



Universität
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IP in data-driven economies

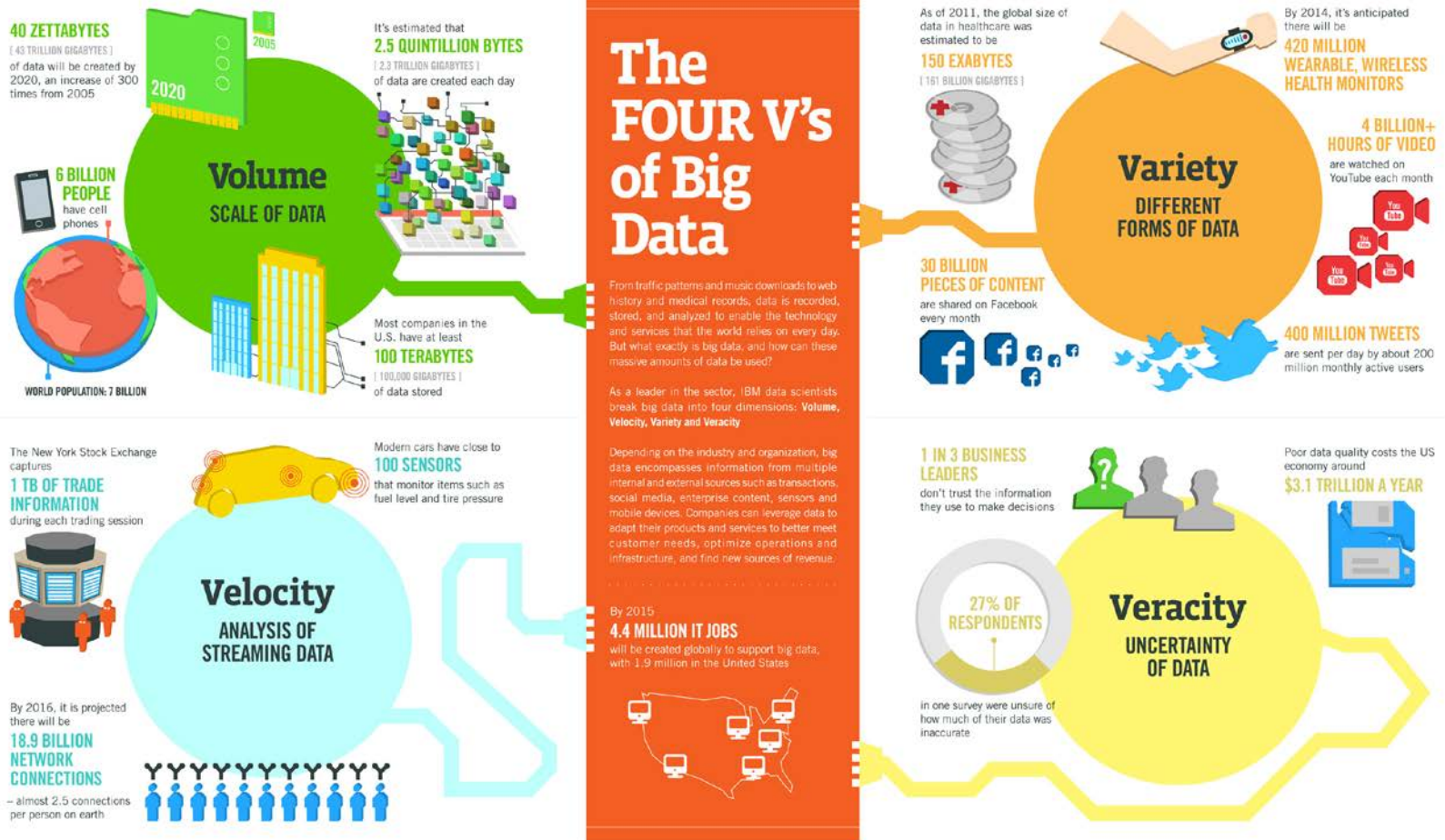
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IP in data-driven economies

- I. Introduction: Data-driven economies
- II. Current European legislative agenda
- III. The way forward (possible policy choices)

I. Introduction: Data-driven economies



Technologies

Big Data: generating, storing, transmitting, analysing data (volume, velocity, variety, veracity)

Internet

Internet of Things, Industry 4.0

Artificial Intelligence (self learning algorithms, artificial neural networks)

Business models

Online-providers

Platforms

IoT

Data as a raw material

Data-based services

Data-related services (SAS, Cloud Computing)

Commercial/non-commercial producers



Collectors (database makers)

Users (analysers, innovators)

Primary data markets, secondary data markets

The „new oil“? – data as public goods (?)

Defining Data

Meaning (Content)	Signs (Coded)	Physical Carrier
<p data-bbox="141 504 409 551">Information</p> <p data-bbox="141 629 481 739">Information(s) Personal Data</p>  A green circular icon with a white lowercase letter 'i' inside, representing information.	<p data-bbox="687 504 794 551">Text</p> <p data-bbox="687 629 993 739">Data Files Data Stream</p> <p data-bbox="739 919 1141 1072">011011100101110111 10001001101010111 10011011110...</p>	<p data-bbox="1238 504 1363 551">Book</p> <p data-bbox="1238 629 1534 739">Data Carrier Server</p>  A photograph of a green printed circuit board (PCB) with various electronic components, including a central processor and memory modules, mounted on it.

Important distinctions

- Personal and non-personal data
- Sectors: finance, automotive, healthcare, agriculture...
- Primary and secondary data markets

II. Current European legal agendas

Data privacy law (including right to data portability)

Trade secrets

Database protection (*sui generis* right for the maker of a database)

Data producer's right

(Contracts for the supply of digital content and digital services)

Patents

(Physical property)

(Unfair competition)

1. Personal Data: General Data Protection Regulation (Regulation (EU) 2016/679)

- Personal Data: any information relating to an identified or identifiable natural person ('data subject')
 - Processing: any operation or set of operations which is performed on personal data
 - Discussion: contracts „Services in exchange for Data“
Consent „for one or more specific purposes“ (Art. 6 (1)(a) GDPR)
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Conditions for Consent (Art. 7)

...

3. The data subject shall have the right to withdraw his or her consent at any time. The withdrawal of consent shall not affect the lawfulness of processing based on consent before its withdrawal. Prior to giving consent, the data subject shall be informed thereof. It shall be as easy to withdraw as to give consent.

4. When assessing whether consent is freely given, utmost account shall be taken of whether, inter alia, the performance of a contract, including the provision of a service, is conditional on consent to the processing of personal data that is not necessary for the performance of that contract.

Right to Data Portability (Art. 20)

1. 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, 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 personal data have been provided, where:
 - (a) the processing is based on consent pursuant to point (a) of Article 6(1) or point (a) of Article 9(2) or on a contract pursuant to point (b) of Article 6(1); and
 - (b) the processing is carried out by automated means.
2. In exercising his or her right to data portability pursuant to paragraph 1, the data subject shall have the right to have the personal data transmitted directly from one controller to another, where technically feasible.

...

2. Trade Secrets (Directive (EU) 2016/943)

Information which meets all of the following requirements:

- a) it is secret in the sense that it is not, as a body or in the precise configuration and assembly of its components, generally known among or readily accessible to persons within the circles that normally deal with the kind of information in question;
 - b) it has commercial value because it is secret;
 - c) it has been subject to reasonable steps under the circumstances, by the person lawfully in control of the information, to keep it secret
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- Effect of protection: „instability“, limited tradeability
 - Collision of company spheres: who is „lawfully in control of the information“?
 - Incentive to intensify intransparencies
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3. Databases: *Sui Generis* „Right for the Maker of a Database“ (Directive 96/9/EC)

- Subject matter: „collection of independent works, data or other materials arranged in a systematic or methodical way and individually accessible by electronic or other means“
 - Data is defined semantically, but a single datum is not covered
 - Protection requirement of „substantial investment“
 - Investment in producing/generating the data? (CJEU C-203/03 – British Horseracing Board)
 - „Spin offs“
 - Consumers?
 - Scope of protection: individual data are not protected
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- Study in support of the evaluation of Directive 96/9/EC on the legal protection of databases
 - Evaluation of Directive 96/9/EC on the legal protection of databases, Commission Staff Working Document, SWD(2018) 147 final:
„the application of the sui generis right in the data economy context should continue to be closely tracked“
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3. Data producer's right (Communication „Building a European Data Economy“, COM(2107) 9 final)

- Scope of the right (scope of protection): use and authorise the use of data
- Scope of data covered (subject matter): machine-generated non-personal data
- Allocation to a person or entity (first ownership): data producer (“owner or long-term user (i.e. the lessee) of the device“)
- Exceptions
- Other instruments: “default contract rules“ and “unfairness control in B2B contractual relationships“, access rules (access against remuneration), product liability

4. Patent law

- Art. 52 (2)(d) EPC: presentations of information shall not be regarded as inventions
 - BGH, 21 August 2012, X ZR 33/10 – MPEG-2-Videosignalcodierung: patent protection for encoding method extends to sequence of encoded video data representing successive frames of video image → data stream (“Datenfolgen“) as a product directly obtained by a patented process (Art. 64 (2) EPC)
 - BGH, 27 September 2016, X ZR 124/15 – Rezeptortyrosinkinase II: patent protection for a test method does not extend to test results → not biochemical test results conveying informations to a skilled person („biochemischer Befund, dessen Erhebung dem Fachkundigen Informationen vermittelt“)
 - Data as a patentable subject-matter (product claim)?
EPO: discussion about CAD files
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III. The way forward (possible policy choices)

- The end(s) of data law
- Legislative instruments
- Is there a market failure?
- Some proposals

Legal goals in the Data Economy

- Safety and security, risk control
Data privacy
 - Promoting innovation
 - Promoting data production (?)
 - Promoting data use (?)
(functioning data markets with or without legal rules, access rights)
 - Distributional justice
(original distribution of goods, judicial review and unenforceability of contracts, taxes)
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Is there a market failure?

Overall goal: more data use (production and allocation efficiency)

- If purposes of data based decisions increase social welfare
- Not necessarily more sharing

Overall means: functioning data markets

Possible policy disruption

Existing framework as a „rag rug“ (legal certainty)

Legal instruments (policy choices)

- Property rights
- Access rights (Competition law)
- Access rights (Contract law)
- Restrictions (Regulatory law)
- Pigouvian tax

Some proposals

- Sector-specific property rights
- Non-exclusive property rights: transferable non-exclusive right to use data including the necessary access
- Standard contracts, judicial review
- Access rights: targeted and non-waivable data access right
- Contractual access-right for data-producer, unwaivable in case of market dominance
- Regulatory law: right to data-avoiding products
- Pigouvian tax (aimed at data use externalities)

"Lorsqu'une loi n'est pas nécessaire, il est nécessaire de ne pas faire la loi."

(attributed to Montesquieu)