To go further : https://emlyon.github.io/mk99

Artificial intelligence (AI)

What is it?

Artificial intelligence (AI) consists for a computer program to reproduce one of the capabilities of the human intellect, based on the analysis of a large volume of data ("big data"). "weak" AI can duplicate specific tasks, such as recognizing an object on an image. "strong" AI would reproduce human consciousness: it will not exist for a long time.

Companies to assist you

DataGenius, mfglabs, Datalyo, nabla.com, Sicara, Quantmetry

Influencers to follow

François Chollet, Benedict Evans, Zeynep Tufekci, Azeem Azhar, Cathy O'Neil, Gilles Babinet

3 companies leveraging AI

Artefact - this marketing analytics firm uses AI to better analyze customer data and develop targeted advertising campaigns.

Climate Corphelps to predict how weather changes affect crops, which allows finely modulating fertilizer consumption.

Stitchfix - this online clothing sales company uses many techniques to 1) optimize their stocks 2) make relevant suggestions to customers.

What business impact?

- Optimization (internal processes): replacement of "white-collar workers" such as data-entry clerks and other repetitive administrative tasks. Better control of the manufacturing process (savings in time, defects, waste, maintenance, etc.). Logistics optimization (warehouses, supply chain).

- <u>Innovation</u> (customer value): products can become "smart" thanks to AI: collision detection for a vehicle, taking a picture at the best moment, personalized recommendations, generating original designs, etc.

Resources needed

Organizational resources:

- IT staff with a knowledge and interest for data-related skills (tools, frameworks...)

- business managers able to interface with data scientists

Financial resources:

- licences for software services
- consulting fees for project development and maintenance

Do's and don'ts

Do
- start by modernizing your
IS and ERPs to have quality
data on which the AI can be
exercised.
- proceed by tests and

iterations (create POCs before launching on a large scale)

Don't

- be seduced by the "AI buzz" and create expensive gadgets. In many cases, traditional statistical analysis suffices.
- treat AI results as ground truth. AI has biases which need an interdisciplinary team to identify and debias.

