



Ksandr LIVE XL
17 juni 2019

Datagedreven waardecreatie: Valt er nog iets te kiezen?



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SBE/Information, Logistics and Innovation



**School of Business
and Economics**



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.



Center for
Digital
Innovation

ocba

AMSTERDAM CENTER FOR
BUSINESS ANALYTICS

- 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
(<https://ee.sbe.vu.nl/nl/management/opleidingen/business-analytics-data-science/inhoud/index.aspx/>)



**The
Economist**

MAY 6TH-12TH 2017

Crunch time in France

Ten years on: banking after the crisis

South Korea's unfinished revolution

Biology, but without the cells

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.



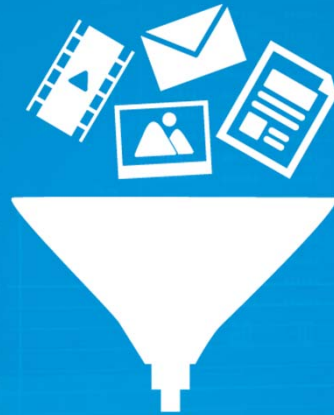
**CHANGE
AHEAD**

Wat has changed?

BIG data



volume



variety



velocity

BIG data:

Granular ● ● Renewal/Updating
Unmanageable ● ● Unintentional

(Günther, Rezazade Mehrizi, Huysman, Feldberg, 2017)



Why important for organizations?



**UNCERTAINTY
AHEAD**

Data: Digital Innovation

Digitized
Demonetized
Dematerialized
Democratized
Deceptive
Disruptive

(Diamandis, Kotler, 2015)

©

2019

LITTERATI

Join the community identifying, mapping,
and collecting the world's litter.

HOME MISSION IMPACT MAP HELP BLOG PRESS

Map Data

Geotags pinpoint individual pieces picked up worldwide.

(Updates hourly)

Explore Map 



(<https://www.litterati.org>)

Moore's Law



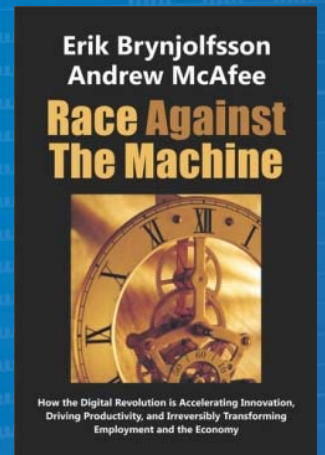
| | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|
| 0,01 | 0,02 | 0,04 | 0,08 | 0,16 | 0,32 | 0,64 | 1,28 | 2,56 | 5,12 | 10,2 |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Andrew McAfee: When do we enter the second half of the chessboard?

US Bureau of
Economic
Analysis starts
tracking IT

Moore's Law
doubling period

$$1958 + 32 * 1,5 = 2006$$



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?

(Brynjolfsson, E., Hitt, L. M., & Kim, H. H. , 2011).

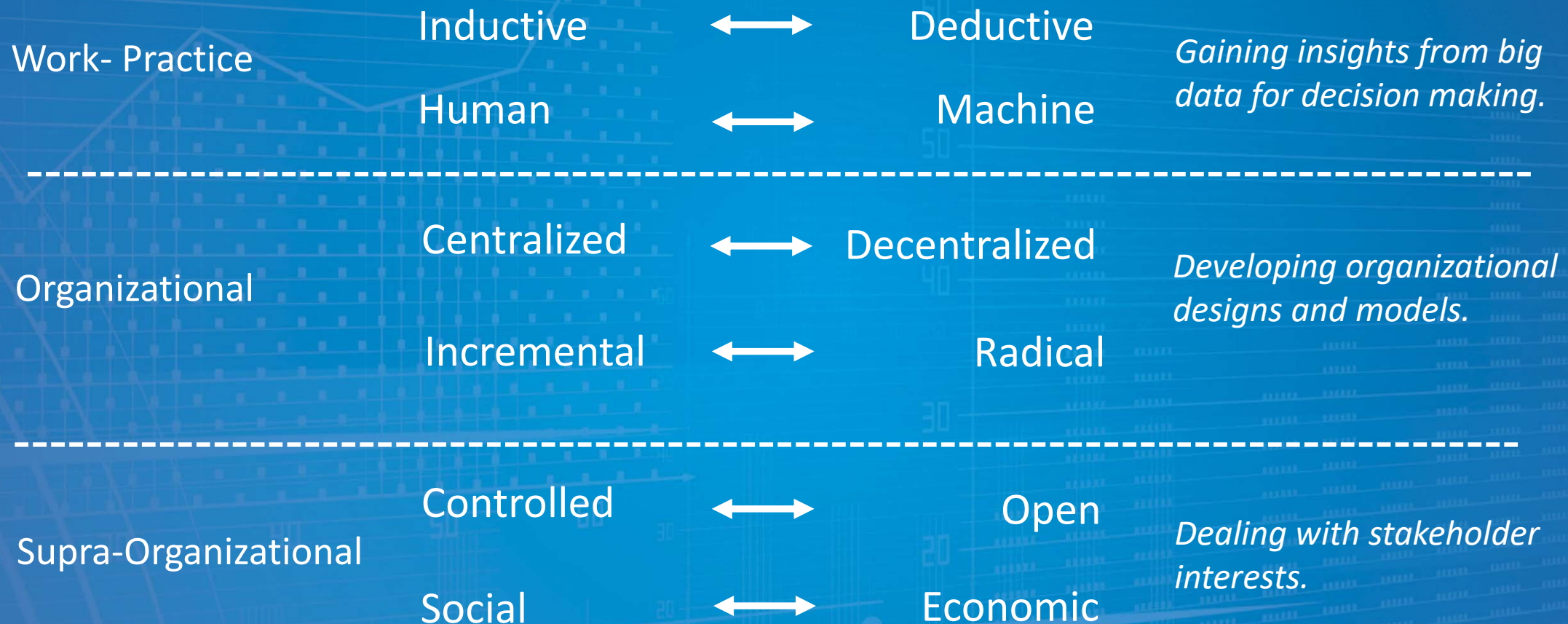
Big Data and Value Creation:

How do organizations create value from big data?

(Günther, W. A., Mehrizi, M. H. R., Huysman, M., & Feldberg, F., 2017).

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))



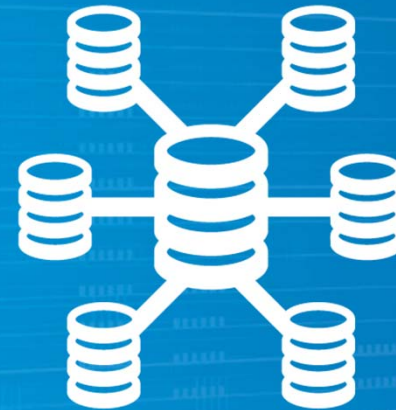
<https://www.sciencedirect.com/science/article/pii/S0963868717302615>



Characteristics (big) data:



Portability



Interconnectivity

HEALTH NEWS

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?



**SOLUTIONS
AHEAD**

DATA-DRIVEN BUSINESS MODEL INNOVATION

| | |
|---|--|
| <p>IMPROVE the business model</p> | <ul style="list-style-type: none">• New Data• New Insights• New Actions |
| <p>INNOVATE the business model</p> | <ul style="list-style-type: none">• Data Monetization• Digital Transformation |

(Woerner & Wixom , 2015))

Improve: New Data



- Descriptive Analytics
- Predictive Analytics
- Prescriptive Analytics

Innovate: Data Monetization



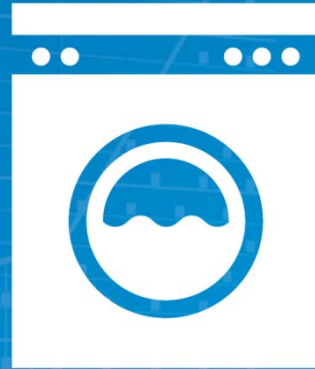
Selling



Bartering



Wrapping

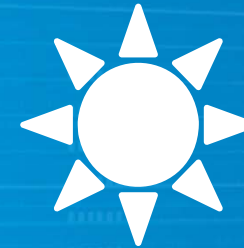


AirClean&Mean

Value:
clean wash, lowest costs, lowest
environmental impact.



Circular



Solar



Financial
Services

*De korting geldt op geselecteerde Garmin producten.
De afgebeelde producten zijn voorbeelden ter
illustratie. Kijk op kanzicoins.com voor een overzicht
van de producten waar je voor kunt sparen en meer
informatie. Actieperiode: januari 2019 t/m april 2019.



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- Knapperig ●●●●●
- Sappig ●●●●●



Digital Twins



Field Lab Smart Maintenance Techport

The background is a solid blue color with a faint, light-colored grid pattern. Overlaid on this grid are several semi-transparent line graphs and bar charts, suggesting a financial or data analysis theme. The lines and bars are in shades of white and light blue, creating a complex, layered visual effect.

What is the best financial service for me?

What is the best education for me?

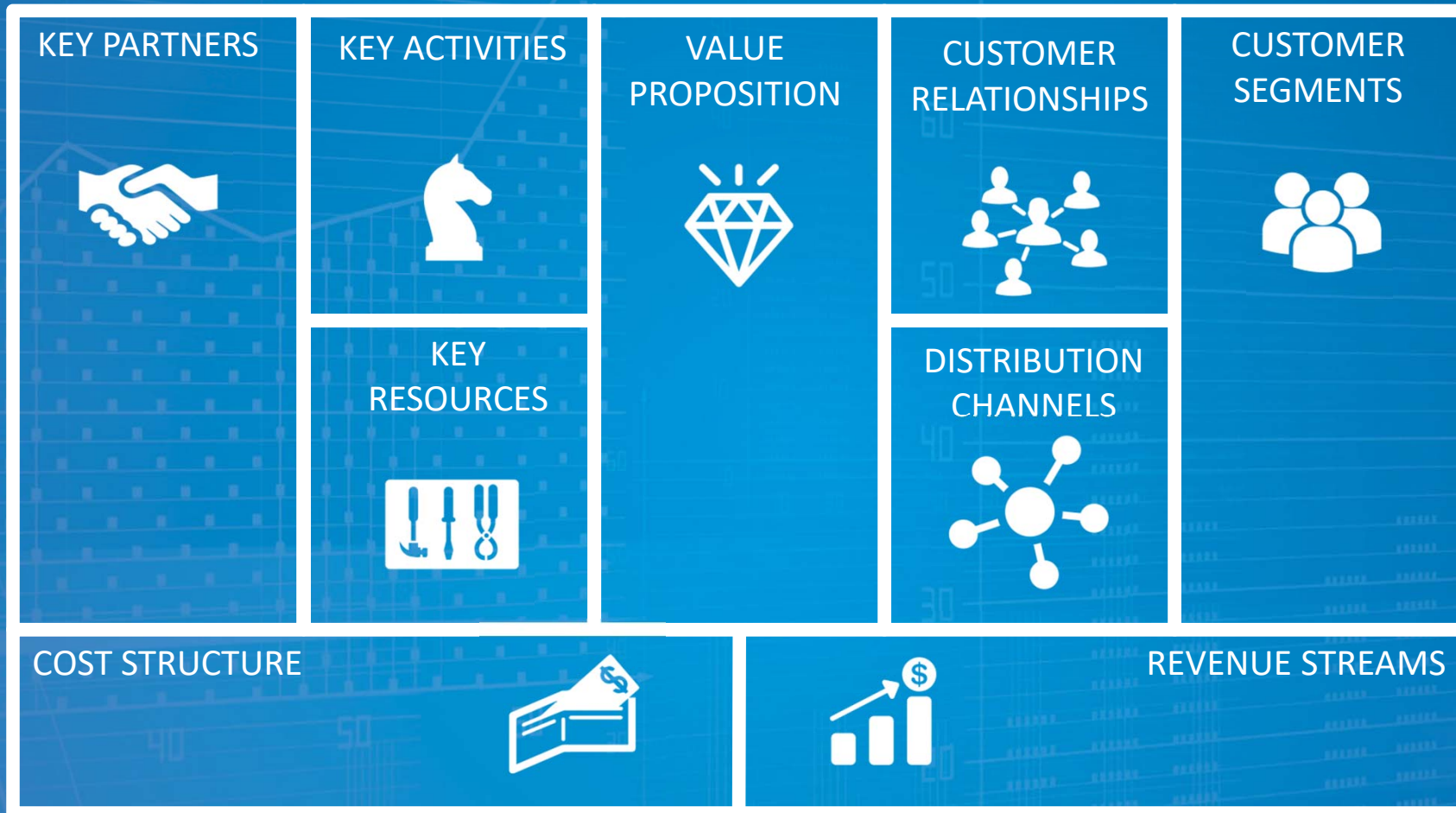
What is the best judge for me?

What is the best treatment for me?

What is the best care for me?

What is the best asset (management) 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

The background is a solid blue color with a faint, light blue grid pattern. Overlaid on the grid are several faint line graphs and data series. One prominent graph on the left shows a line that rises to a peak, dips slightly, and then rises again. Another graph on the right shows a line that starts high and gradually declines. The overall aesthetic is clean and professional, typical of a corporate or financial report.

JOURNEY

Datagedreven waardecreatie: Valt er nog iets te kiezen?



Who will become the



of your industry..?

U B E R



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>

