

Big Data in the Platform Economy: *Who owns? Who should control?*

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Outline

- I. Big data as a by-product of IoT**
- II. The platform economy**
- III. Some rules on who owns**
- IV. Conclusions: who should control?**

Outline

- **Big data as a by-product of IoT**
 - Some features and facts
 - Types and owners of data: open data, privately-owned data, personal data
 - A new intangible asset
- **The platform economy**
- **Some rules on who owns**
- **Conclusions: Who should control?**

Big Data

3 Vs:

- Volume
- Variety
- Velocity

“vast quantities of dynamic, varied digital data” that are generated by IoT and distributed by ICT networks

« Big data is a UK success story; (...) 58,000 jobs could be created and £216bn contributed to our economy (2.3% of GDP) over a five-year period »



House of Commons
Science and Technology
Committee

« While personal data is only a small proportion of big data, given the scale and pace of data gathering and sharing, distrust arising from concerns about privacy and security (...) must be resolved by industry and Government »

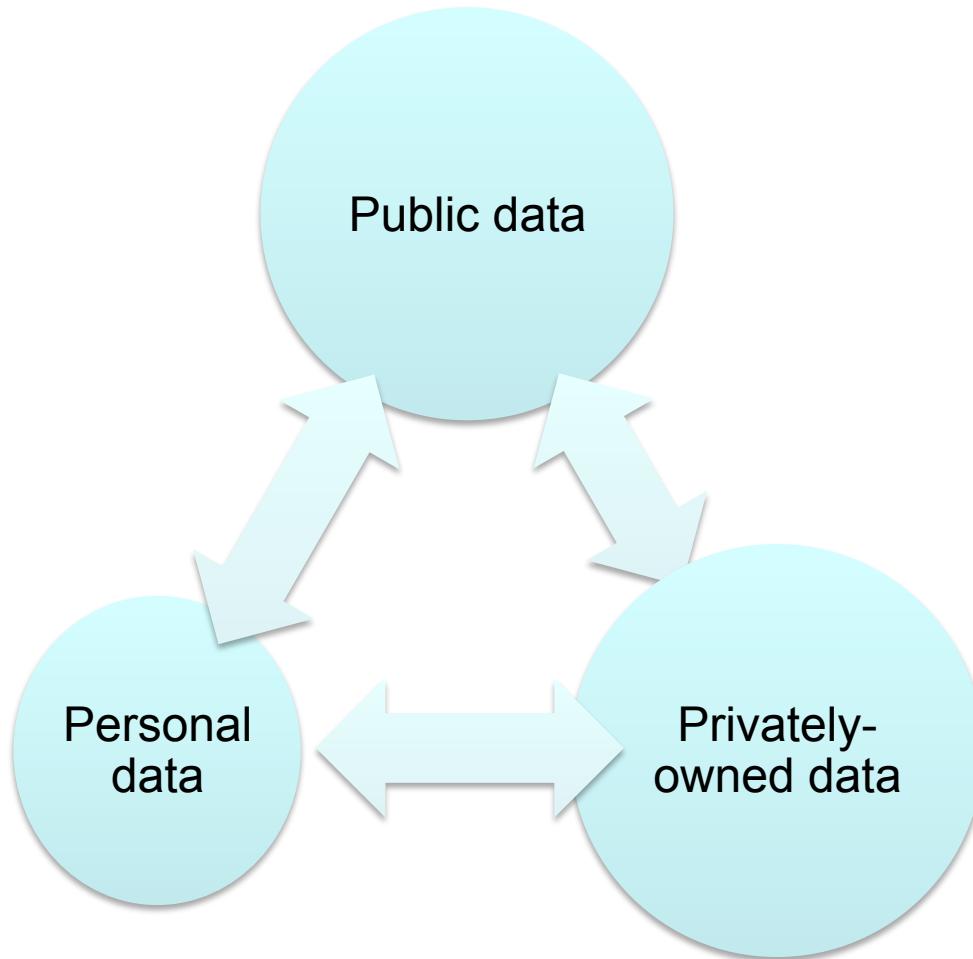
The big data dilemma

Fourth Report of Session 2015–16

Report, together with formal minutes relating to the report

Ordered by the House of Commons
to be printed 10 February 2016

Various 'owners' & sources of data



Public sector: open data

- Open data = data as infrastructure

“Roads help us navigate to places; data help us navigate to decisions” (Open Data Institute)

 - Open: licensed for anyone to access and use (Open Government licence)
 - Transport for London: > 5000 developers registered to receive its data sets → creation of 360 transport information apps
 - The processes, policies, standards of open and shared data are ‘much harder’ than data analysis (e.g. of weather feeds)

Individuals: personal data

- The dilemma: internal conflicts in people's attitude towards big data (p. 28)
 - 2015 poll in UK: 79% of adults are '**concerned**' about their online privacy (46% think they are harmed by collection of data by big companies)
 - Other poll: 60% of people are '**happy**' with the amount of information shared with companies (47% think exchanging data is essential for running society)

Of course first poll made by *Big Brother Watch* and second by the *Direct Marketing Association*

Private sector: proprietary data

- Data sharing = wishful thinking?
 - Objective to unlock new value from sharing proprietary data in faster, better and more trusted ways

“There is a lot of friction in data sharing in terms of legal governance” (UK Digital Catapult)

- What are the means to encourage data sharing if private undertakings are allowed to restrict access by contracts or property rights (and if part of this data is protected as personal data of the users)?

Trends in global trade (F.T., 3 March 2016)

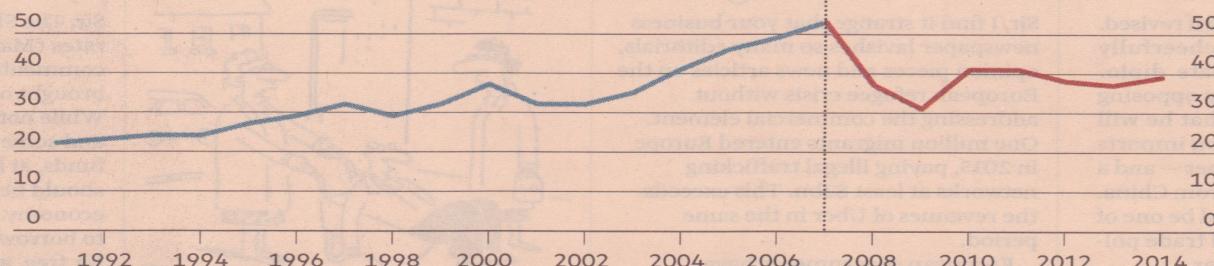
A structural shift?

Changing world The factors shaping 21st century trade

Flows of goods, services and finance

% of global GDP

For decades, trade grew
at twice the rate of the
global economy ...

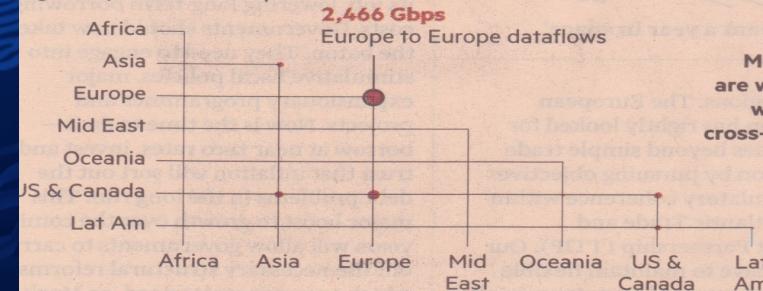


Financial crisis

... 2016 is expected to
be the fifth year in
a row in which trade
has failed to grow at
this historical rate

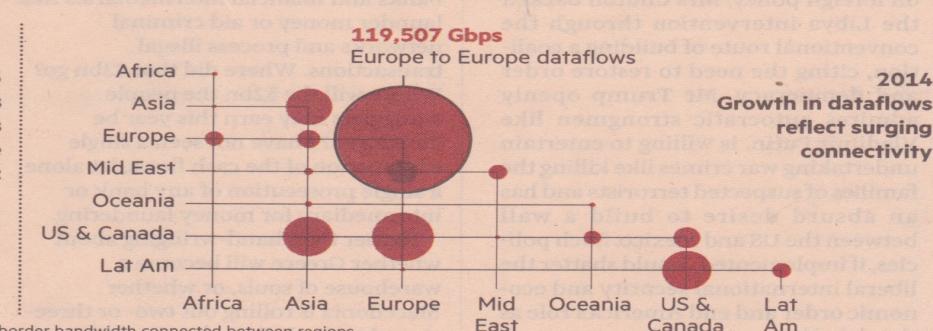
Then and now: The rise of global dataflows

Gigabits per second (Gbps)*



2005
Most dataflows
are within regions
with very little
cross-region traffic

* Used cross-border bandwidth connected between regions



Outline

- **Big data as a by-product of IoT - or its core value?**
- **The platform economy**
 - ‘Platform’: buzzword or new economic reality?
- **Some rules on who owns**
- **Conclusions: Who should control?**

Have you heard about the GAFA?

DOING BUSINESS IN A



The logo consists of four large letters G, A, F, and A, each containing a different company's logo. The 'G' is blue and contains a white lowercase 'g'. The 'A' is grey and contains a white Apple logo. The 'F' is blue and contains a white lowercase 'f'. The 'A' is orange and contains a white lowercase 'a' with a curved arrow underneath it.

WORLD



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Stand on the shoulders of giants

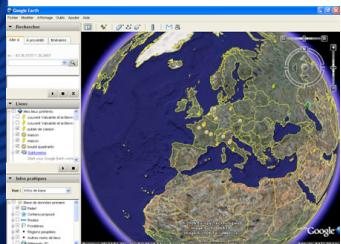
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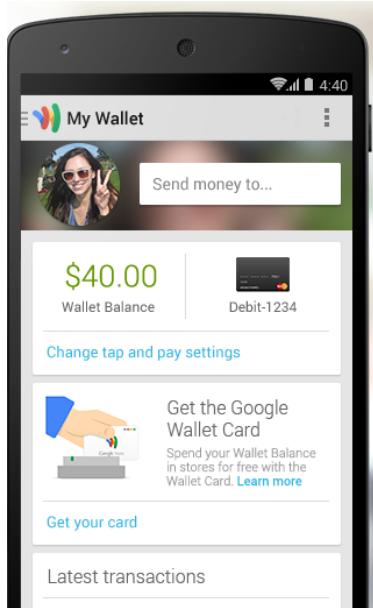
Google

Google News

Picasa™ Web Albums

B Blogger

Google Wallet



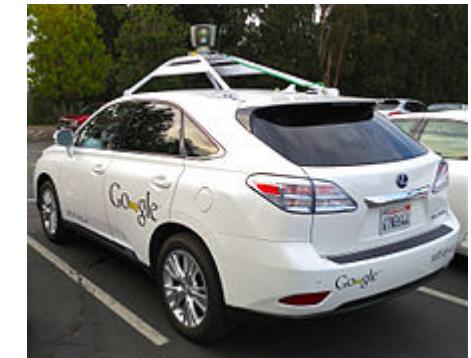
Chromebooks for Business

Les Chromebooks sont de nouveaux ordinateurs très rapides qui vous permettent de vous connecter à Internet, où que vous soyez et à tout moment. Ils sont faciles à gérer et comportent une batterie offrant une autonomie d'une journée, une connexion 3G intégrée et un clavier grand format.

Samsung Series 5 550

- Écran 12,1 pouces (1 280 x 800)
- 1,48 kg
- 6 heures d'autonomie en activité
- Processeur Intel® Celeron®
- 4 Go de RAM
- Lecteur SSD de 16 Go
- Intel HD Graphics 3000
- Wi-Fi 802.11 b/g/n, Ethernet
- Gigabit et modem 3G intégrés (en option)
- Caméra haute définition
- Deux ports USB 2.0
- Fente pour carte mémoire 4 en 1
- Sortie DisplayPort++ (compatible HDMI, DVI, VGA)
- Connecteur de sécurité Kensington

Disponible en France, à partir de :



Commission's *Digital Single Market (DSM) Strategy* (May 2015)

- <https://vimeo.com/132076290>



Platform: a wrong concept?

“Platform regulation is not a useful phrase”

“In the end, we are all platforms in some form or another.”

Theo Bertram, Google's European public policy manager

'Platform' in the *DSM Strategy*

- Platforms enable:
 - consumers to find online information
 - businesses to exploit e-commerce
- Platforms include:
 - Search engines
 - Social media
 - E-commerce platforms
 - App stores
 - Price comparison websites
 - Mobility, accommodation, tourism, recruitment, etc. services

‘Platform’ in the *DSM Strategy*

- Platforms (in general): *the good and the bad*
 - Have a multiplier effect in fostering new SMEs
 - Improve efficiency and consumer choice
 - Accumulate/control an enormous amount of personal data
 - Yes, but nothing new: telecom operators?
 - Use algorithms to transform this into usable information
- ‘Some platforms’: *the bad?*
 - ‘*Growing market power of some platforms*’
 - Need ‘*further analysis*’ (regulation?) ‘*beyond the application of competition law in specific cases*’

The digital/platform economy

Policy paper of UK government
released on 15 Jan. 2016: headings
of the table of content:

- *Transparency of online platforms*
- *Use of information by online platforms*
- *Constraints on the ability of consumers and traders to move from one platform to another*
- *Access to data*
- *Free flow of data: on data location restrictions*
- *On data access and transfer*
- *On data markets*
- *On access to open data*
- *On access and reuse of (non-personal) scientific data*
- *On liability in relation to the free flow of data and the internet of things*
- *Personal data management systems...*



UK Government Response to EU public consultation on Digital Platforms

Including the regulatory environment for platforms, online intermediaries, data and cloud computing and the collaborative economy

*it's all about
data*

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 - **Intellectual property law: copyright, database right, trade secret**
 - **Data protection**
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Competition law: role of data

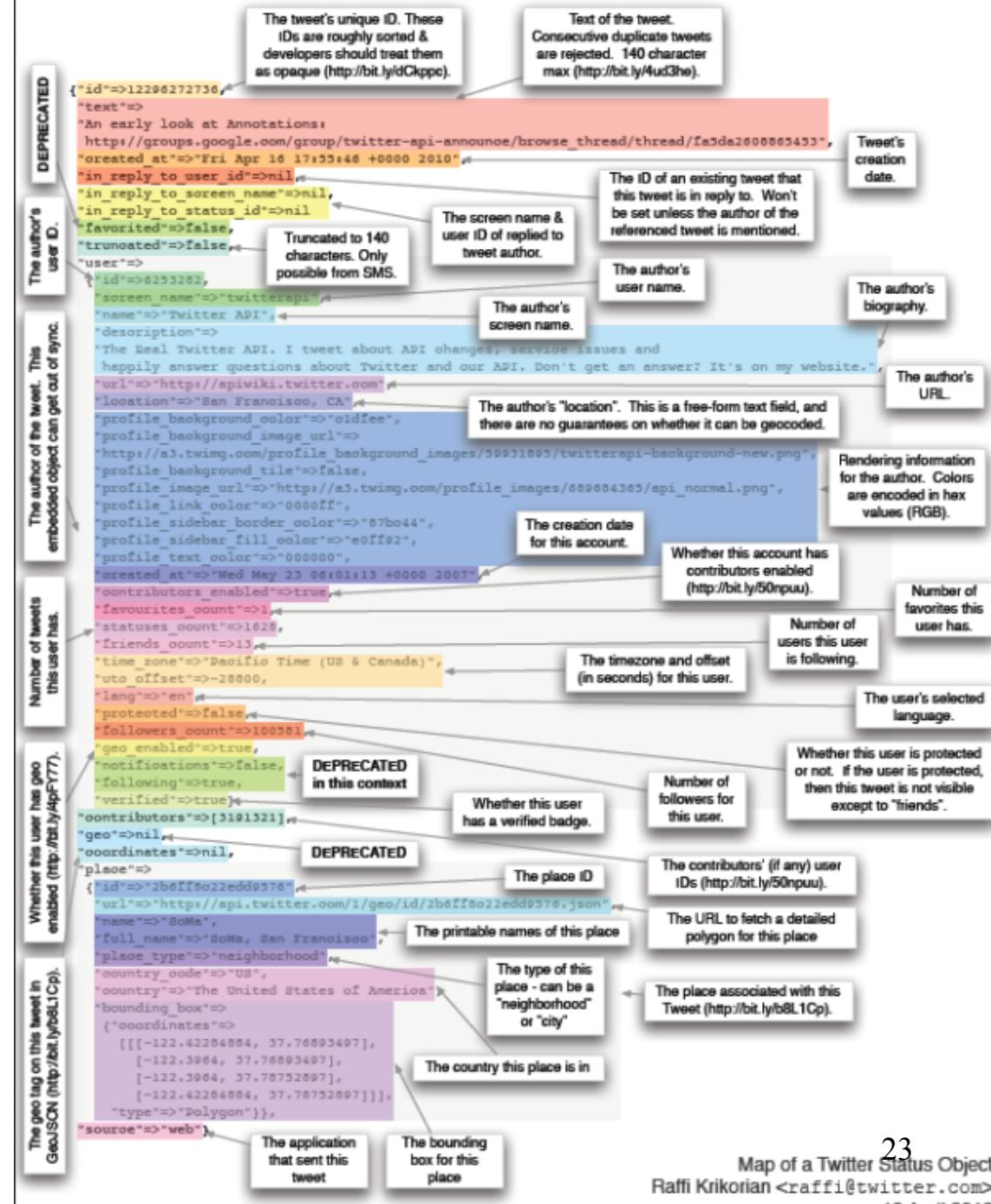
- Precedents:
 - IP-related ECJ cases on refusal to licence and to give access to data: *Magill* (1995), *IMS Health* (2004)
 - Merger decisions: *Facebook/WhatsApp* (2014), *Google/DoubleClick* (2008)
- New developments:
 - Position of data protection authorities (European Data Protection Supervisor, Preliminary Opinion, *Privacy and competitiveness in the age of big data*, March 2014)
 - Ongoing Facebook investigation (Bundeskartellamt)

Merger decisions

- Dominance → definition of relevant product market: where substituability
- DG Comp has not defined a market for data:
 - *Facebook/WhatsApp* (3 Oct. 2014, §70):
 - WhatsApp did not collect personal data and Facebook only uses/analyses the data to serve targeted ads on behalf of advertisers and did not sell the data to advertisers or third parties
 - Conclusion: no possible market definition with respect to the provision of data or data analytics services (§72) when data is not traded (>< analysis of markets for consumer communications services and for online advertising)
 - Thus data = input / intermediary product → no possible assessment of substituability and no relevant market

Twitter sells the data

- Sells the tweets for > 250 M \$ to GNIP and Datasift
- Grants the right to access the content and to use the metadata (datamining)
- Here real market
- >< Google, etc: privacy policies → no sale of data to third parties



Economic nature of data

- In principle: non-rivalrous
 - The fact that one entity has a piece of data does not preclude others from gathering the same information
 - Ex. many entities use the same data (our home address, phone number, gender, date of birth...)
 - The same knowledge can be generated by gathering different types of data
 - Ex. a search engine might analyse my search queries to know my music preference, while a social network might just look at my profile
- But possible to exclude competitors by preventing access through contracts:
 - Ex. Facebook: Terms of Use prohibit content scraping by 1/3; Google: restricting the portability of advertising campaigns
- Or by using IP rights

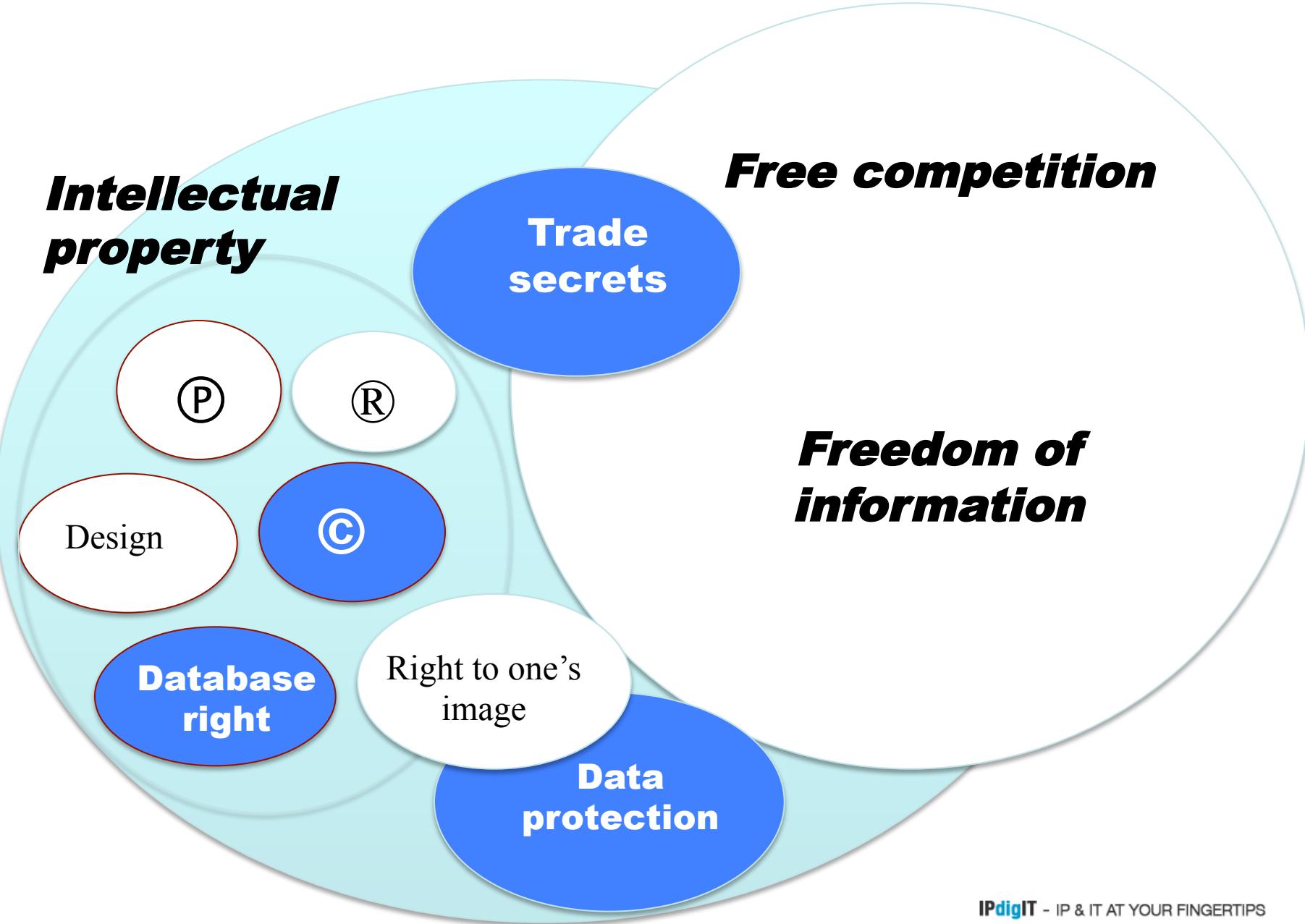
Competition law: role of data

- Is there something like “*data dominance*” or it is just the abuse of contractual terms?
 - *Facebook* investigation initiated by the Bundeskartellamt (March 2, 2016)
 - Terms of Use of the social network = probably “abusive imposition of unfair terms on users”
 - Abusive practice (in market for social networks) if this infringement results in market dominance?
 - “Special obligations” → use of adequate ToU
 - At least, data and the market power in data start to be better taken into account in the competition analysis

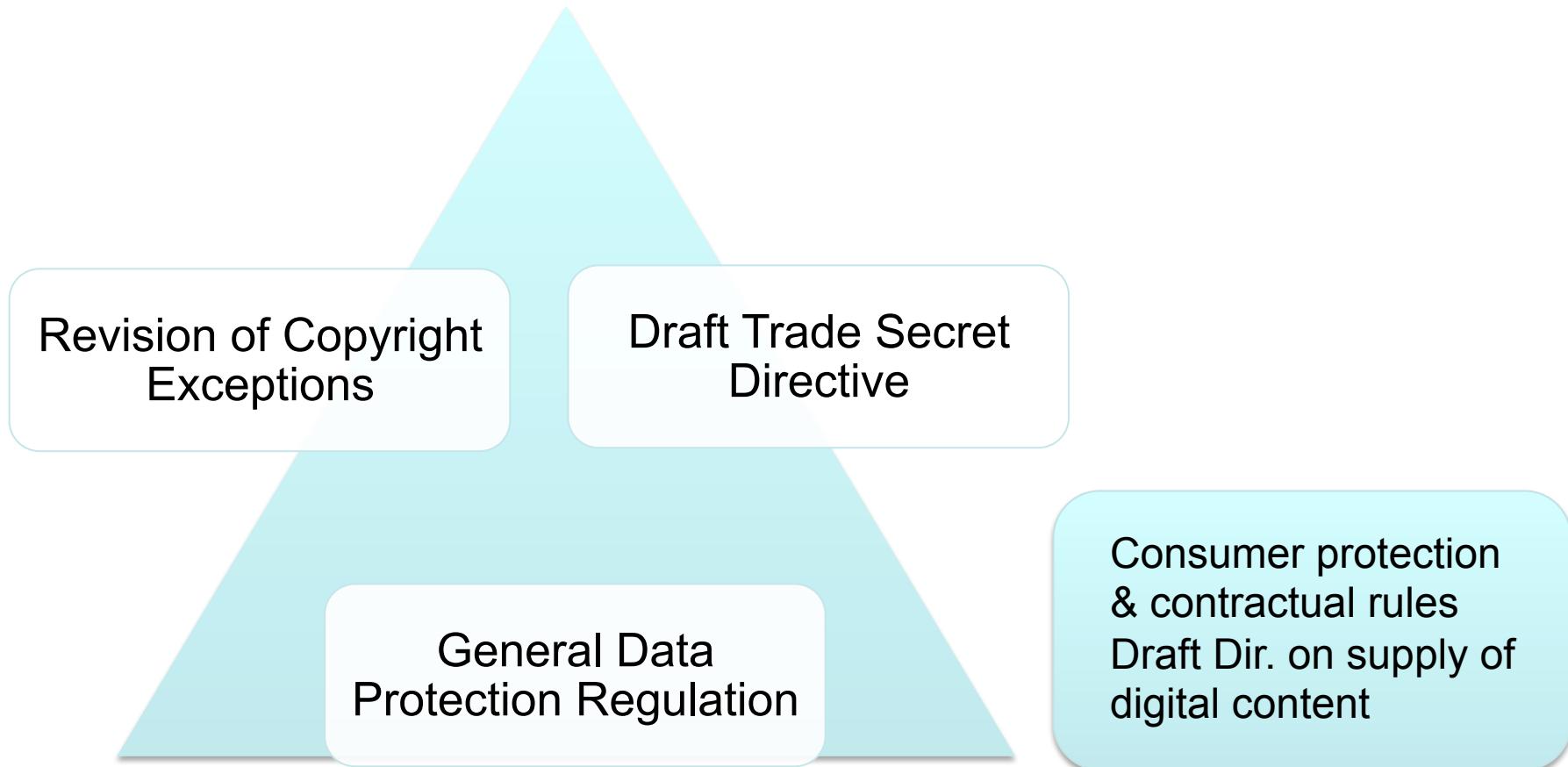
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Rights on & to information



Big Data: EU regulation (in the pipeline)



Data mining and reproduction in ©

- Inadequate delineation of the right:
 - No condition of economic/commercial/for-profit nature
 - Many acts of reproduction are not linked to the true exploitation of the work, because in the digital world, ubiquitous technical or intermediate copies
- Court-based solution: condition to ‘use a work as a work’ → a communication between the author and a public
 - Not in case of data mining, thumbnail reproduction for search, technical copies for anti-plagiarism software, etc.
- Legislative fix:
 - New exception for data mining
 - Communication, *Towards a modern, more European copyright framework*, COM(2015) 626 final, 9 Dec. 2015

Data mining exception in copyright

- Risk that the exception for text and data mining to be proposed will be narrow:
 - « *Some of (the copyright exceptions) may also need to be reassessed in the light of today's technological realities. This situation seems to be posing problems in particular for those exceptions that are closely related to education, research and access to knowledge (...) The need to better reflect technological advances and avoid uneven situations in the single market is also clear with text-and-data mining (TDM), through which vast amounts of digital content are read and analysed by machines in the context of science and research. The lack of a clear EU provision on TDM for scientific research purposes creates uncertainties in the research community. This harms the EU's competitiveness and scientific leadership » (COM(2015) 626 final, p. 7)*

Trade secrets and datasets

- Draft Proposal: package-deal agreed on Dec. 18, 2015 (no reopening, but vote in plenary at the E.P. on April 12, 2016)
 - Requirement that the information:
 - (1) *is secret in the sense that it is not, as a body or in the precise configuration and assembly of its component, generally known among or readily accessible to persons within the circles that normally deal with this kind of information*
 - (2) *has commercial value because it is secret*
 - (3) *has been subject to reasonable steps under the circumstances, by the person lawfully in control of the information, to keep it secret*
 - Online platforms may enjoy the protection which applies to customers/suppliers data

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Data protection (GDPR)

- Data portability: right to re-use data
 - “*The data subject shall have the right to receive the personal data concerning him or her which he or she has provided to a controller in a structured and commonly used and machine-readable format and have the right to transmit those data to another controller without hindrance from the controller to which the data have been provided (...)*” Art. 18 (Trilogue, Dec. 2015)
 - Contractual provisions restricting portability are not binding
 - Similar to number portability for telecoms?

Data as contractual value

- Data as counter-performance in contracts:
Art. 3(1) draft Directive on contracts for the supply of digital content (COM(2015) 634 final, 9 Dec. 2015)
 - Scope: “*to any contract where the supplier supplies digital content to the consumer or undertakes to do so and, in exchange, a price is to be paid or the consumer actively provides counter-performance other than money in the form of personal data or any other data*”
 - Money or data
 - ‘Actively’ provided: by registering for ex.
 - >< data collected by the trader for ex. the IP address or statistical information
 - Exclusion of data collected for performance of contract (art. 3(4) draft Dir.)

Data obligations

- Obligation in case of termination: Art. 13(2) (+16)
 - “*When the consumer terminates the contract: (...)*
 - (b) the supplier shall take all measures which could be expected in order to refrain from the use of the counter-performance other than money which the consumer has provided in exchange for the digital content and any other data collected by the supplier in relation to the supply of the digital content.*
 - (c) the supplier shall provide the consumer with technical means to retrieve all content provided by the consumer and any other data produced or generated through the consumer's use of the digital content (...) The consumer shall be entitled to retrieve the content free of charge, without significant inconvenience, in reasonable time and in a commonly used data format”*

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Information Wants To Be Free. Information also wants to be expensive. Information wants to be free because it has become so cheap to distribute, copy, and recombine—too cheap to meter. It wants to be expensive because it can be immeasurably valuable to the recipient. That tension will not go away. It leads to endless wrenching debate about price, copyright, ‘intellectual property,’ the moral rightness of casual distribution (...)

**Stewart Brand, *The Media Lab:
Inventing the Future at MIT, 1987***

Who should control?

- Competition law: tighten the analysis by taking into account data dominance?
 - Consider a putative market for data
 - To take seriously the abuse of ToU (data protection)
- Intellectual property: relax the barriers to access and use data?
 - Copyright:
 - New reading of reproduction right or exception for data mining
 - Clearer line between direct infringement, indirect liability and TPM protection
 - Database: flexible framework to address data scraping
- Data protection and contracts: implement the data portability obligations?



Thanks for your attention

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