



prof. dr. Sander Klous

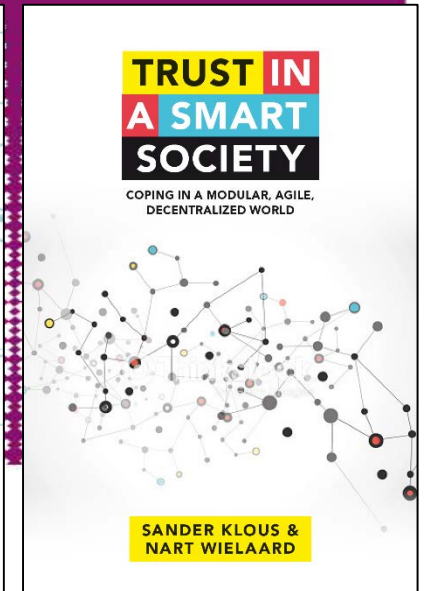
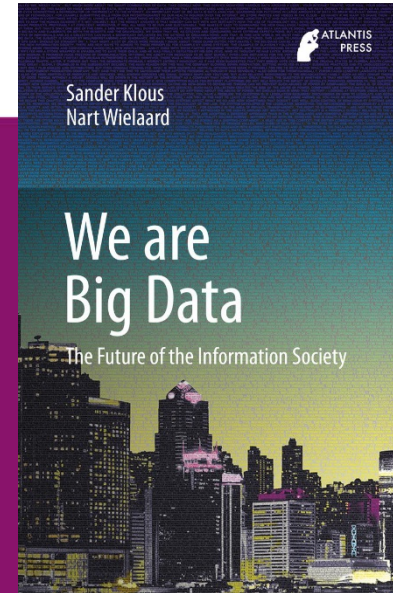
Big Data Ecosystems in Business and Society
University of Amsterdam

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Trusted Analytics

The future of our smart society



Extreme expectations

https://www.youtube.com/watch?v=2vXyx_qG6mQ

Content

1. Living in a Smart Society

2. Analytics in Ecosystems

3. Trusted Ecosystems



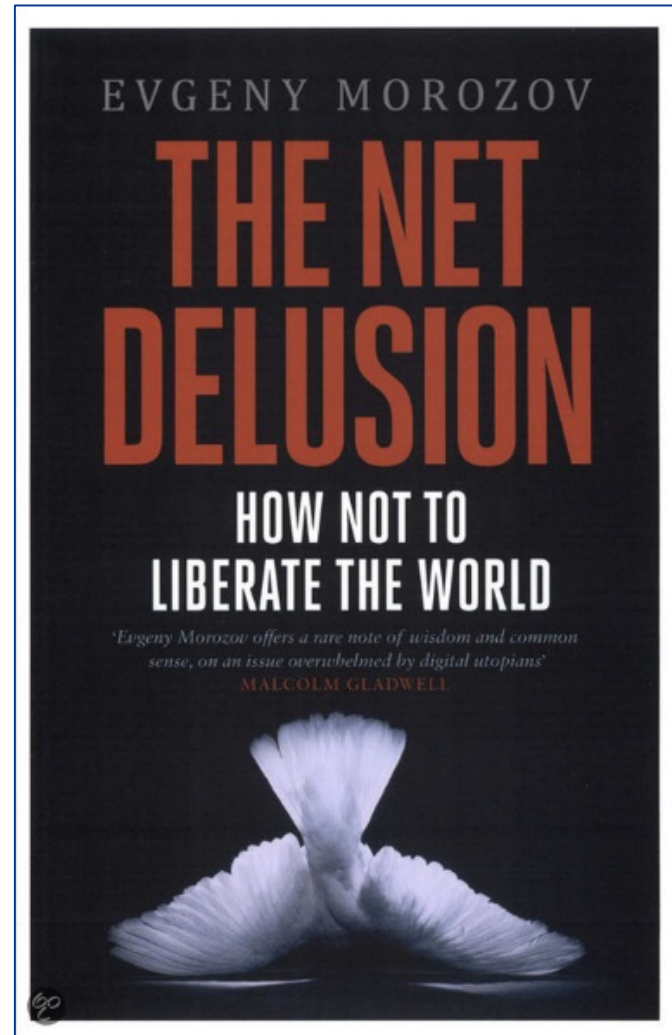
Systems determine our behavior



Slavishly following algorithms



Invisible barbed wire

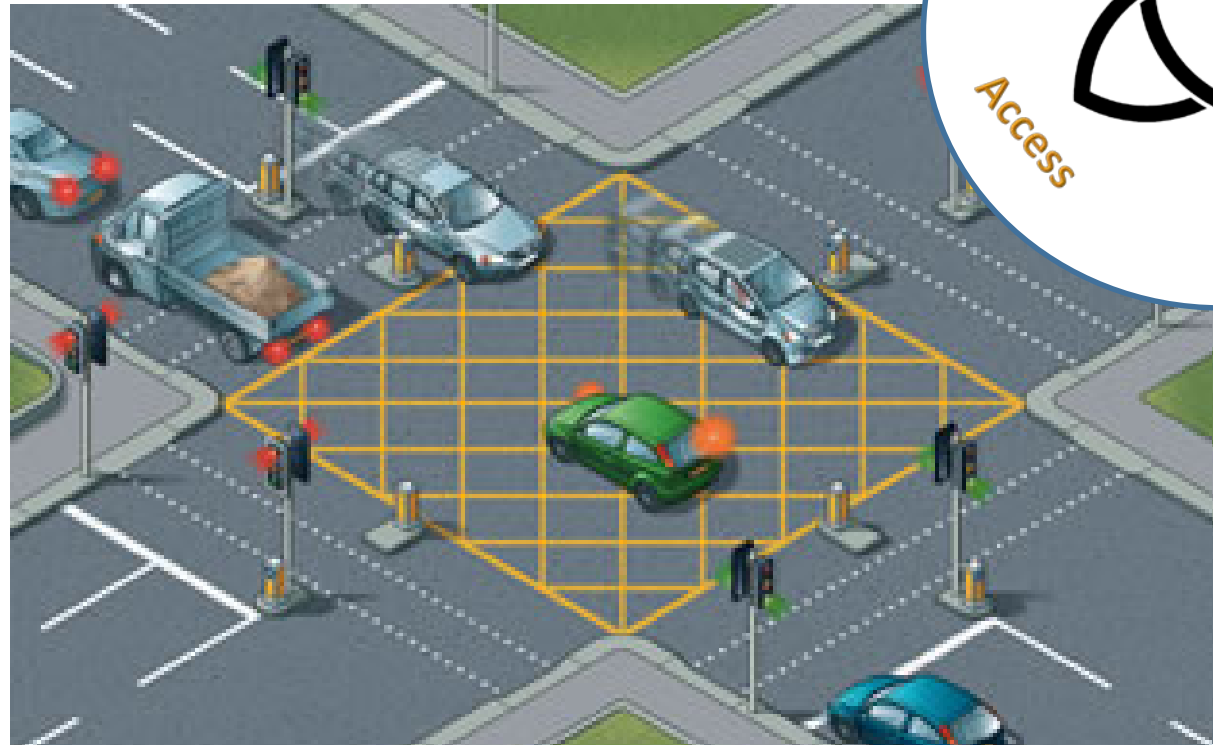


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Two types of ecosystems



Traffic lights

Google, Apple
Amazon, Etc.



Roundabouts

The Internet
The World Wide Web

The trust perspective

The Google Fact Checker: from traffic lights to roundabouts



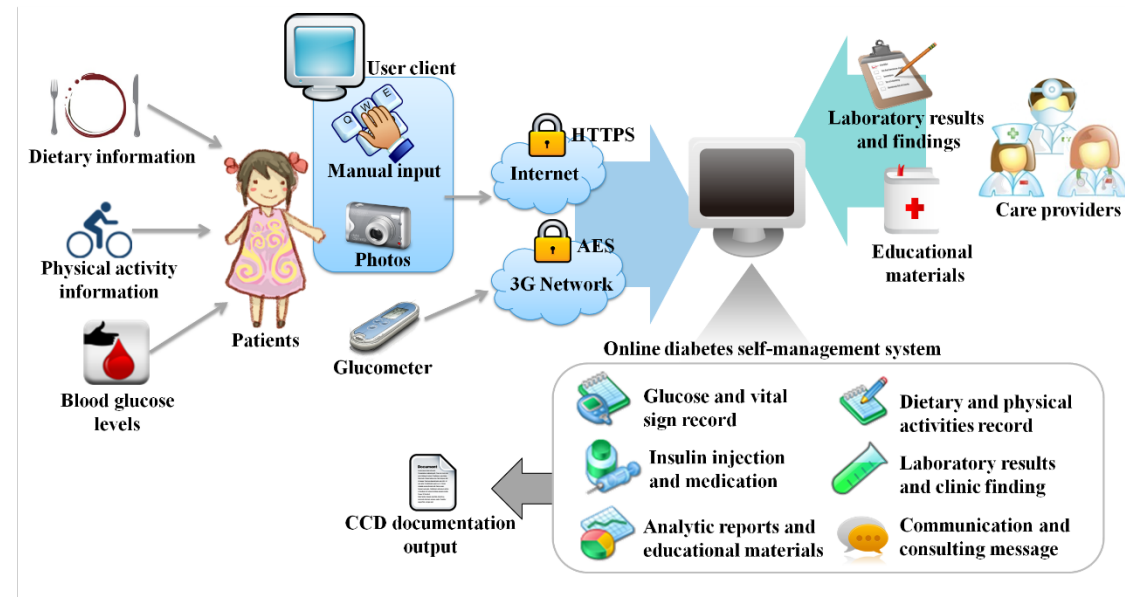
Enabling Personalized Interventions



Value Based Healthcare (CVA)



Diffuse Intrinsic Pontine Glioma
(Childhood Brain Stem Tumor)



Diabetes Type 2

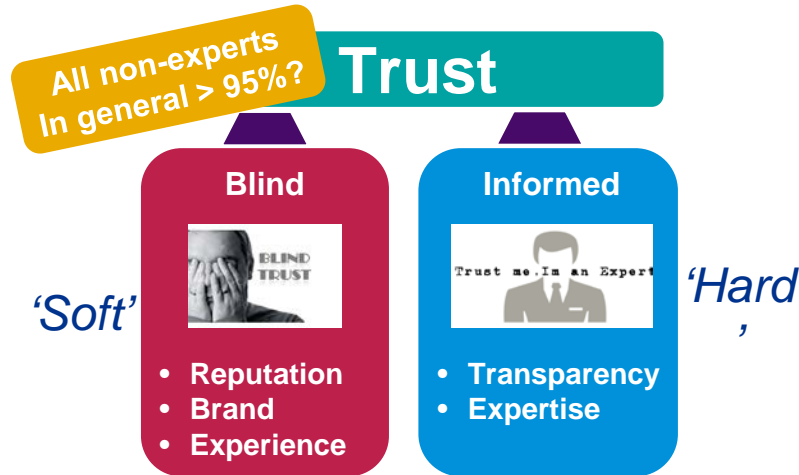


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What is trust?



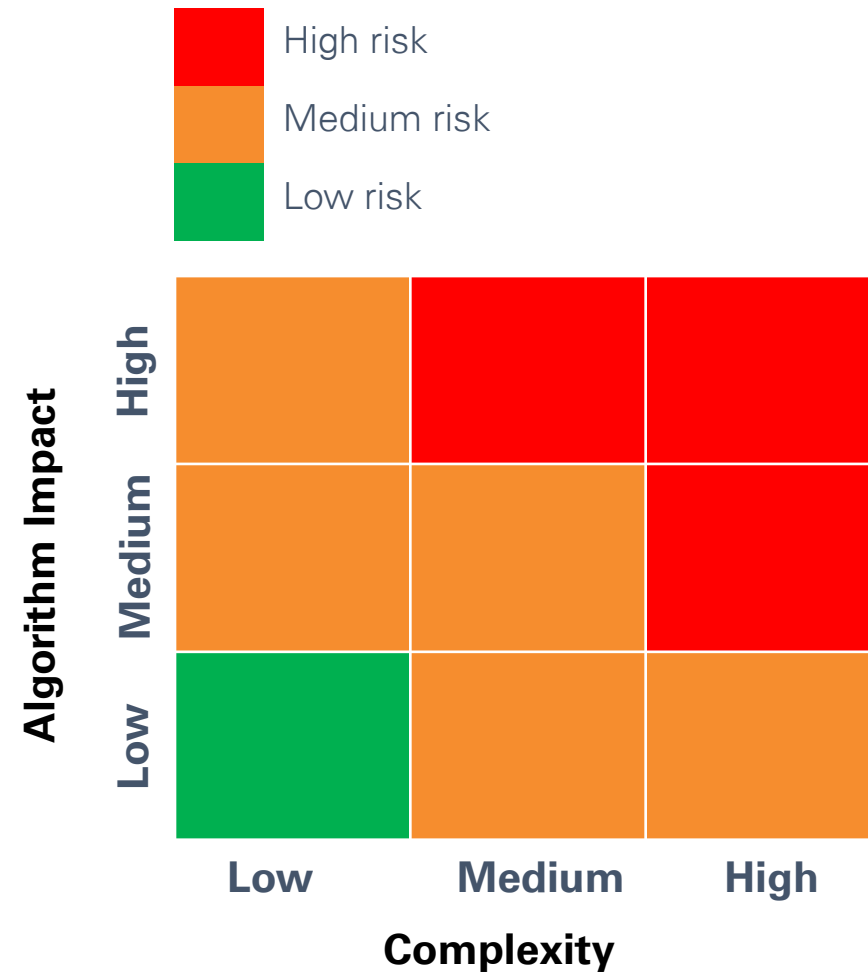
Auditing AI

Methodology

- Materiality (Relevance)
- Three lines of defense
- Design, Implementation and Effectiveness

Challenges

- Independence
- Explainability
- Agility



Socially impactful algorithms



✖ City of
✖ Amsterdam