Datagedreven waardecreatie: Valt er nog iets te kiezen?
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Professor of Data-Driven Business Innovation
SBE/Information, Logistics and Innovation

Research:
• Data-Driven Business Innovation
• Economics of Artificial Intelligence
• Ecosystems (collaboration)
• Business Intelligence/Business Analytics/Big Data
• Online Decision Making (DSS & GDSS)
• Mobile Sensing/Internet-of-Things

Business Consultant.
The world’s most valuable resource

Data and the new rules of competition
1. *What* has changed?
2. *Why* are these changes important?
3. *How* can organizations respond? Innovate their business model and create value with data?
4. Inspire.
• Business Administration & Mathematics & Computer Sciences & …. 
• Bachelor and Master Business Analytics 
• Multidisciplinary Research Center 
• Eco System: Businesses & Science 
• One stop shop: Access to all relevant academic expertise 

• Post Graduate Education: Business Analytics & Data Science 
What has changed?
BIG data

volume

variety

velocity
BIG data:

Granular ● ● Renewal/Updating
Unmanageable ● ● Unintentional

(Günther, Rezazade Mehrizi, Huysman, Feldberg, 2017)
Why important for organizations?
Data: Digital Innovation

Digitized
Demonetized
Dematerialized
Democratized
Deceptive
Disruptive

(Diamandis, Kotler, 2015)
Moore’s Law

Deceptive
US Bureau of Economic Analysis starts tracking IT

1958 + 32 * 1.5 = 2006

Moore’s Law doubling period
The Home of Data Science & Machine Learning
Kaggle helps you learn, work, and play
Create an account or Host a competition
Data: Value Creation?

Strength in numbers:
How does data-driven decision making affect firm performance?


Big Data and Value Creation:
How do organizations create value from big data?

How do organizations realize value from big data?

(Debating big data: A literature review on realizing value from big data (Günther, Rezazade Mehrizi, Huysman & Feldberg, 2017))

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<th>Inductive</th>
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<th>Gaining insights from big data for decision making.</th>
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Developing organizational designs and models.

Dealing with stakeholder interests.

Characteristics (big) data:

Portability

Interconnectivity
The new Apple Watch has a heart monitor and the FDA approves

Health apps can help patients take charge of their health, says the American Heart Association, which also supports the EKG app.

by Maggie Fox / Sep. 12, 2018 / 10:20 PM ET
Who will become the Uber of healthcare....?
How can organizations create value with data?
### DATA-DRIVEN BUSINESS MODEL INNOVATION

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<thead>
<tr>
<th>IMPROVE the business model</th>
<th>INNOVATE the business model</th>
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<tbody>
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<td>• New Data</td>
<td>• Data Monetization</td>
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<td>• New Insights</td>
<td>• Digital Transformation</td>
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<td>• New Actions</td>
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(Woerner & Wixom, 2015)
• Descriptive Analytics
• Predictive Analytics
• Prescriptive Analytics
Reach immediate critical mass with minimal acquisition costs.
What is the best financial service for me?

What is the best education for me?

What is the best judge for me?

What is the best treatment for me?

What is the best care for me?

What is the best product service for me?
(Osterwalder, A., & Pigneur, Y., 2010)
Challenges, Risks:

• Data Privacy and Ethics: BIG Dilemma’s!

• Data Obsession ("the dictatorship of data")

• Data Quality: New Paradigms?

• Skills: Data Scientists

• Energy

• Security
Datagedreven waardecreatie:
Valt er nog iets te kiezen?
Who will become the [logo] of your industry...?
If you want to know more about the economics of artificial intelligence, prediction machines, and how AI can help to solve complex problems (link to SDGs), check: [https://youtu.be/p7XwKKTLRIw](https://youtu.be/p7XwKKTLRIw)