

Information Economy

37E00100

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Multisided platforms thus far...

- Platform core concepts (Eisenmann et al.)
- Platform types (Cusumano et al.)
- Sharing platforms (Constantiu et al.)
- Crowdsourcing platforms (Blohm et al.)
- Multisided data platforms (Otto & Jarke)

Article of the day

Otto, B. & Jarke, M. (2019), "Designing a multi-sided data platform: findings from the International Data Spaces case", Electronic Markets

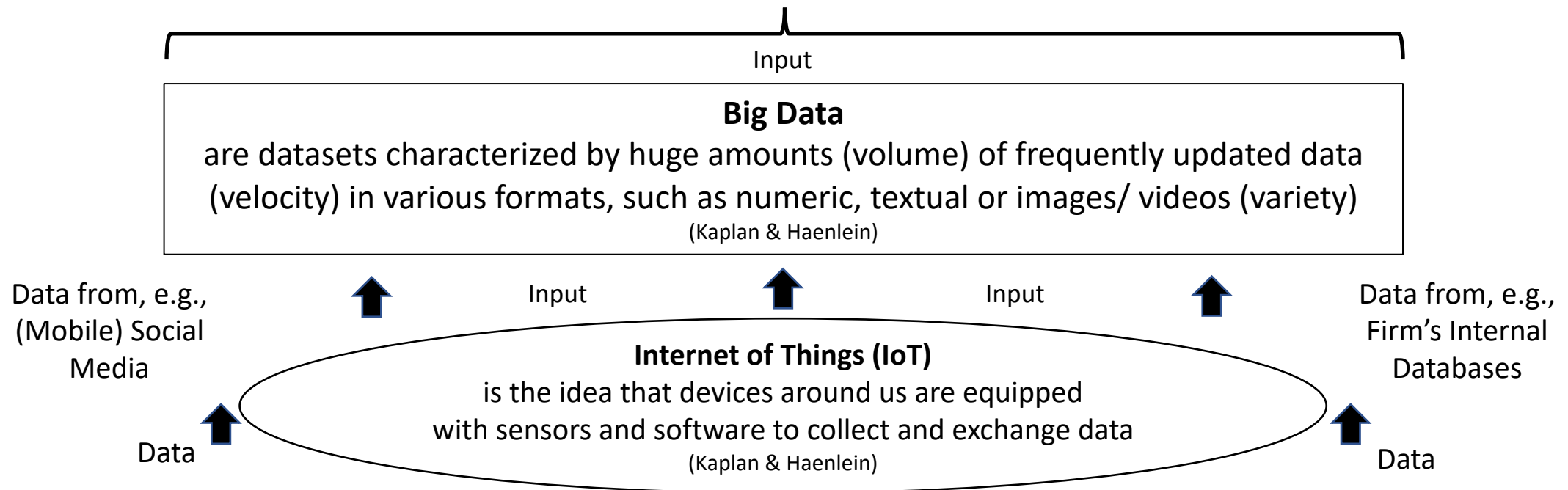
- What did you like about the paper? Dislikes?
- New insights from the article?
- What not clear?
- What would you like to learn more about?

Data as fuel for AI-tools

Artificial Intelligence (AI)

is “a system’s ability to correctly interpret external data, to learn from such data, and to use those learnings to achieve specific goals and tasks through flexible adaptation”

(Kaplan & Haenlein)

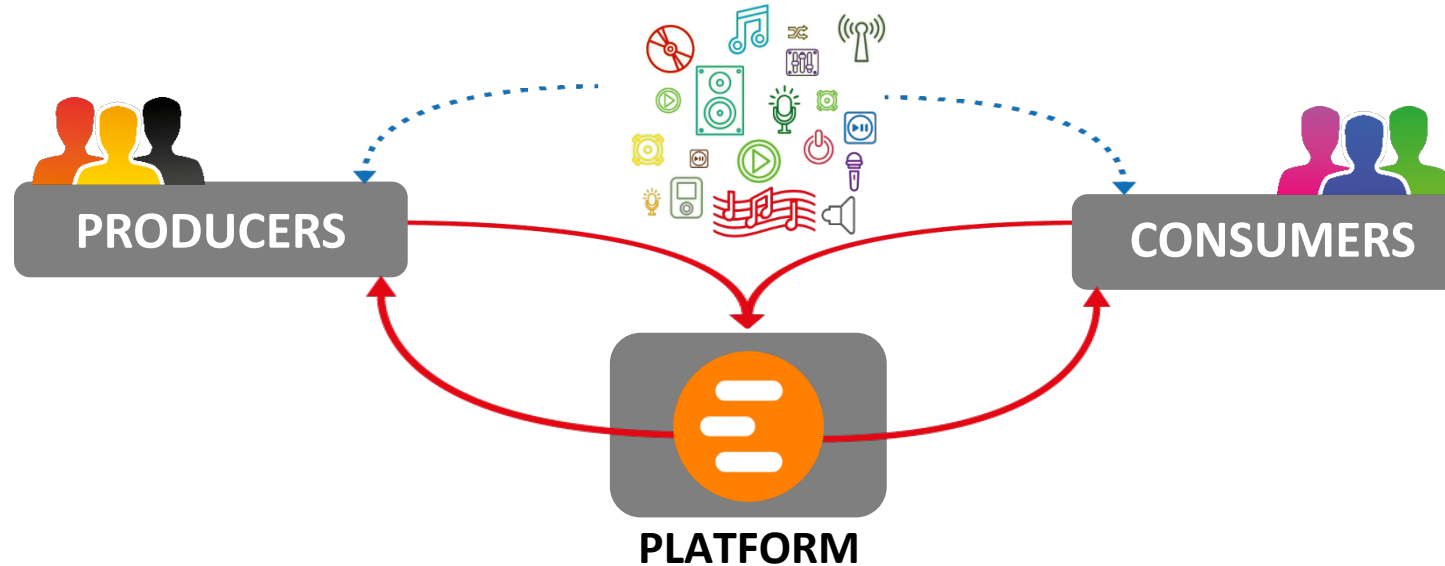


Pipeline business vs. multisided platform business



What if the element of value exchange is data?

Elements of value exchange



Examples of data platforms

PatientBank, a platform for gathering and sharing medical data enabling patients to gather their medical records electronically

Github, is a developer platform that allows developers to create, store, manage, and share their code

Data.world, a platform providing a unified view of companies' data resources and knowledge, acting as an enterprise data catalog and governance platform powering the strategic data initiatives

Health level seven (HL7), is a standard development organization developing specifications to structure, encode, and exchange patient healthcare information; the underlying objective is to facilitate exchange between healthcare systems

Kaggle, a data science competition platform and online community of data scientists and machine learning practitioners enabling users to find and publish datasets, explore and build models in a web-based data science environment, work with other data scientists and machine learning engineers, and enter competitions to solve data science challenges

Multisided data platforms as Information infrastructures

- Information infrastructures (II) are defined (Monteiro & Hanseth, 1996) as:
 - shared (i.e., not the sole property of one organization but are often shared among multiple organizations or stakeholders),
 - evolving (i.e., dynamic and continually evolving to meet changing organizational needs and technological advancements),
 - heterogeneous (i.e., consist of diverse components, technologies, and standards that are interconnected) installed base of IT capabilities (i.e., represent the existing technological infrastructure upon which organizations build their IT capabilities)
 - that organizations employ to coordinate, control, and compete within and across organizational contexts

Tensions in data platforms

- Dynamics and growth mechanisms of multisided data platforms bear similarities to other platforms
 - Importance of cross-side network effects
 - Possibilities for rapid growth and decline
 - Need to analyse winner take all dynamics
- Their operation is, however, prone to tensions arising from juxtapositions on:
 1. Stability vs. flexibility
 2. Privacy needs vs. data sharing
 3. Centralize vs. decentralize
 4. Global vs. local context

Stability vs. flexibility

- Stability vs. flexibility in that data platforms need to be stable and reliable to support core organizational functions. However, they also need to be flexible enough to adapt to changing business needs and technological advancements (Hanseth & Lyytinen, 2010). Stability in data platforms is often achieved through standardization which can promote efficiency and interoperability, but, at the same time, it may stifle innovation and flexibility by imposing constraints (Ciborra & Hanseth, 1998; Hanseth et al., 1996).

Privacy needs vs. data sharing

- Data platforms often involve the sharing of data among different entities or stakeholders. Balancing the need for openness and data sharing with data privacy and security concerns can be challenging, especially in industries like healthcare. Openness in data platforms can promote collaboration and innovation, but it can also introduce security vulnerabilities. Finding the right balance between openness and security is essential in setting up and developing data platforms.

Centralize vs. decentralize

- Centralized or decentralized control over data platforms can be a source of tension. Centralization may lead to efficiency, but decentralization can foster innovation and responsiveness.

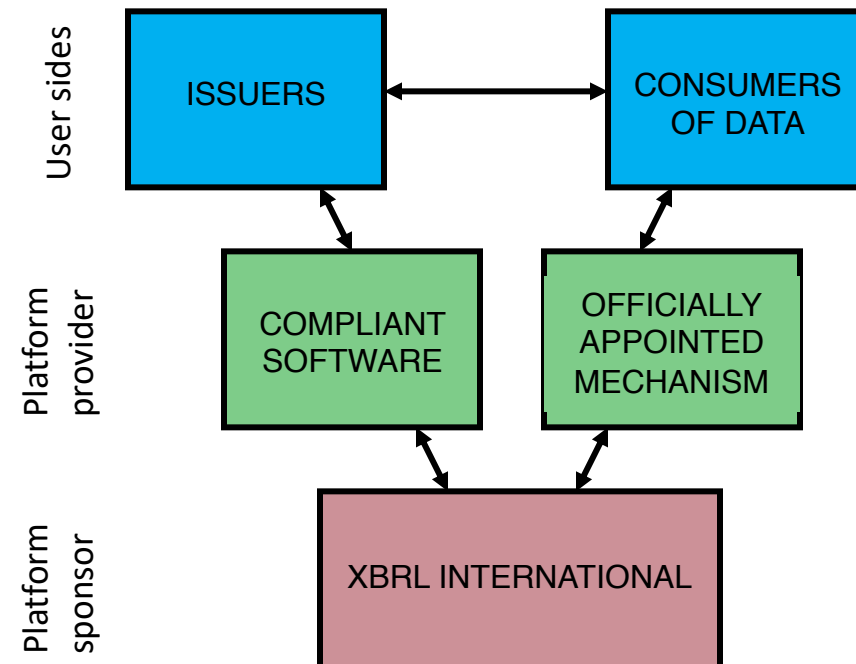
Global vs. local context

- Data platforms may need to function in global contexts while respecting local regulations and cultural norms (Ciborra & Navarra, 2005). The balancing act between the global integration with local adaptation can turn out to be complex for data platforms. Organizations setting up data platforms must navigate global and local tensions by understanding and accommodating regional variations.

Data platform – XBRL

- XBRL stands for eXtensible Business Reporting Language
- It is a global language for representing financial data in systems and for transmitting financial data across organizational boundaries
- It is mainly used for financial statement reporting, but also for tax reporting, statistics reporting, prudential reporting, and even crime reports
- See more on xbrl.org and xbrl.fi

XBRL =
JOINTLY SPONSORED
SHARED PLATFORM



Success factors of XBRL

- XBRL International seems to have resolved the issues related to the tensions described earlier
 1. Global vs. local: Governance model where semantics and syntax is provided on a global level (XBRL International and its working groups), but implementations are done on local level
 2. Stability vs. flexibility: Stability is provided by the core Specification 2.1 which has remained untouched since its inception in 2002, new innovative features have been added regularly (e.g., Inline XBRL added human readability to the XML file)
 3. Centralize vs. decentralize: XBRL International and XBRL Europe coordinate global and regional development and community events; local jurisdictions have the authority to pursue mandatory and voluntary filing programs
 4. Privacy needs vs. data sharing: A current working group at XBRL International is developing digital signatures that connect all or part of the report to one or more signatures; the standardized semantics and syntax make XBRL sharable easily across domains

QUESTIONS?

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