

analytics

ethics

what can we do?

strategy

ANALYTICS

Defining Analytics

Building representations of reality that help us peer into the future and or understand the past - by finding meaningful patterns in discovered data e.g. logic, checklists, scientific method, statistics, machine learning

The Wonders of Analytics

G2V - mapping plant stress to causes

Using new sensing technology, analyzing untouched data sources of plant information Outcome: Early warning system for indoor farmers

G2V - instantaneous world wide idea testing

Global audience of adwords. Analytics used to optimally connect interested parties Outcome: evaluate risk of a new product early and rapidly

Google DeepMind - protein folding

Breakthroughs in deep learning models that help solve protein folding
Outcome: fundamental breakthroughs in biology for understanding of cancer, pandemics, ++

Building Models

Models are toy versions of reality

Models only see as much as the modeller gives it the right data / assumptions

Data garbage in = data garbage out But if you narrow the scope well enough... Models are opinions embedded in mathematics.

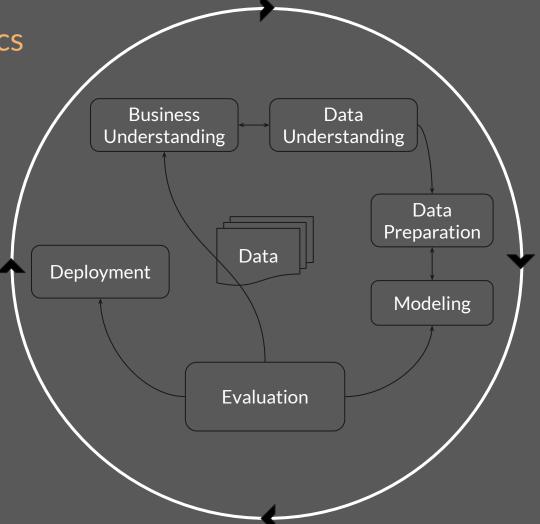
Cathy O'Neil

The Dangers of Analytics

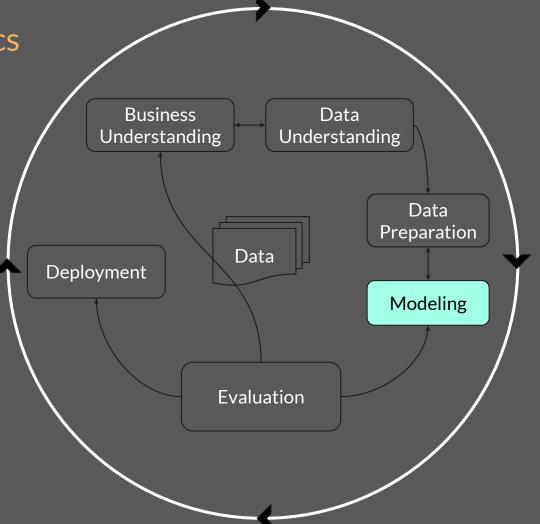
Specialized, narrow, limited, can be very powerful What are the consequences of limiting what information a model processes? Creator defines the ignorance of the model in order to give it more power

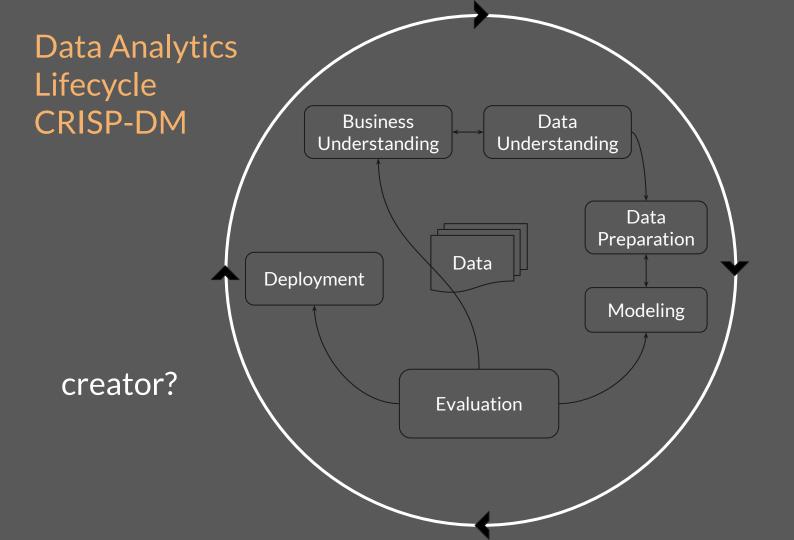
"Personalized truth"

News feeds that manipulate human psychology/emotion/attention Outcomes: threats to human right to privacy, tribalization, threats Data Analytics Lifecycle CRISP-DM

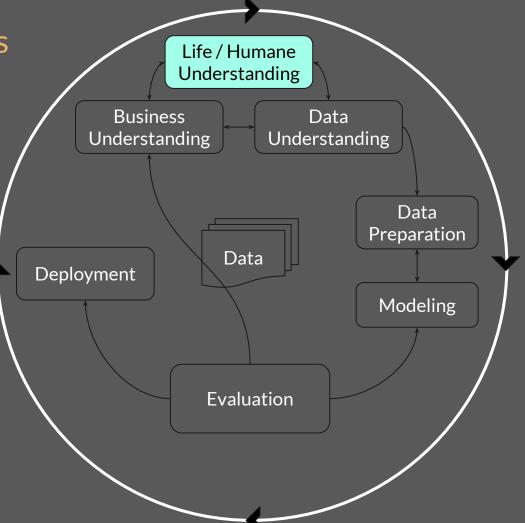


Data Analytics Lifecycle CRISP-DM



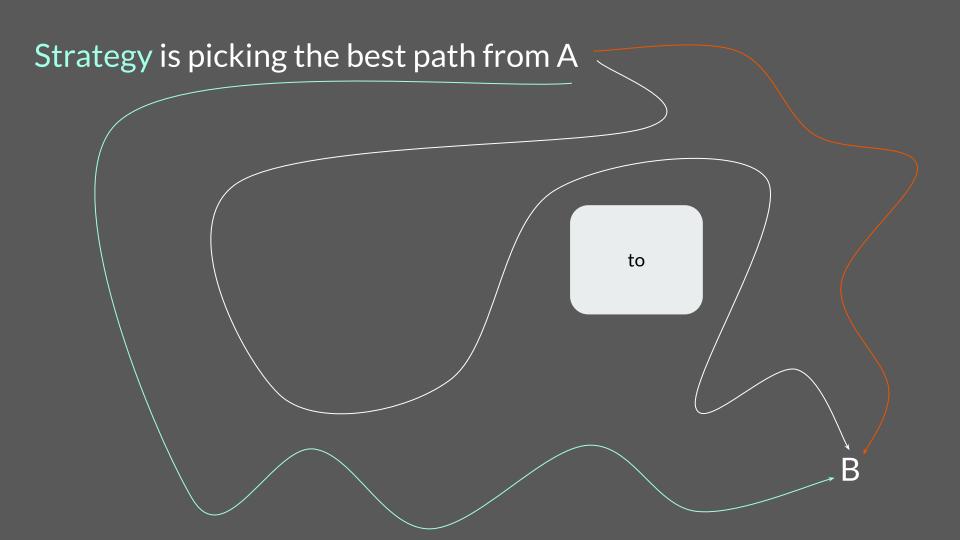


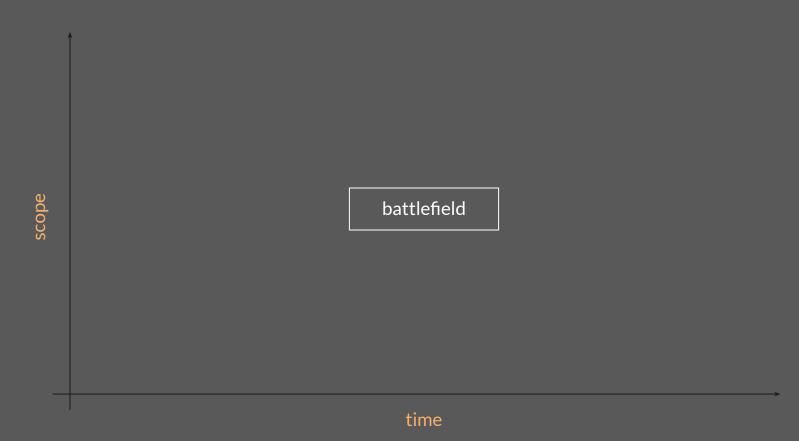
Data Analytics Lifecycle CRISP-DM





Strategy is picking the best path from A

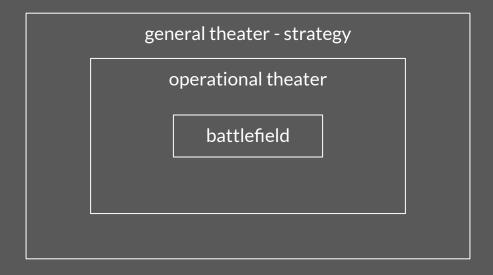




operational theater
battlefield

scope

scope



national policy - grand strategy general theater - strategy operational theater battlefield

scope

No plan of operations reaches with any certainty beyond the first encounter with the enemy's main force.

> Helmuth Von Motlke 1880

Strategy is an ongoing process

Learning and navigating as you go - an emergent process

Prioritizing a strategic reserve for learning in scope and time

Confidence in ability to find and reorient to your north star

Strategy at Work - G2V Optics

Orienting to our north star

Vision: "bettering the world with data and light"

A Series A in 2 years with as high valuation as possible for autonomy

How are we tackling the riskiest assumptions?

Not the most comfortable ones (e.g. sell before you build)

How can we increase our learning rate?

How do we leverage the learning of others - grants, vendors, science research

What is the grand strategy?

Is vertical farm technology even a problem worth solving?

Strategy in Surveillance Capitalism

What is surveillance capitalism's north star?

• Shareholder return generation through the prediction of human behavior

Incursion | Habituation | Adaptation | Redirection

- Capture and as much data as possible
- Normalize the incursion
- Resist regulation through political capture
- Take away attention from the adaptation, continue to extract
 - e.g. "corporate social responsibility"

data - information - knowledge - understanding - wisdom

data - information - knowledge - understanding - wisdom

analytics | strategy

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analytics | strategy

ethics



ethics is the ongoing study, development, and application of moral reasoning

Similarities

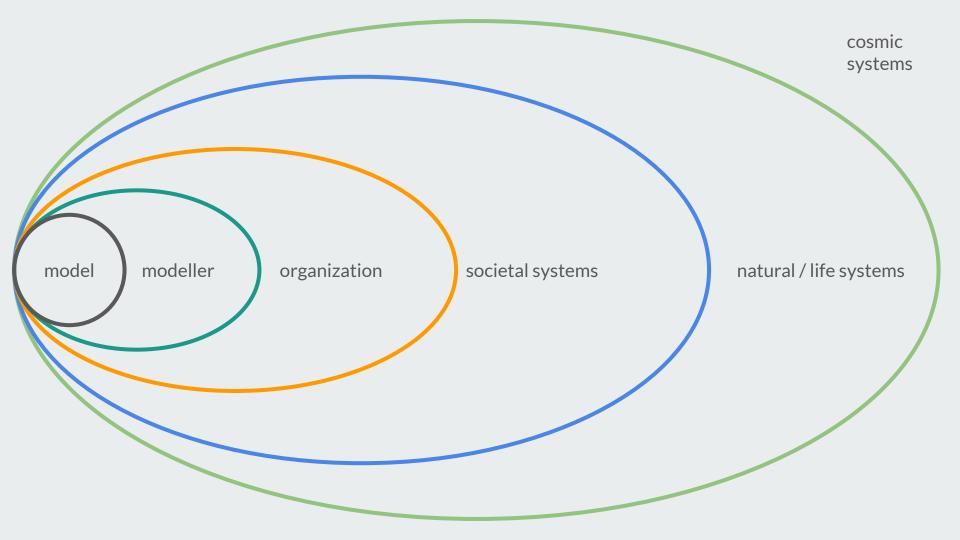
ethics vs strategy

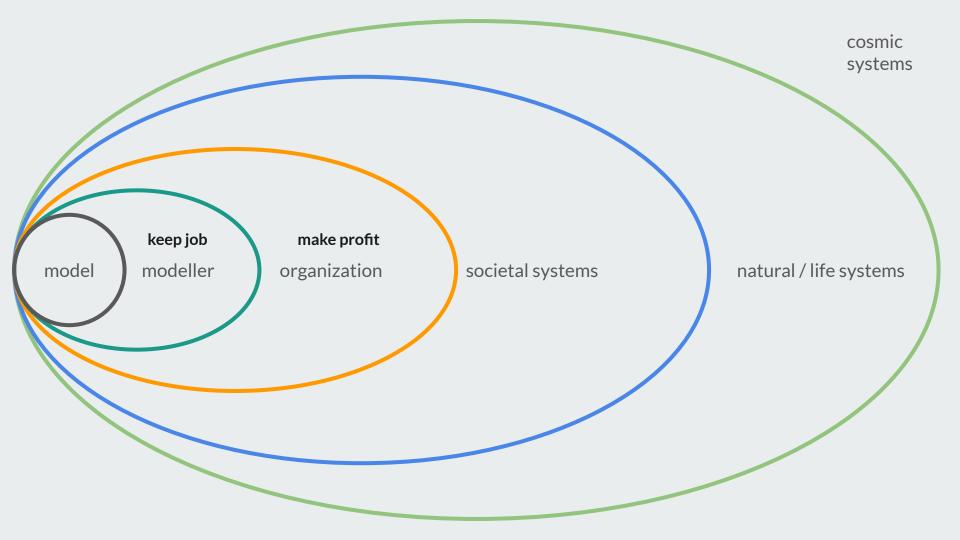
- Weighing harms and benefits on different frames
- On going study
- Pushing back ignorance

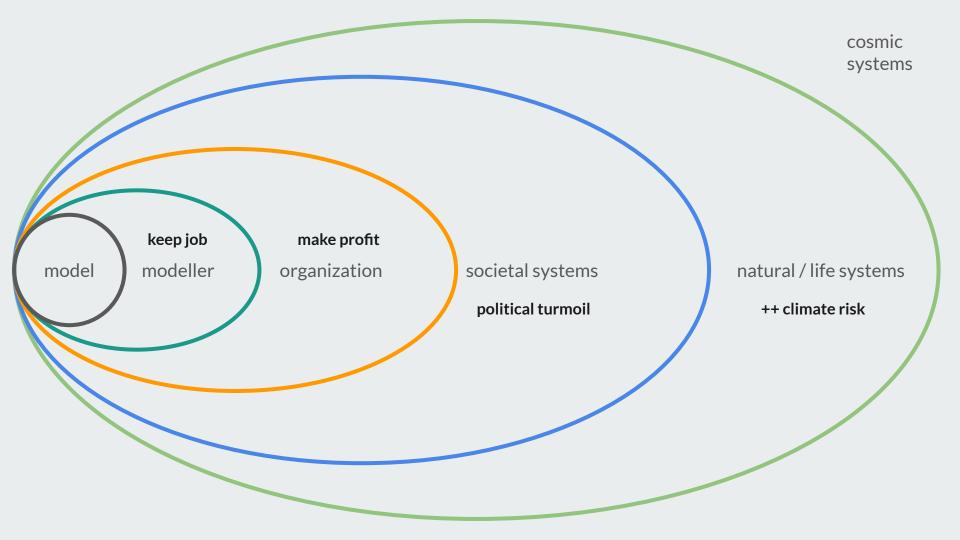
Differences

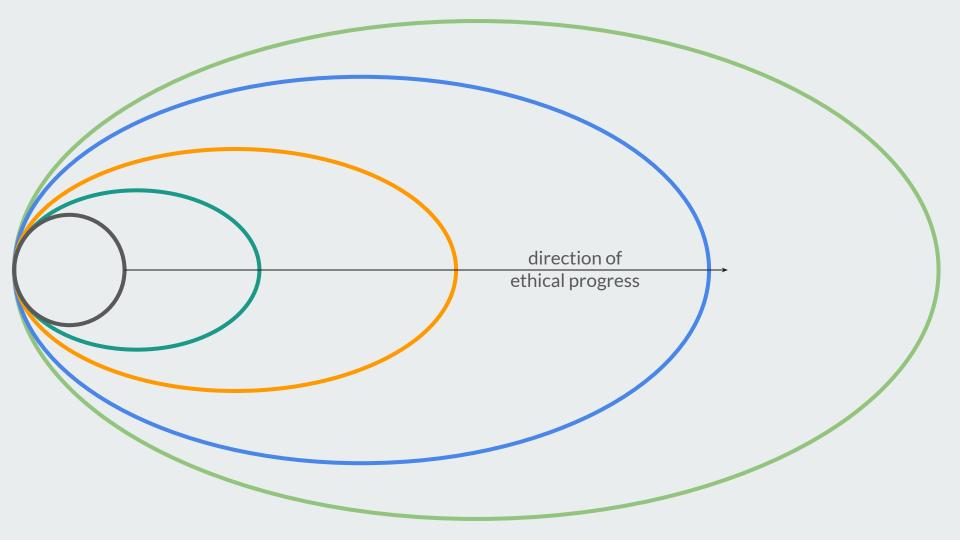
ethics vs strategy

- Emphasis on morality
- Questions of care / suffering / injustice
- Asks questions of character and conduct of the creator









ethical conflicts

Under the regime of surveillance capitalism, the corporation's scientists are not recruited to solve world hunger or eliminate carbon-based fuels. Instead, their genius is meant to storm the gates of human experience, transforming it into data and translating it into a new market colossus that creates wealth by predicting, influencing, and controlling human behavior.

Shoshana Zuboff

"externalities"

- Decay of truth
- Polarized politics
- Destabilization of democracy
- Loss of privacy / liberty
- Widening inequality b/t rich/poor
- Destruction of our biosphere

data - information - knowledge - ur	nderstanding - wisdom
analytics strategy	
	ethics

Technological progress without an equivalent progress in human institutions can doom us. The scientific revolution that led to the splitting of an atom requires a moral revolution as well.

Barack Obama



Start Close In

Start with your own question, give up on other people's questions...take a small step you can call your own.

David Whyte

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Be with with your own suffering
find meaning by starting with compassion for self...and others
Have your care fuel...
a conviction that better is possible
perseverance
Courage to critically question
your self
your tribal identity
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Question Broadly

..those closest to the pain should be closest to the power.

Ayana Pressley

Investigate and weigh consequences in larger frames

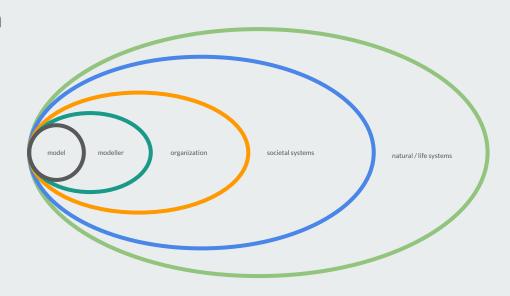
Look at the externalities Learn about the political and social implications of your actions

Critically question

sources of authority sources of power

Discuss consequences

especially with those affected and those outside your bubble



Accept Responsibility

Collective action is more powerful than individual action

e.g. climate change must be tackled as a globe, not as a nation

Responsible strategy requires social and political solutions

Not just technical solutions!

Civic and political engagement for right public policy / incentives

Advocating for consequences for unethical behavior

Communicating across the political spectrum

Seek stories of co-responsibility and the common good

Stories that attempt to answer moral questions

How should we rearrange our economy for a more sustainable relationship to human and planetary health?

What should we do about rising inequality?

How can we rebuild trust in government?

What makes for the dignity of work?

What do we owe one another as citizens?

START CLOSE IN

Authenticity
Caring and Compassion
Critical Questioning

WHAT CAN WE DO

QUESTION BROADLY

Investigate larger frames
Question authority and power
Open eyes to consequences

ACCEPT RESPONSIBILITY

Engage in collective action
Civic / political engagement
Advocate for consequences of unethical acts
Seek stories of co-responsibility / common good

We make our world significant by the courage of our questions, and the depth of our answers.

Carl Sagan



References

Low, K. (2016). The Human Venture Institute mapbook (16th edition). Action Studies Institute.

O'Neill, C. (2016). Weapons of math destruction. Crown Brooks.

Whyte, D. (2019). David Whyte: Essentials.

The National Aeronautics and Space Administration. (2020). Pale blue dot revisited [Photograph]. Flickr. https://www.flickr.com/photos/nasacommons/49533887268/

Resources

Podcast

Your Undivided Attention - Center for Humane Technology Podcast https://www.humanetech.com/podcast

Recent Books

- Winners Take All Anand Ghiridaradhas
 - Systematic inequality
- The Tyranny of Merit Michael Sandel
 - The myth of meritocracy
- The Precipice Toby Ord
 - Existential risk

Drawdown Project

https://drawdown.org/solutions/table-of-solutions

Thanks.

contact | presentation | ethics resources <u>www.nickkal.com/ethics</u>

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"Invention springs from a divine discontent with things

the way they are and a conviction that humanity can do

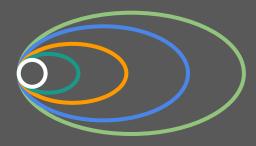
better."

- Gordon Ratray Taylor, Historian

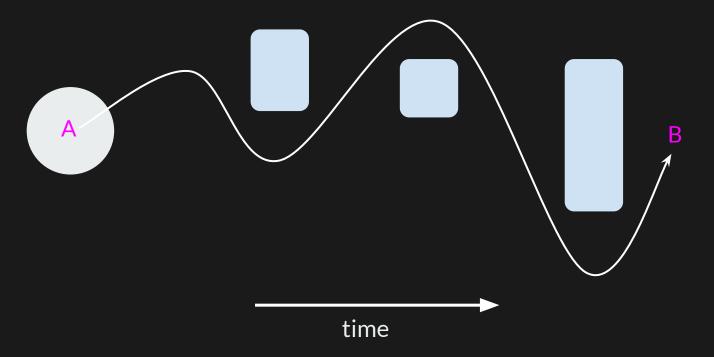


motivation starts with caring

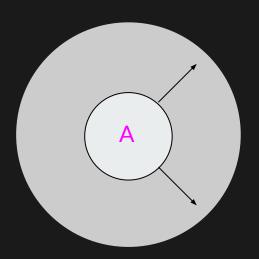
frame



ignorance is the enemy ignorance is the absence of that, which can be learned, that could be helpful

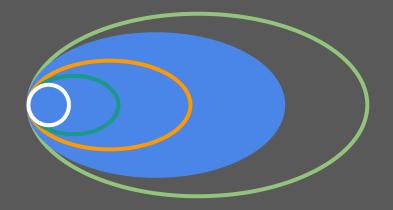


wisdom without being told, see what needs to be learned, and do it successfully



wisdom is helpful learning - this is the superpower

harmful consequences of AI - social trends



INEQUALITY

Worker / Employer Inequality
Widening Socioeconomic Gaps
Political / Democratic Disruption

LOSS OF LIBERTY

Privacy IS Liberty Increased control by corporations and government through surveillance

DECAY OF TRUTH

Bad actors manipulate AI systems to control the narrative for narrow gain Intentional attacks on our shared understanding

Ethics - Personal Conflict Examples

If you go into business, some examples:

- Would you push an ethical approach if it meant making your own job irrelevant?
- What's worth losing your job over, or switching companies or industries over?
- Is this technology worth killing for lack of potential good?
- How many steps away from the front line benefit / harm do you have to be?
- Is it better to change the system from the outside, or from the inside of an industry?
- How do you push ethical directions when it is not profitable to do so?
- How would you grapple with an ethical direction meaning many people may lose their livelihoods?
- Is it ok to implement solutions that have negative effects for the next gen?