Data and Surveillance
Vera Haataja

Agenda

- Data & Platforms
- Data & Society
- Surveillance capitalism
- Black Mirror exercise
- Digital prison

Data and Platform Businesses

- Data is part of the DNA of digital platforms.

- They need data to facilitate the best possible matches and assure the quality of the interactions.

- Data is the most valuable resource for platform businesses, and they invest a lot to **capture**, **structure**, and **analyse** consumer behaviour and production.

Other Positive Effects

Healthcare Advancements	Wearables and predictive analytics improve personal health monitoring and disease prevention.
Smarter Decisions	Data-driven insights optimise personal finance and workplace efficiency.
Social Opportunities	Data connects individuals with job opportunities through smart matching.
Safety & Security	Real-time data enhances fraud detection and smart city safety measures.
Education Innovation	Personalised learning and predictive tools support student success.
Environmental Impact	Smart devices and analytics promote energy efficiency and sustainability.
Fostering Innovation	Data accelerates R&D, driving breakthroughs across industries.

The Value of Data for Platform Managers

Understanding User Behaviour

- Platforms learn a lot about their users analysing their data in areas such as:

 User segments and sub-segments
  Core exchange
  Value proposition
  Pricing
  Quality control mechanisms

- The Logic: Learning from the past about the future.
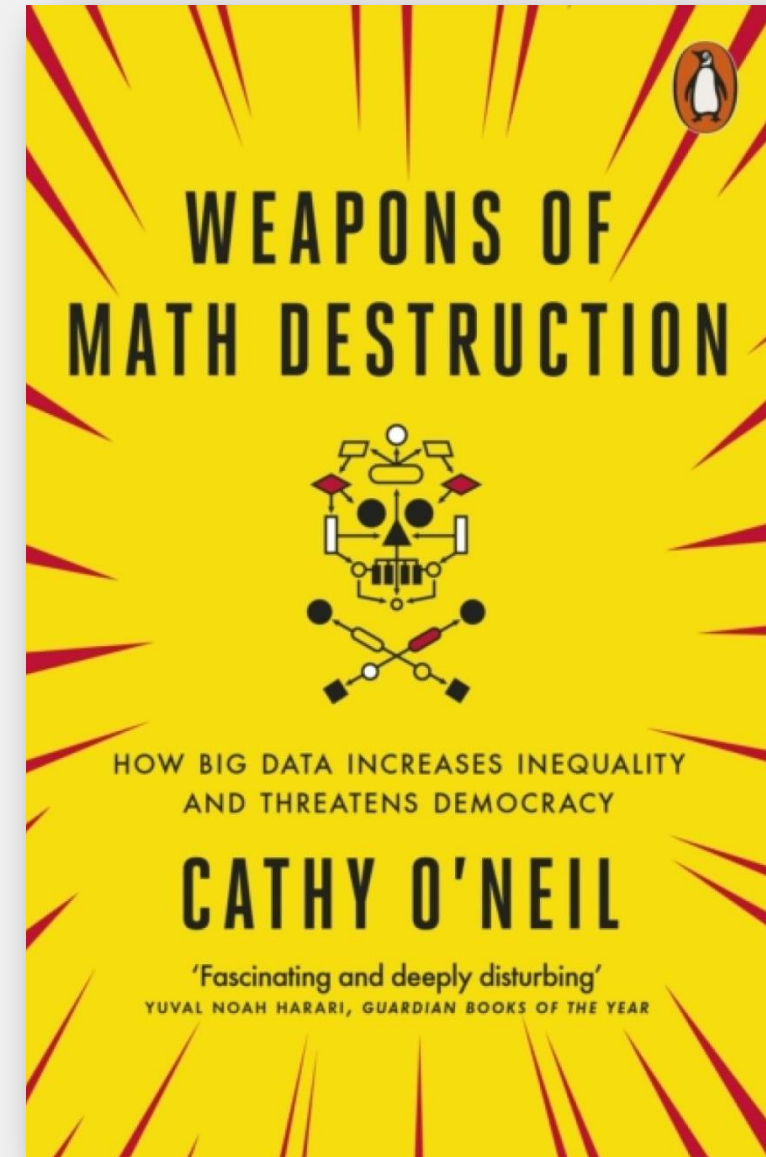
The Limitations of Data for Platform Managers

- The Problem: The past is not always like the future.
- Unforeseen events (black swans).

  - You cannot predict shocks and rare events.
  - COVID and what effects it has on user behaviour.
  - Data is also not good for predicting trends before they occur.
  - You need both: Data-driven decision making for the daily operations of a platform, but also non-data driven decision making in special situations and for strategic change.
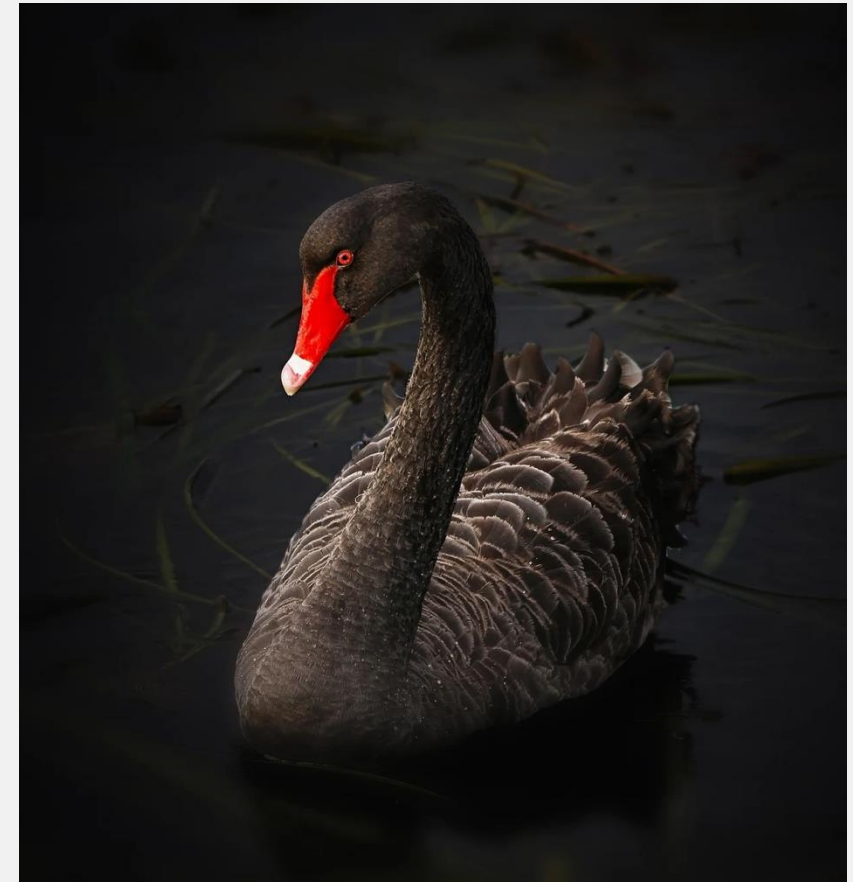
Limitations of Data for Society

- Data-driven algorithms can **amplify existing social inequalities** by perpetuating historical biases found in data.

- Predictive models **can target marginalised communities**, leading to systemic issues like over-policing and discrimination in hiring and lending practices.

- The **opaque nature of algorithmic decision-making** reduces accountability, making it difficult for individuals to challenge unfair outcomes.

- When algorithms control access to essential resources without oversight, **they undermine democratic principles** and disenfranchise citizens.

- It's crucial **to critically assess the societal impact of data** use and ensure accountability in algorithmic processes to protect democratic engagement.

WEAPONS OF MATH DESTRUCTION

HOW BIG DATA INCREASES INEQUALITY AND THREATENS DEMOCRACY

CATHY O'NEIL

'Fascinating and deeply disturbing'
YUVAL NOAH HARARI, GUARDIAN BOOKS OF THE YEAR

Surveillance Capitalism

Surveillance capitalism has evolved from simply collecting data to actively shaping human behaviour for profit.

- Stage 1: Data Extraction
- Stage 2: Prediction Markets
- Stage 3: Behavioural Modification

THE AGE OF SURVEILLANCE CAPITALISM

THE FIGHT FOR A HUMAN FUTURE AT THE NEW FRONTIER OF POWER

SHOSHANA ZUBOFF

Surveillance Capitalism

- **Stage 1: Data Extraction**
- Companies collect human behavioural data as "free raw material"
- Some data improves products, but most becomes "behavioural surplus"
- This surplus is processed by machine intelligence systems
- **Stage 2: Prediction Markets**
- Behavioural data is turned into "prediction products"
- These products forecast what people will do (now, soon, later)
- Sold in "behavioural futures markets" to companies wanting to predict consumer behaviour
- **Stage 3: Behavioural Modification**
- Companies discovered intervention is more profitable than just prediction
- Systems now nudge, coax, and herd behaviour toward profitable outcomes
- Goal shifts from "automating information flows about us" to "automating us"

Role of Film and Television in Critical Thinking

- Film and television are more than entertainment. They reflect societal values, norms, and issues, offering a lens to critically analyse our world. Visual media often explores ethical dilemmas, cultural shifts, and technological changes—making them valuable tools for critical thinking.

- By analysing films and TV shows, we can:
  - Question societal norms and structures.
  - Understand the ethical dimensions of technology.
  - Engage with futuristic or dystopian portrayals of real-world issues.

Visual Media and Social Discourse

- Visual media doesn't just mirror reality; it actively shapes how we understand and engage with societal issues

- Films and TV shows influence public opinion, cultural norms, and even policy debates.

- By portraying certain narratives, visual media can normalise particular ideologies or challenge them, often leading to broader discussions in society.

Black Mirror Nosedive (S3, E1)

- In Nosedive, individuals in society rate each other on a five-star scale through a pervasive social media platform.

- These ratings determine social standing, opportunities, and access to services—creating a competitive, artificial culture.

- The protagonist, Lacie, obsesses over improving her rating to climb the social ladder, but her world begins to unravel as her score drops.

- In the end, Lacie loses everything and finds freedom in letting go of the rating system.

Black Mirror San Junipero (S3, E4)

- San Junipero is set in a simulated reality where individuals, especially the elderly or terminally ill, can upload their consciousness to a virtual world.

- The platform allows users to escape physical limitations and live out idealised versions of their lives, choosing when and how they want to exist in the simulation.

- The episode focuses on two women, Yorkie and Kelly, who form a relationship within this digital world.

- In the end, Yorkie and Kelly choose to remain together in San Junipero after death, living eternally in the virtual paradise.
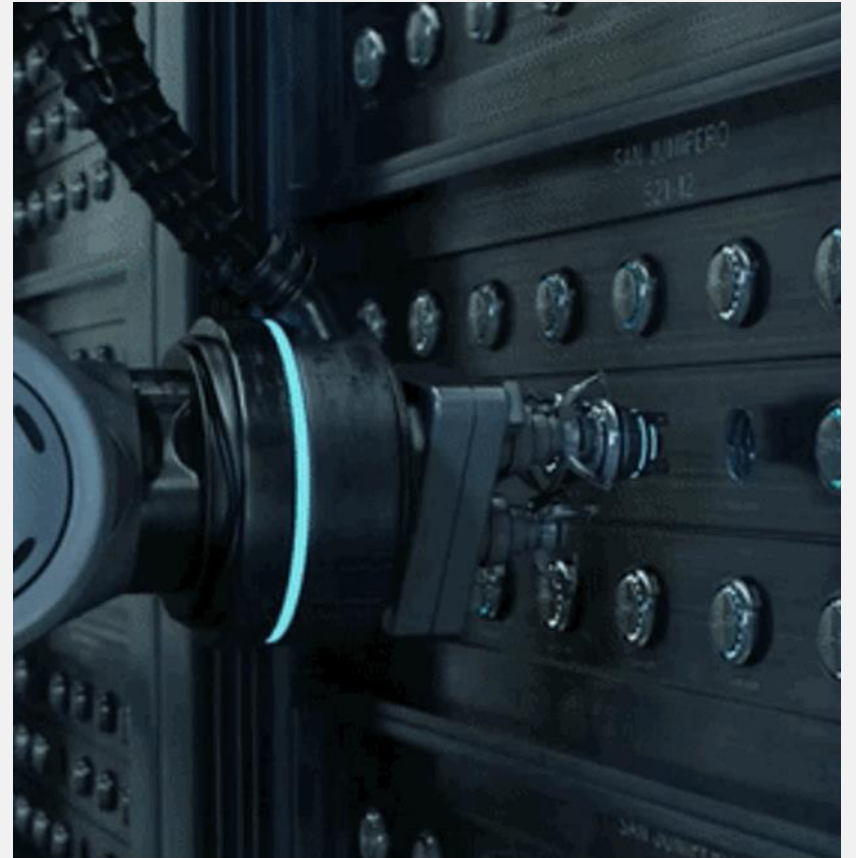
Themes in Nosedive

Surveillance:

- Society constantly monitors and judges behaviour through a rating system.
- Individuals are under pressure to perform for public approval, highlighting the oppressive nature of digital surveillance.

Power:

- The rating system creates a hierarchy, with higher ratings offering more opportunities and privileges.
- Social status is determined by ratings, leading to a superficial, competitive environment.

Connection:

- Despite digital interactions, true emotional connection is scarce.
- The pursuit of high ratings undermines genuine human relationships and authenticity.

Identity:

- People's identities are shaped by their ratings and online personas.
- Characters conform to societal expectations, losing authenticity in the process.

Themes in San Junipero

Surveillance:	Power:	Connection:	Identity:
• Virtual afterlife raises questions about control and observation in digital existence. • Challenges traditional notions of surveillance in life and death.	• Characters exercise choice and control over their digital experiences. • Technology shapes human experiences, offering agency beyond physical existence.	• Explores virtual relationships and emotional bonds in an afterlife context. • Emphasises the endurance of human connections despite physical boundaries.	• Questions of authenticity and the essence of self in a digital realm. • Characters confront challenges of retaining individuality in a posthuman context.

Similarities to Social Media: E.g., TikTok, Instagram

Users curate their lives for public viewing, mirroring the rating system in "Nosedive."

Social status is determined by follower counts and engagement, creating pressure to conform.

While social media fosters interaction and connection, it often leads to shallow relationships and emotional isolation.

Online personas are shaped by the pursuit of validation, risking authenticity and personal integrity.

Bentham's Panopticon

Central observation.

Seeing without being seen.

Inmates know that at any time they might be being watched.

Jeremy Bentham 1748 – 1832

A Digital Prison?

- The modern digital panopticon employs algorithms to monitor and manipulate choices, restricting individual freedom.

- Constant surveillance affects moral development and behavior, fostering a culture of compliance and limiting critical thinking.

- Individuals often voluntarily relinquish autonomy for convenience, impacting their ability to make independent decisions.