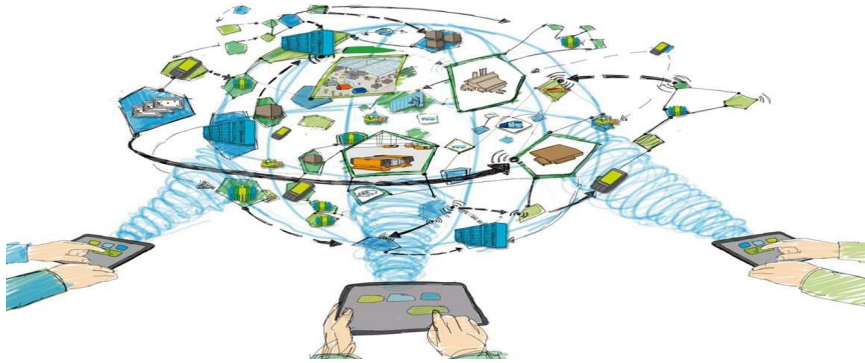


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# DIGITAL BUSINESS MODELS AND THE VALUE OF DATA

Prof. Dr. Boris Otto  
Nice, June 6, 2014

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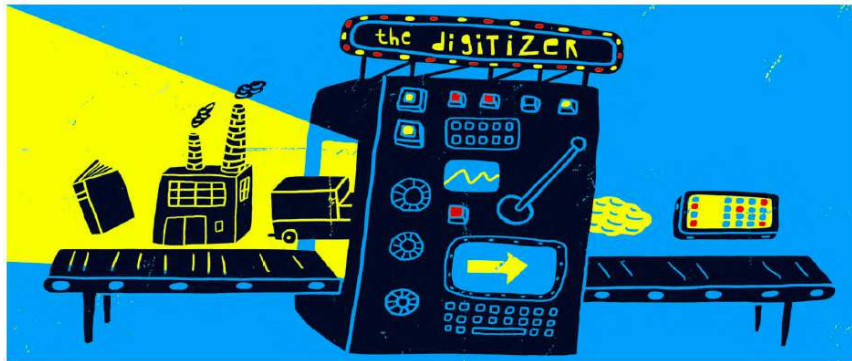
## AGENDA

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- Digitization and the Data Economy
- Data-Driven Business Models
- The Way Ahead

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## Digitization is the overarching development today affecting every industry



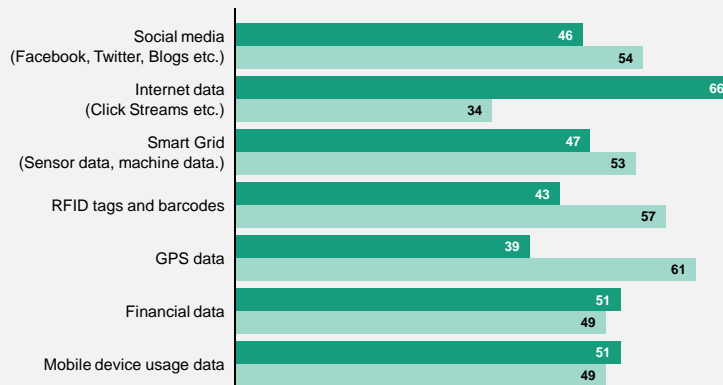
Source: Financial Times, 2014.

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## The number of different data sources is increasing

### What data sources do you exploit?



Source: The Economist Intelligence Unit Limited: Big Data – Lessons from the leaders, 2012, n = 752, figures are percentages.  
 Legend: █ already used █ planned to be used.

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## Industrial Big Data is one key development in the Data Economy



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## The other one is Social Big Data referring to our digital footprints



Source: <http://edublogs.misd.net/ric17nicoler/2013/02/14/my-digital-footprint/>, 2014.

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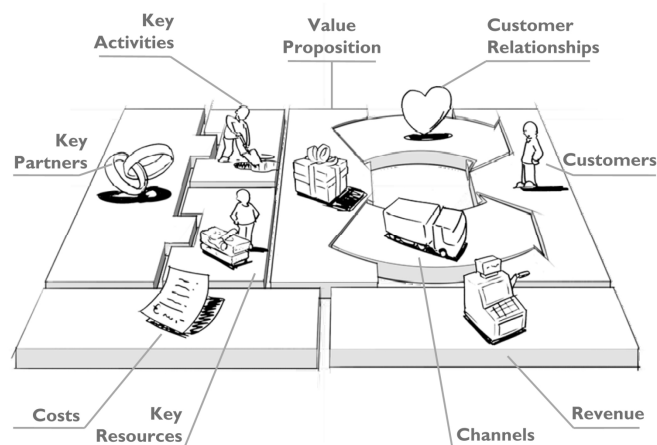
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## Business model innovation is a prerequisite to sustaining competitive advantage

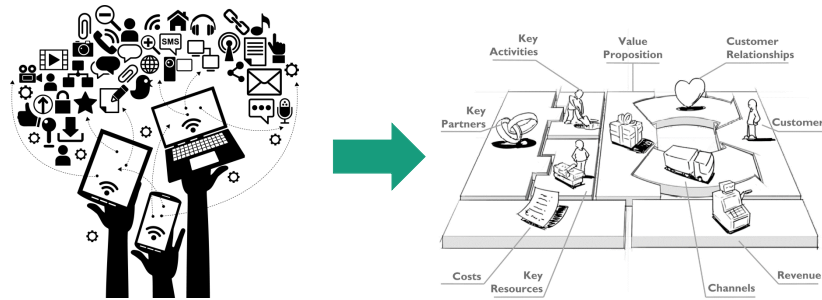


Source of the image: Jam Visual Thinking, 2014.

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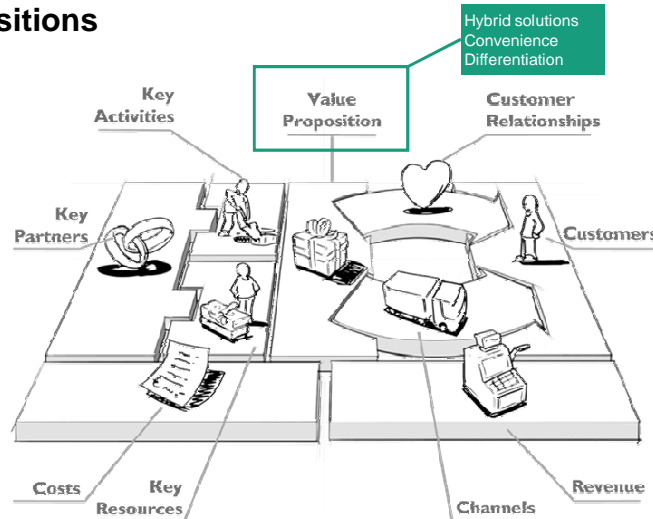
**Businesses have to answer the question as to how the Data Economy affects business model innovation**



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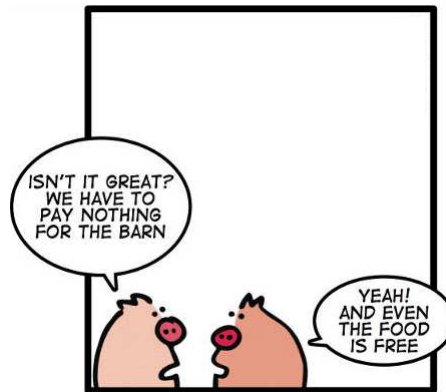
**Digital Business Models leverage data-centric value propositions**



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**Customer value proposition goes beyond the business logic of free pricing models such as Facebook etc.**

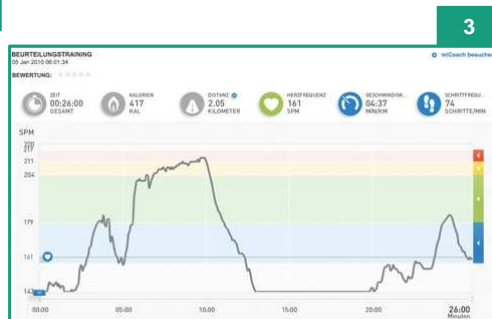


If you're not paying for it, you're not the customer - you're the product ...

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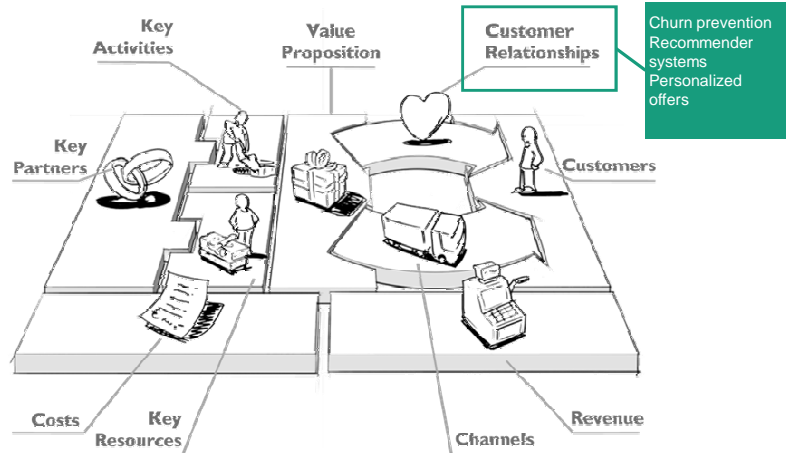
**adidas miCoach is a good example of data-driven customer value**



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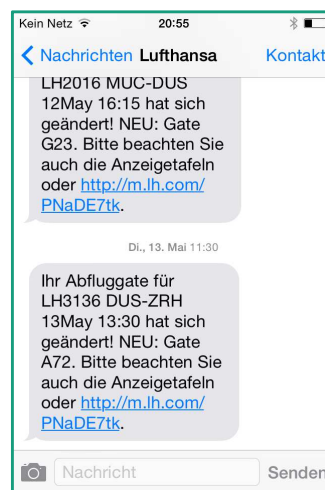
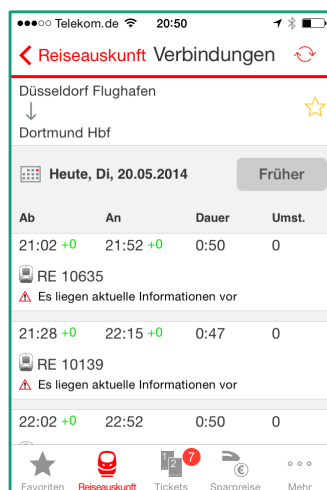
### Digital Businesses use multiple channels to interact with the customer



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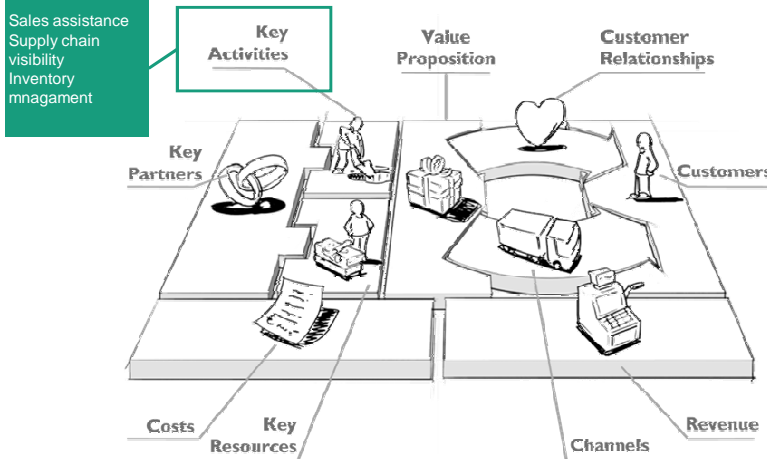
### Multi-channel integration is key to successful Digital Business Models



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## Digital Business Models use the power of data to improve operations



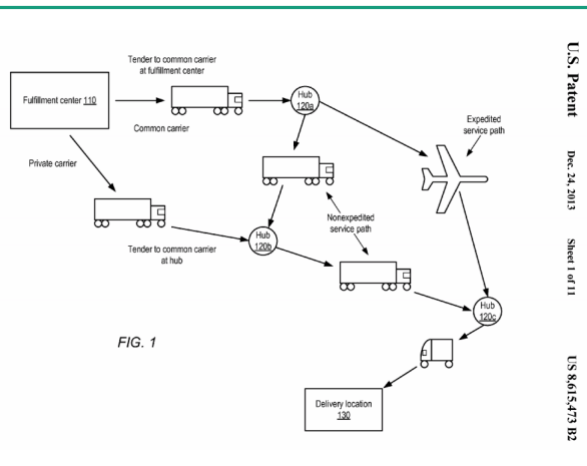
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## Amazon patented “Anticipatory Shipping”

12-24-2013: Amazon US Patent

- End-consumer centricity
- Shipment before customer buys
- Speculative Shipping
- Reducing delivery times by predicting what buyers are going to buy before they actually do it
- Analyzed data includes historical buying patterns, preferences expressed explicitly via surveys/questionnaires, demographic data, browsing habits, wish-lists and so on.

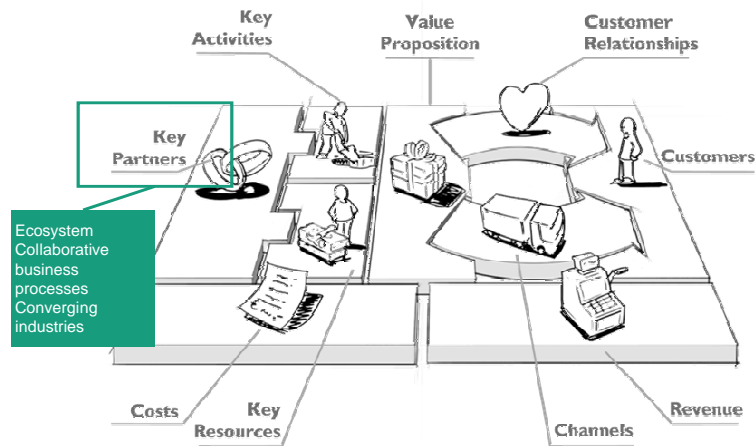


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### Digital Business Models leverage the potentials of ecosystems



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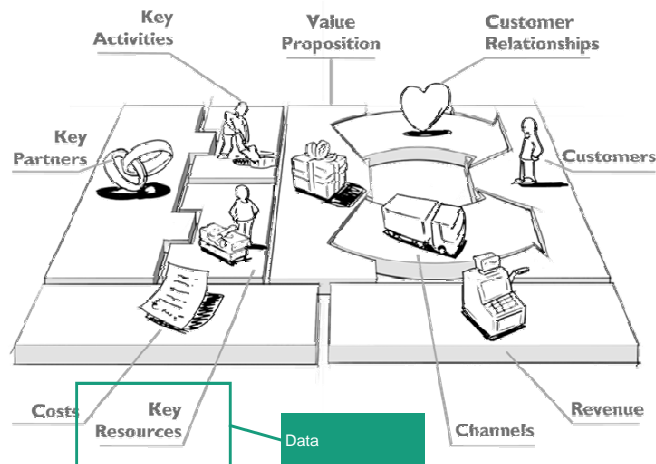
### Competition is not within verticals any longer, but takes place cross-industry

<p>2004</p>   Internet Search	<p>2014</p>   <b>Automotive</b> Autonomous driving  <b>Energy</b> Smart metering  <b>Telecommunications</b> Fiber-to-the-Home  Internet Search
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## Data is a strategic resource in Digital Business Models



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## “Native” digital enterprises use a new generation of data management capabilities



### Organizational & ICT Capabilities

- Cloud Computing
- Big Data Software
- Data Science and Machine Learning
- APIs
- Crowdsourcing and Social Processes

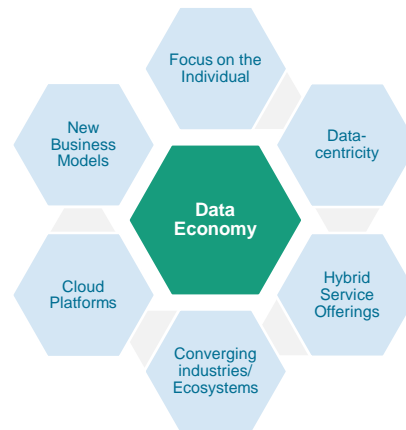
“Modern data markets will employ a whole new generation of technology, processes, and data science that supersedes the previous generation of data management systems”<sup>1</sup>

Source: Elbaz, Gil: Data Markets: The Emerging Data Economy. © 2012. <http://techcrunch.com/2012/09/30/data-markets-the-emerging-data-economy/>. Requested on 2014-02-07.

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## The “Smart Service Welt” initiative advances our understanding of the “mechanics” of digital businesses



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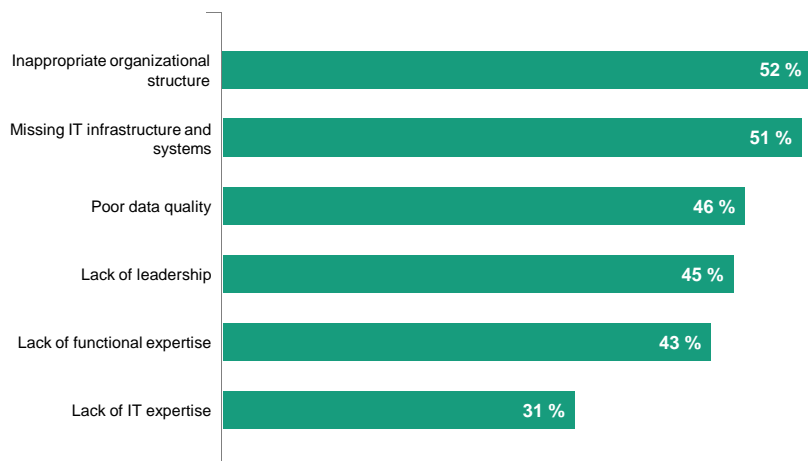
### Success is not guaranteed...



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### Companies have to overcome a couple of challenges



Source: McKinsey: Minding your digital business. In: McKinsey on Business Technology (2012) Nr. 27. S. 24-31.

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## The Competence Center Digital Consumer Business (CC DCB) facilitates Digital Business Model innovation



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## Please get in touch for further information



Univ.-Prof. Dr. Ing. Boris Otto

**TU Dortmund University**

Audi-Endowed Chair of  
Supply Net Order Management  
LogistikCampus  
Joseph-v.-Fraunhofer-Straße 2-4  
D-44227 Dortmund

Tel.: +49-231-755-5959  
[Boris.Otto@tu-dortmund.de](mailto:Boris.Otto@tu-dortmund.de)

**Fraunhofer-Institute for Material Flow and Logistics**

Director Information Management &  
Engineering

Joseph-v.-Fraunhofer-Straße 2-4  
D-44227 Dortmund

Tel.: +49-231-9743-655  
[Boris.Otto@iml.fraunhofer.de](mailto:Boris.Otto@iml.fraunhofer.de)

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