

Standardization for the Digital Economy in reference to data collaborations

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The Way Towards the Internet of Things Open Standards vs Silos

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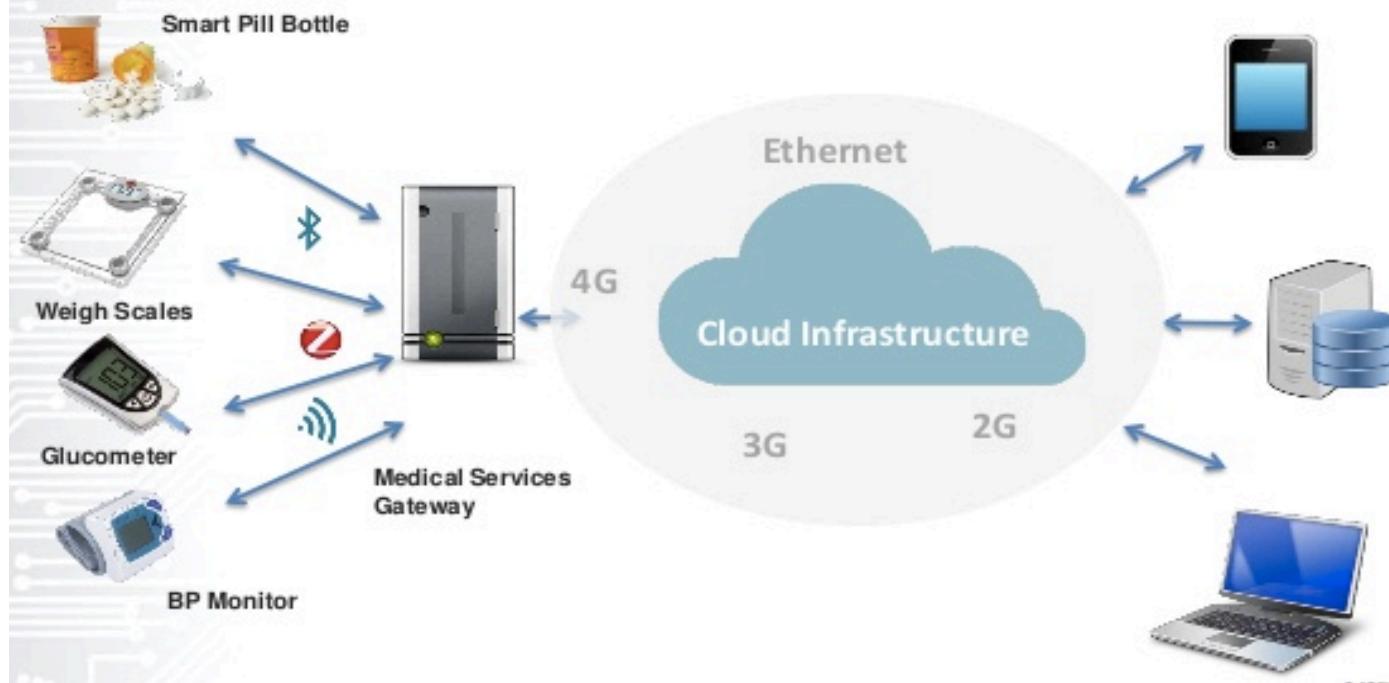


Benefits with Interoperability and Internet of Things

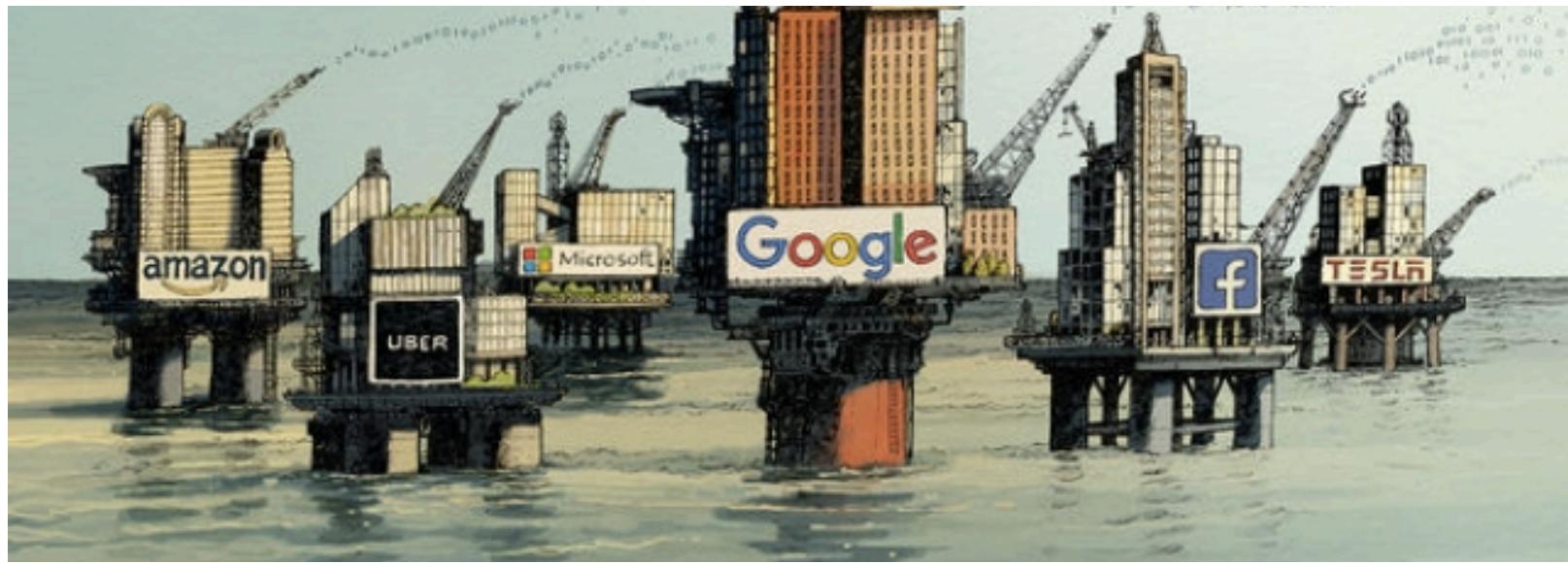
- ◆ Interoperability is the key concept in policy debates for the future of the digital economy.
- ◆ Indeed, the expected benefits of the Internet of Things and Industry 4.0 hinge on the interoperability between networks, software and data.
- ◆ Problems with for example "data fragmentation"
- ◆ Different layers of standards, e.g. Infrastructure or lower layer interoperability, while upper layer data interoperability is not technically necessary
- ◆ There is also a difference between horizontal and vertical data interoperability and standards.

IoT and its Infrastructure, i.e. BIG DATA's ecosystem

- IOT infrastructure consists of - Terminal devices, Communication and Cloud infrastructure



Silos



The Economist, June 2017

Actions from the EU Commission

- ◆ Wide safe harbours regarding standard-setting. EU's policy with regard to collective standard-setting is not limited to European Harmonised Standards or market-driven cooperative standard-setting, as a "bottom-up" approach.
- ◆ Indeed, Commission supports "open platform approach that supports multiple application domains and cuts across silos". Open standards shall support the entire value chain and integrate multiple technologies.
- ◆ The Commission is also interested in self-regulation in relationship to platforms to business relations and portability of non-personal data.

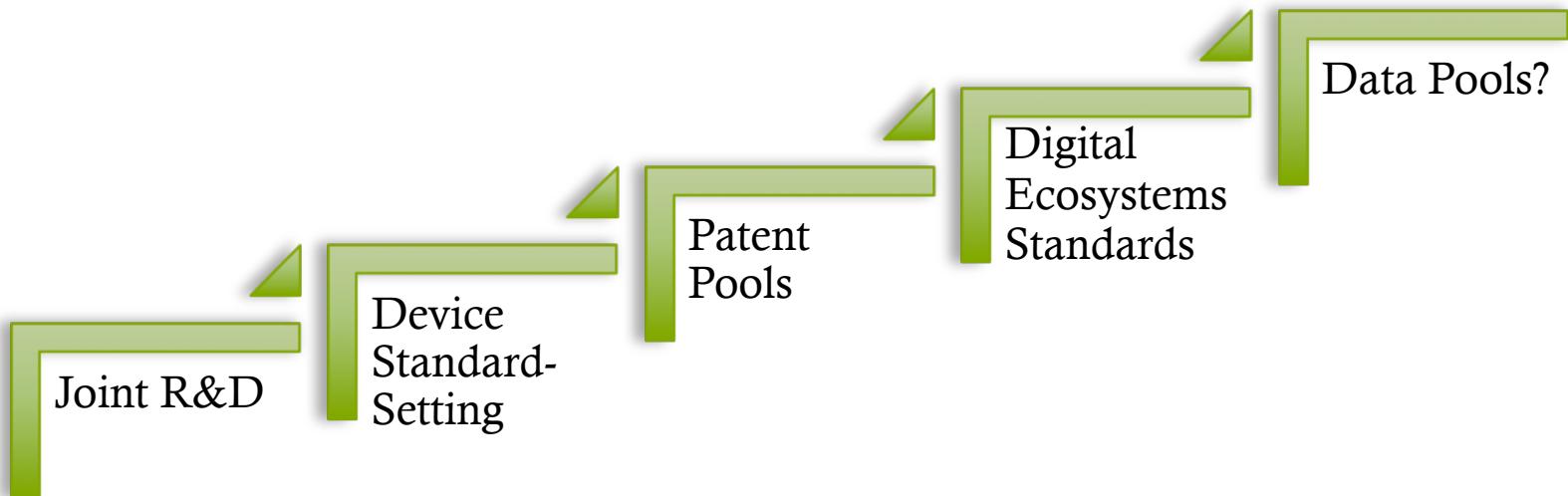
Different application of Antitrust Law to different standards?

- ◆ Divide standards according to the anticompetitive effects they cause:
 - ◆ Basic/Infrastructure
 - ◆ Network/Interoperability
 - ◆ Patent thicket plagued technologies
 - ◆ Standards so enable access to data
 - ◆ Product

Short Comparative Historical Exposé

- US NCRA 1984, enacted as an exemption for pure R&D collaborations;
- EU R&D Block Exemption 1985, did not only exempt pure R&D collaborations but also joint production;
- Amendment to include joint production in US NCR(P)A 1993;
- Amendment to include joint sales in R&D Block Exemption 1993;
- Four technology safe zone in US Licensing Guidelines 1995;
- Patent Pools Business Review Letters approx. 1998;
- Four tech. threshold in the EU TT Guidelines (ink. Patent pools) 2000;
- R&D Block exemption 2000, and Horizontal Guidelines
- Three technology safe zone in US Licensing Guidelines 2000;
- In 2004, the US Standard Development Organization Advancement Act includes standard-setting activities with IP arrangements under the NCRPA
- New Horizontal Guidelines and block exemptions for R&D and specialization agreements in 2010/2011
- New Regulation on European Standardisation 2012
- TT Guidelines 2014
- Data Pooling?

Collaborations



Data Pooling

- ◆ Commissioner M. Vestager seem to purport that data pooling has its benefits.
 - ◆ “bigger is better”, combining companies’ data into a single, big pool might give you insights that you couldn’t get from each one on its own.
 - ◆ Indeed, from her statements it seems clear that pooling data from the outset should be considered pro-competitive. Or, at least there is no presumption of antitrust harm, when competitors engage in data pooling.

Mobility as a Service (MaaS)

- Integrated journey planning and payment systems, as well as multimodal service packages, have been proposed to be fundamental features of MaaS. As a consequence, the development of MaaS demands that the public transport authorities and private transport services cooperate more intensively, sharing data across their organizational borders. Further, MaaS may introduce a need for two new roles in the value chain: 'MaaS integrators' that assemble the offerings of several transport service providers (e.g. PTAs, rental car companies, and citybike businesses), and 'MaaS operators' that package and deliver combined offerings to end users
- The car manufacturers designing their respective data architecture under the notion of 'extended vehicle'

Conclusion

- A general competition policy concern is whether to "support" collaborations or unilateral conduct
 - Collaborative ecosystems including data pools v. tech giants/system leaders with monopolistic platforms plus adjoined ecosystems
 - There must – at least - be some kind of levelled playing field

Thank you!

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‘Standardization under EU Competition Rules & US Antitrust Laws: The Rise and Limits of Self-Regulation’ (Edward Elgar monograph, pp. 496, May, 2014).