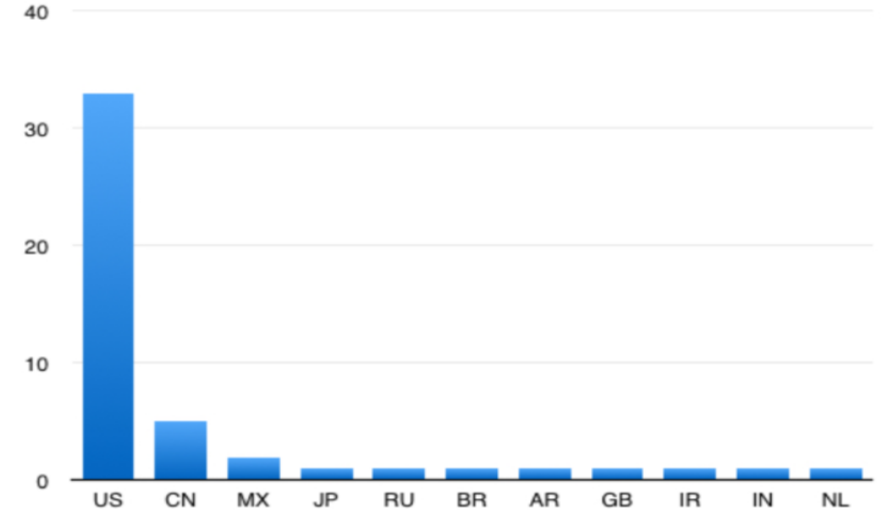
Global traffic of top world corporations (monthly visits in millions)



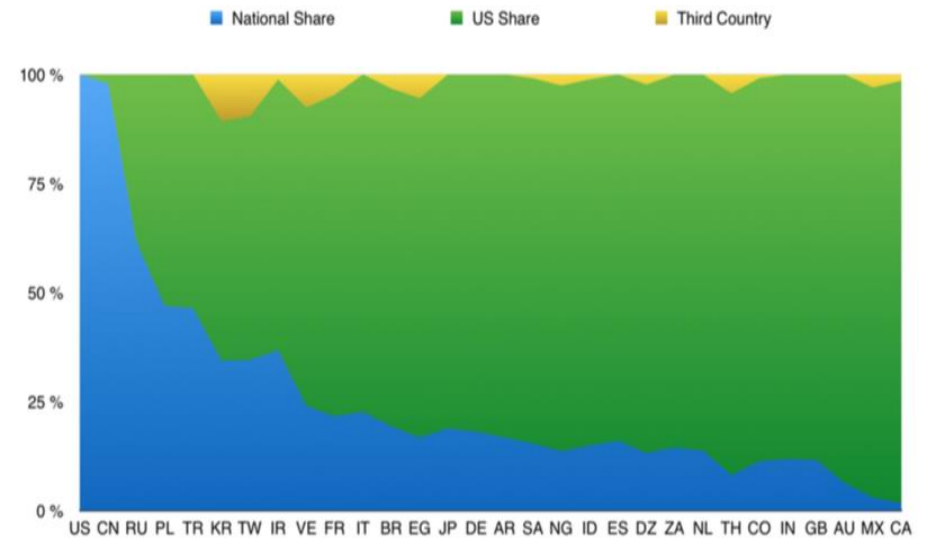
Influence of dominant actors



Number of influential platforms by countries



Ratio of sites in the Top 25 of each country headquartered in the US, nationally, or in a third country



Source: Faravelon, A. et al. (2016). Chasing Data in the Intermediation Era: Economy and Security at Stake. *Economics of Cybersecurity*, Part 2, 14 (3), pp.22-31.

Data imbalances: do they matter?

As seen there are power laws at work: only a few influential platforms mostly concentrated in the US or China attracting most of traffic and getting most of data, so in the new intermediation economy we see the 'dependency of most countries on foreign platforms'

US platforms dominate, collect data from users at any interaction, bring data home, develop algorithms that process them into valuable services/products, a steady self-reinforcing loop that makes them more powerful and lock in other countries in the role of raw data supplier

Data flows can demonstrate imbalances among exports and imports. Some of these flows represent 'raw' data while others represent high-value-added data products

Does any of this make a difference in national economic development trajectories? Some economists answer is YES IT DOES!

Suppose EU country F decides that its position in the data economy does indeed place it in a dependent relationship with U.S. platform businesses. It considers that the risks of a self-reinforcing dependency that traps it in a data periphery role as a low value-add raw material exporter and high-value add data product importer are real. What options present themselves to a policy maker in F struggling with longer term economic growth prospects? We first look briefly at economic development theory, and then answer the question

Algorithmic management defined

- Algorithmic management can be defined as the use of computer-programmed procedures for the coordination of labour input in an organisation
- Planning (i.e. deciding in advance), staffing, commanding, coordinating and controlling. With algorithmic management, all these functions can be supported or at least partly implemented with computer algorithms
- Algorithmic management is associated with many key digital technologies: big data analytics, machine learning, geolocation, connected mobile devices, wearables, etc.
- It should be understood as a specific way of combining and using those technologies with the purpose to automate or at least support some of the functions previously carried out by human management for the coordination of work

Algorithmic management diffusion outside of platforms

- As such technologies are adopted even by firms in the conventional economy, similar effects may spill over beyond gig work: Amazon Warehouse is the top example
- digital technology increases the flow of information to strategically important managerial groups, enabling them to expand their structural power over labour in various ways
- The system automatically flags workers with deficient performance records, who are then vulnerable to “coaching,” as pro-company workers called it, followed by formal warnings, and eventually termination
- The second performance metric, Time off Task (TOT), records the number of minutes during each shift when workers have shown no measurable productivity. The system normally allots workers a five-minute period during which inactivity is not flagged. Beyond this, the digital clock starts ticking, measuring the number of minutes each worker has failed to engage in productive activity. TOT levels amounting to an hour or more can be cause for summary termination, but smaller levels are also cause for discipline.

Conclusions

There is a point in Sunstein's critique of the precautionary principle, in that by reacting to uncertainty and complexity with across-the-board regulation may end up stifling true innovation without cutting the nails of the incumbents.

There are many innovative platforms and not all of them are or will become as GAFAM. The latter and the concerns they raise can only be dealt with new competition policy instruments and cases, and with political will to do so.

On the other hand, regulators should incentivize relevant actors to adopt governance standards and procedures that will support their efforts to operationalize trustworthy digital transformation and online platform economy.

Furthermore, they should support the development of technologies, systems, and tools to help relevant actors identify and mitigate relevant risks. This means incentivizing organizations to adopt robust internal governance and equipping them with tools to identify and mitigate risk is considered more effective than a regulatory regime that mandates specific outcomes.

New regulation should support ongoing efforts to build best practices, rather than risk cutting them short with inflexible rules that may not be able to adapt to a rapidly-changing field of technology.

In conclusions, regulators should carefully weight the pros and cons of policy responses adopting the precautionary principles and those that support a case by case cost benefit analysis before introducing any new piece of legislation.