



Aalto University

Algorithmic management and organizing in the age of AI

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Me, briefly

Henri Schildt

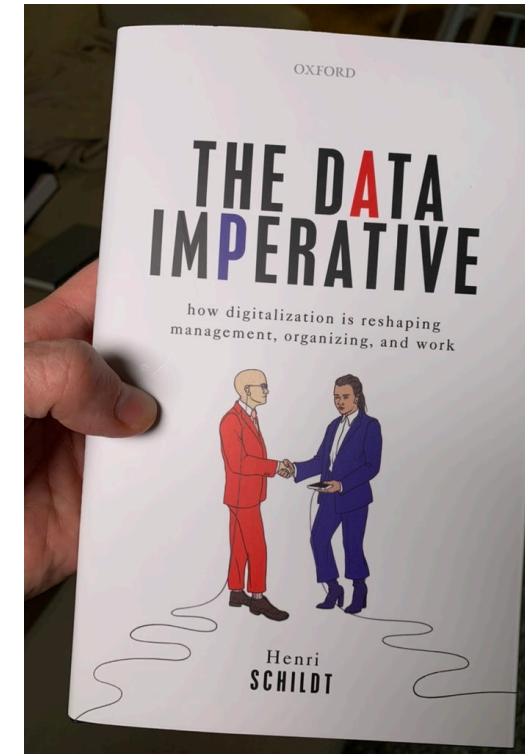
Professor of strategy at Aalto University (2012->)

2007-2010 Assistant Professor at Imperial College Business School

Current focus of teaching + research on digital strategy and digital transformation

Obsessed with everything AI-related

Also conducting research on social sustainability & organizations helping marginalized populations (esp. refugees)



My book was published by Oxford University Press in November 2020, available on Amazon.



Agenda today

Data & algorithms are now central to all organizing

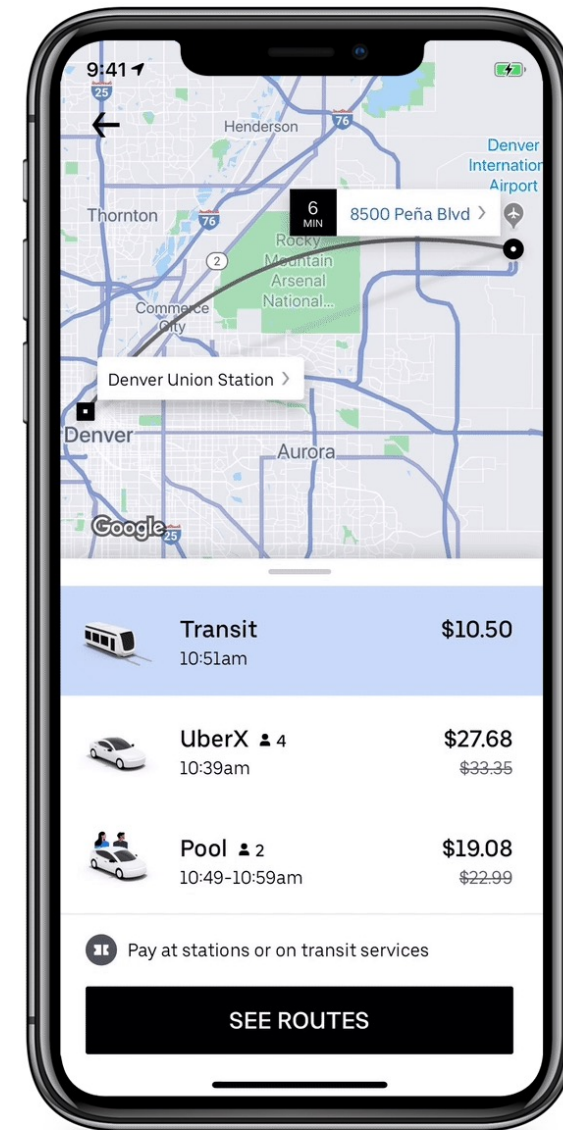
Algorithmic management case study: Percolata

Digital operating models: optimization and adaptation

Data & algorithms in the context of organizing

Data tends to mean information that can represent some more or less real entities and processes

Algorithms are simply any software code that turns input data into some more useful output information



Four core tasks of organizing & software

- Division of tasks
- Allocation of tasks
- Coordination of tasks
- Control (motivation)



See Puranam, P., Alexy, O., & Reitzig, M. (2014). What's “new” about new forms of organizing?. *Academy of management Review*, 39(2), 162-180.

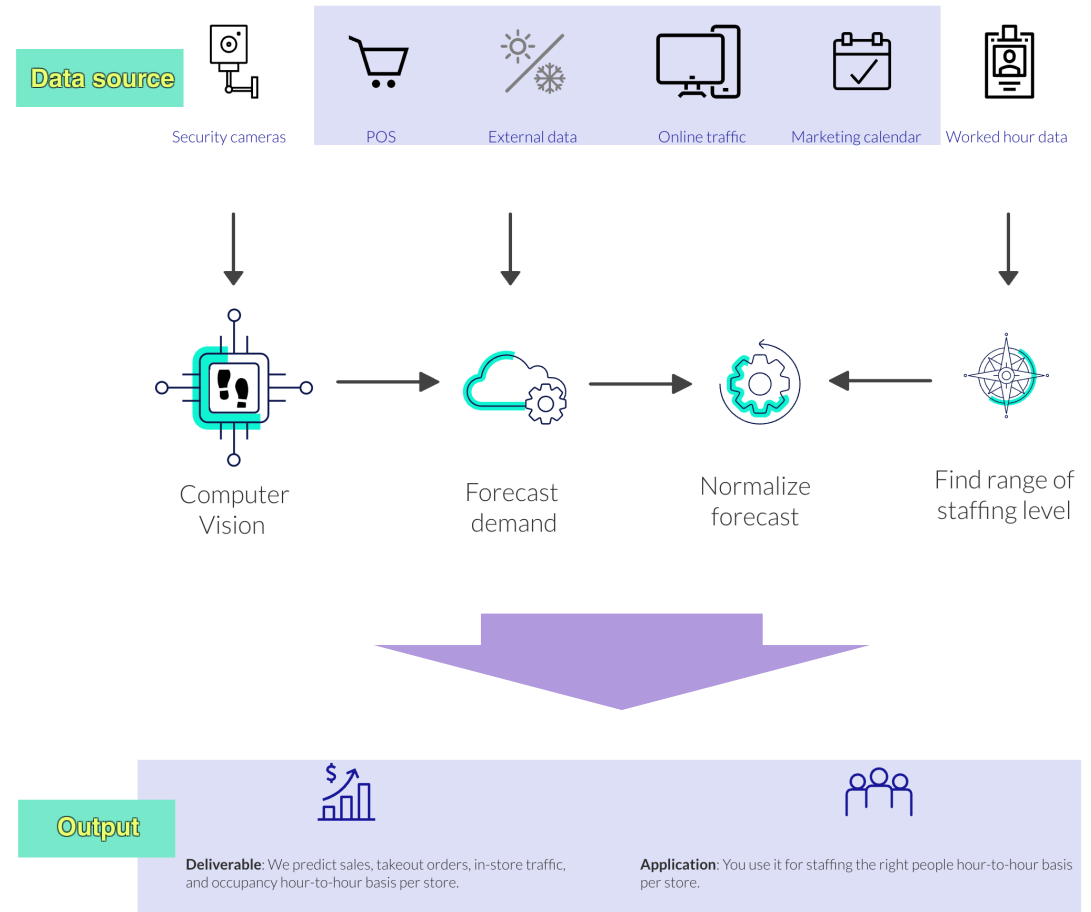
Percolata case

Please watch the video and discuss:

- What is the data that Percolata creates/collects/uses?
- What are the business processes that the AI application is redefining, and how?
- What are the advantages and disadvantages of this system?

Video link:

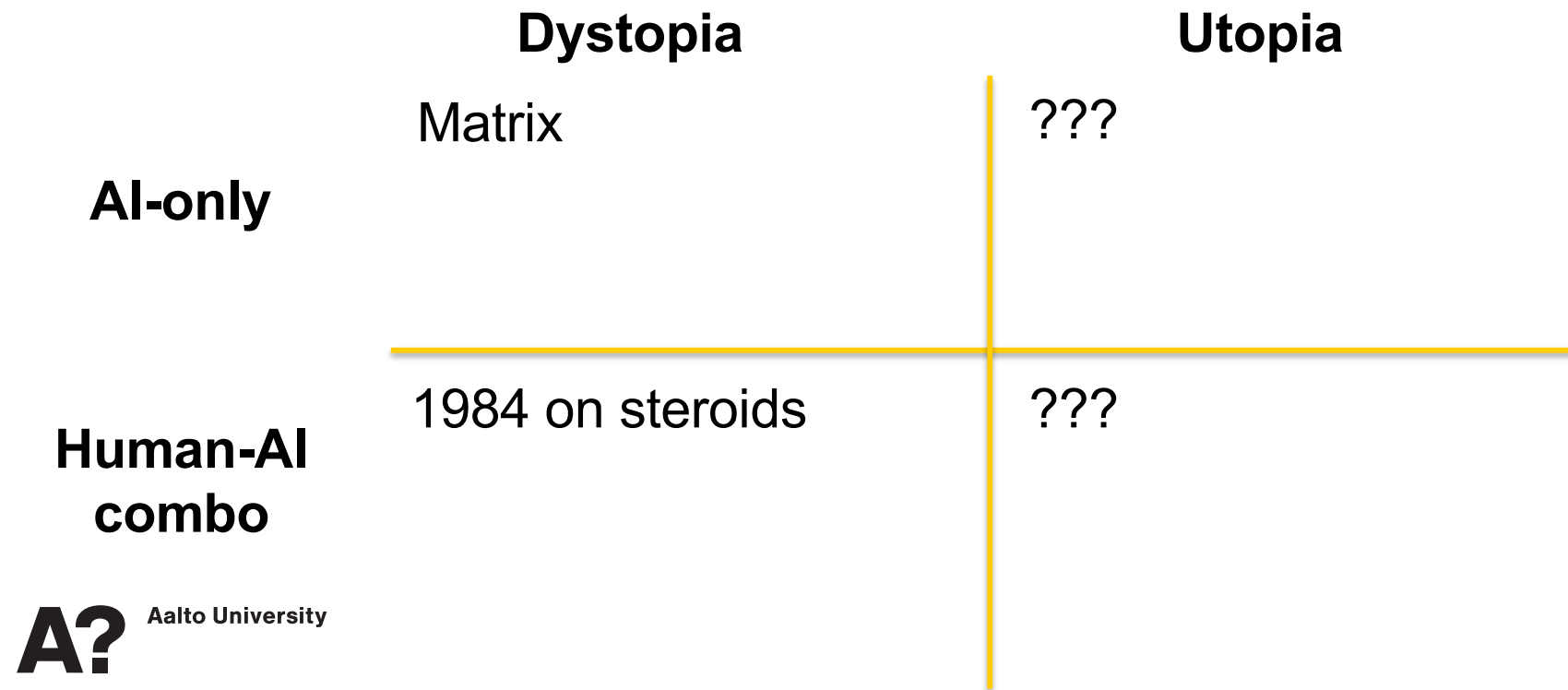
<https://youtu.be/aZ9d1IHVQbc>



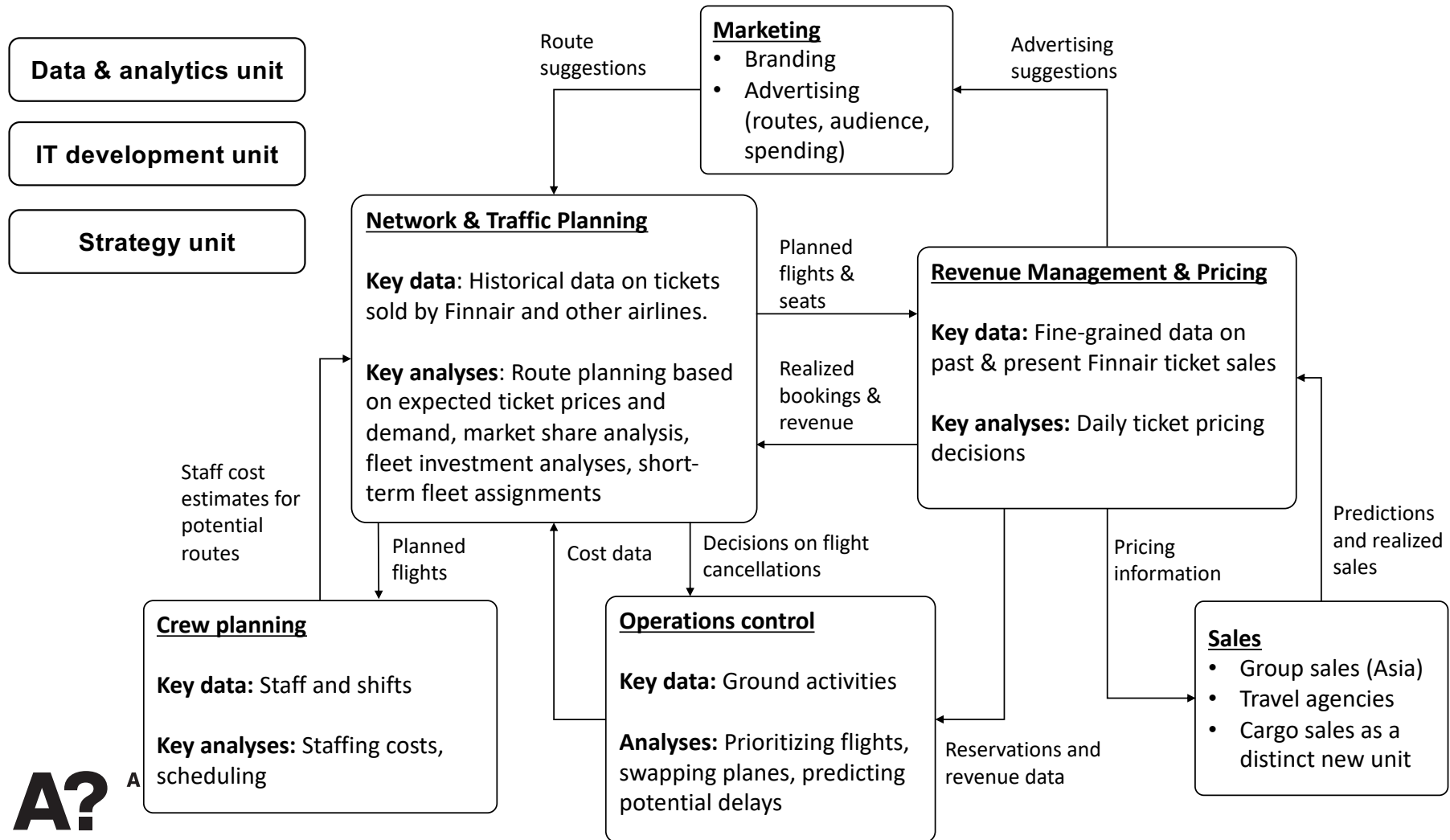
Human organizing vs. algorithms

What are the advantages of algorithms over humans?

When does algorithmic management replace human supervision and when are they complements?



Data & algorithms are simply everywhere



Generative AI will change everything

Generative AI set to affect 300mn jobs across major economies

Technology could boost global GDP by 7% but also risks creating 'significant disruption'



02-17-23

NASA's new AI-designed parts look like they're from an alien starship

These tangles of metal can make NASA's spaceships and equipment lighter and more efficient.



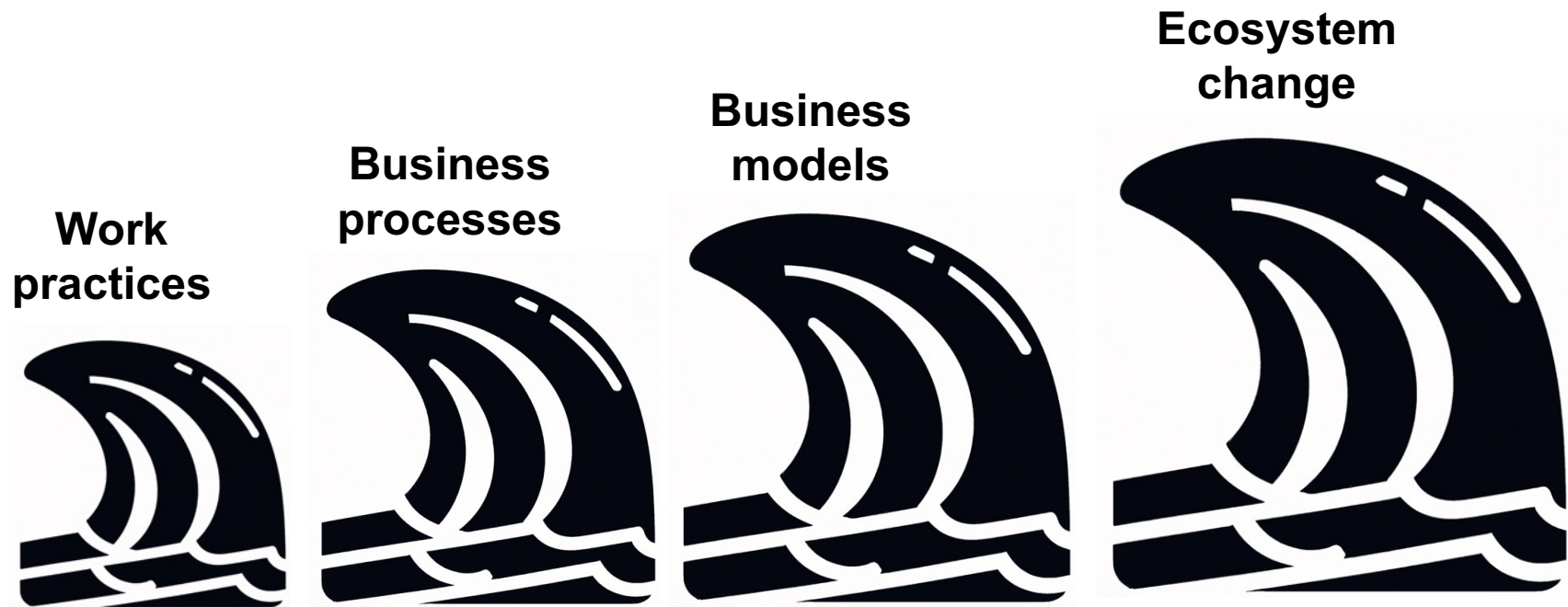
[Source Images: NASA]



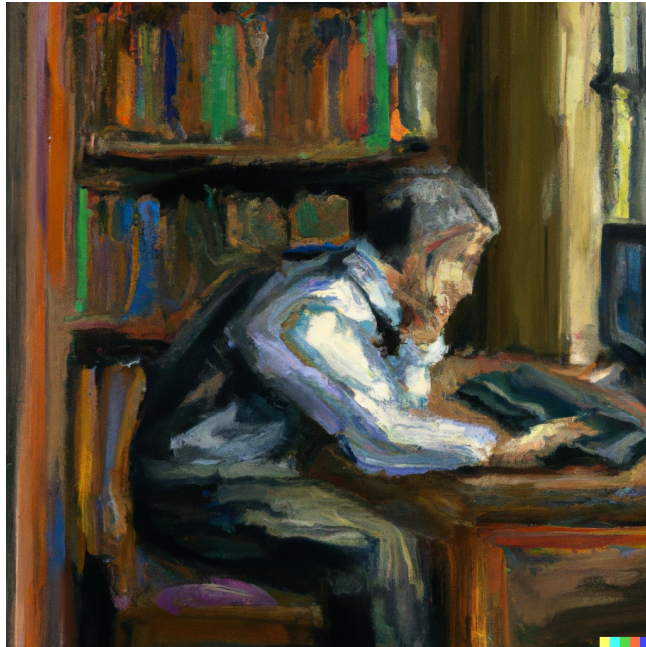
Summarize Any Meeting
Within Seconds

jamie is the new AI assistant that creates meeting summaries in business-writing quality within seconds.

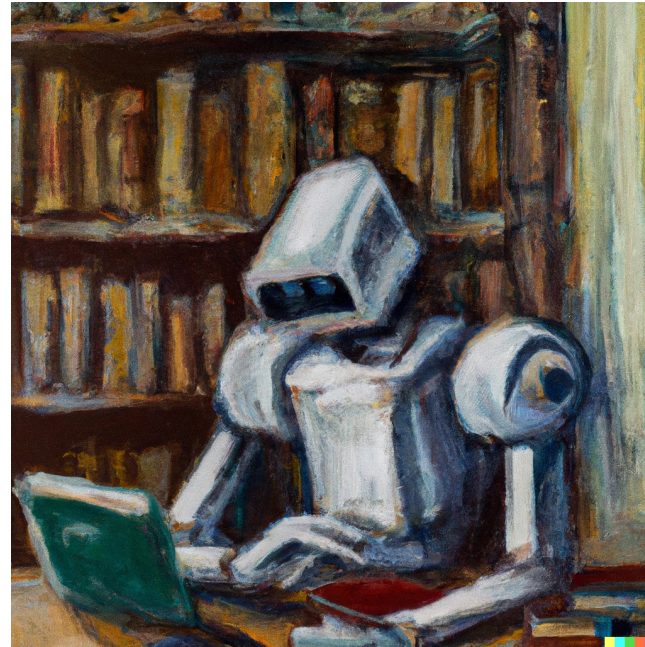
Four waves of change in organizing



How to cope with serious errors and results outside our ethical bounds?



Human in the loop



More software, more GPT calls

Summary

Computers > humans?

- For organizations, digital data provides in many ways a ‘superior’ representation of the world than human observations
- Algorithms are similarly superior to human judgment and choice

Companies feel compelled to replace human management with algorithmic management

- It is much faster, cheaper, and more reliable

This can lead to a really dystopian future

Thank you!

For any questions, don't hesitate to email me:

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