



Seminar Robotic Accounting 2018

Artificial Intelligence in the Audit

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GBNED
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The Future of Auditing and Digital Assurance

The image shows a woman in a dark, sleeveless dress standing in front of a large, multi-panel digital display. She is holding a white folder and pointing at the screen with her right hand. The display is filled with various data visualizations, including line graphs, bar charts, and world maps. The maps are labeled with city names: New York, London, Berlin, New Delhi, Hong Kong, Tokyo, Canberra, and Wellington. The background is a dark blue with a grid pattern.

Agenda for today



The background image shows a man in a dark suit and tie, pointing his right hand towards a large, glowing blue hexagon containing the letters 'AI'. Behind him is a grid of smaller hexagons, each containing a different AI-related term. The background is a blue-toned image of a man's face and torso, overlaid with a grid of binary code (0s and 1s).

- ✓ Introduction artificial intelligence for auditors
- ✓ How does it work?
- ✓ What Next?

AI

Deep Learning

Science

Neural Network

Big Data

Data Mining

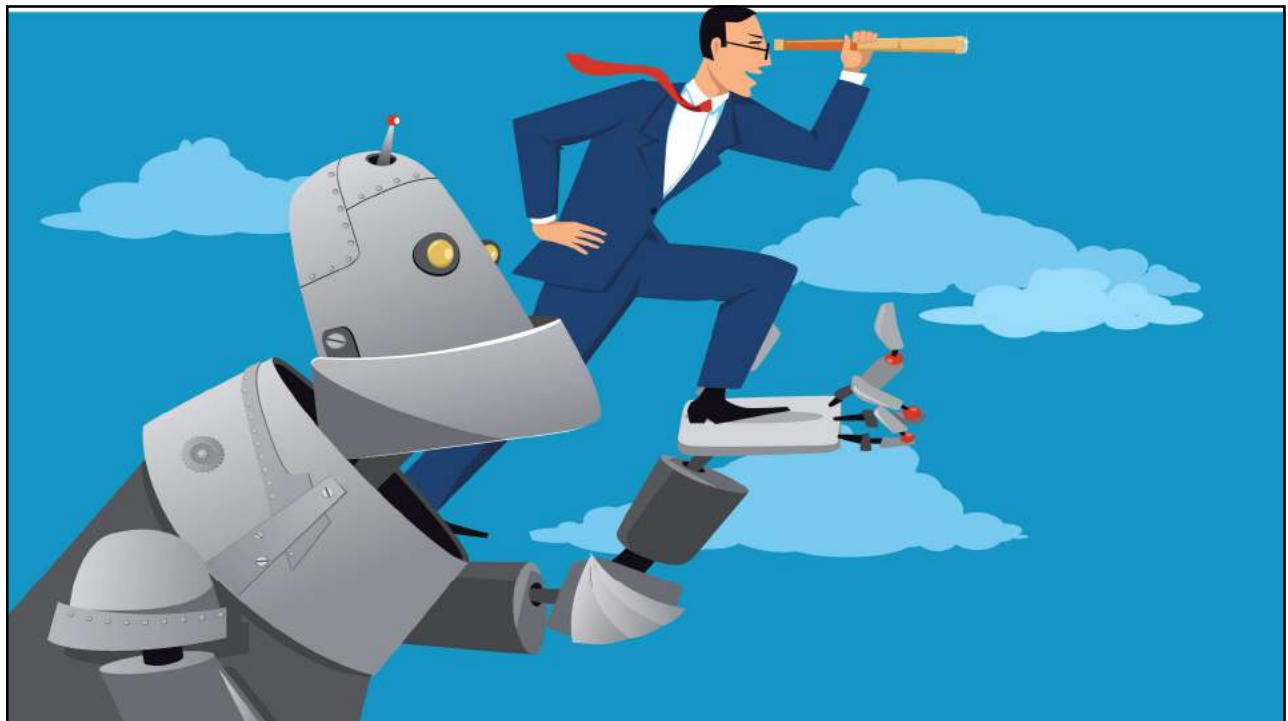
Theory

Algorithm

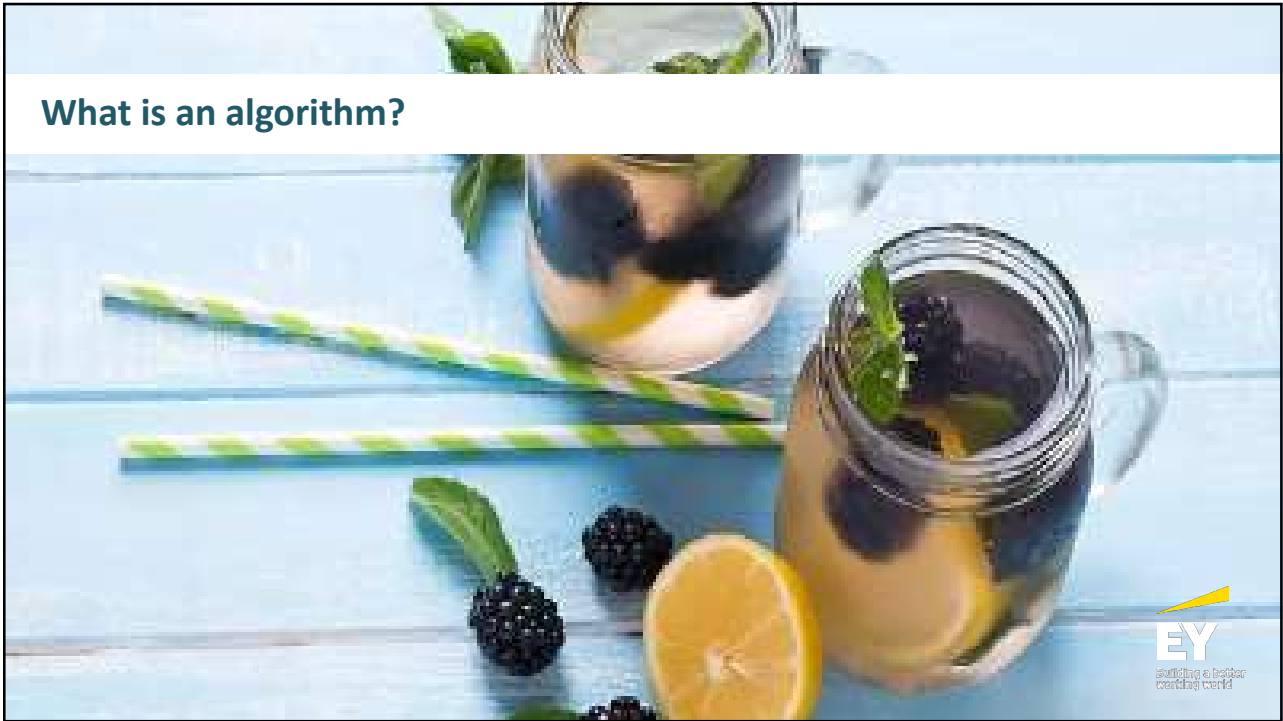
Model

Application

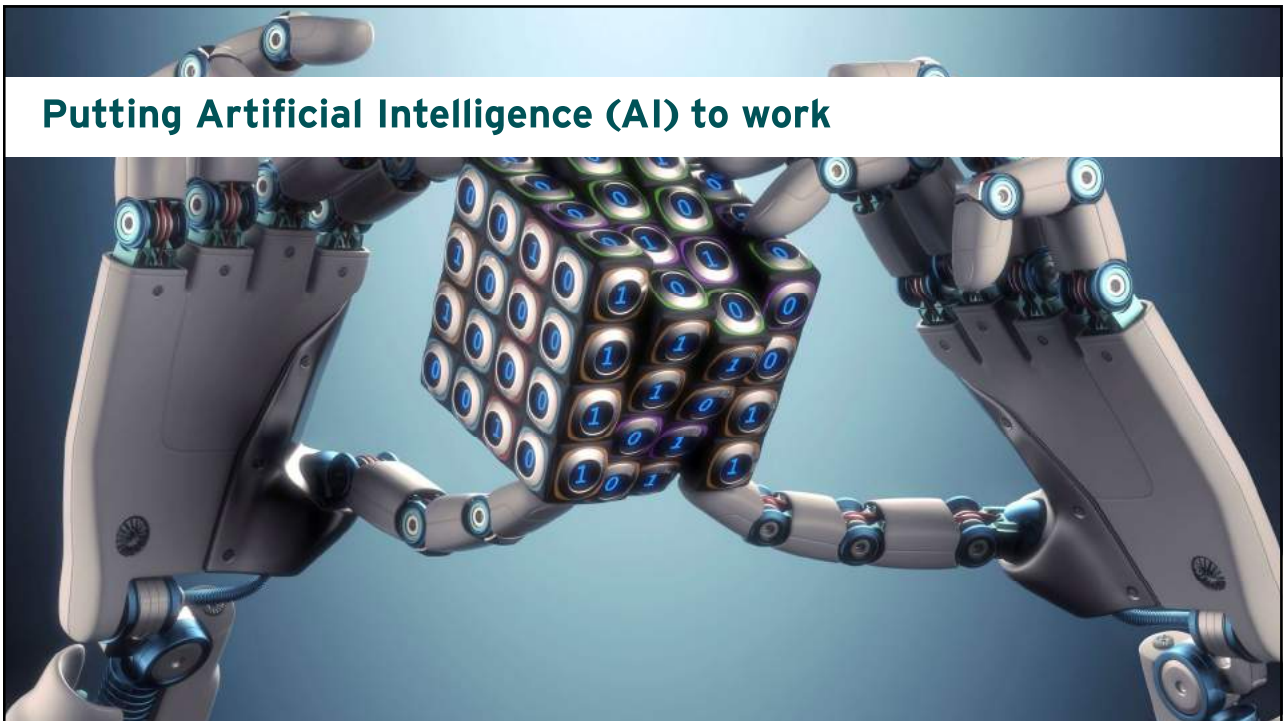




What is an algorithm?



Putting Artificial Intelligence (AI) to work



Nice things are happening....



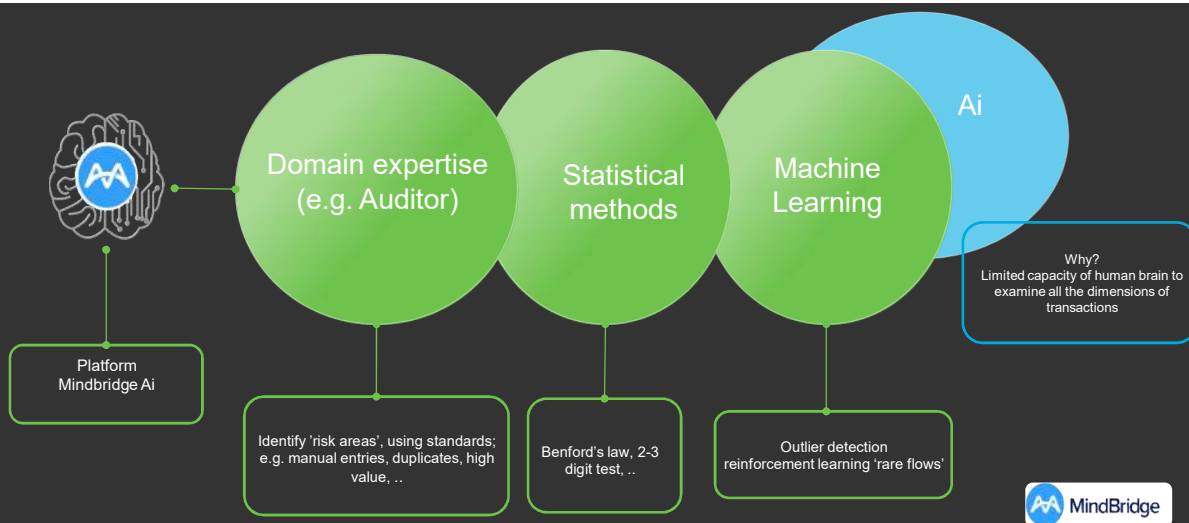
Innovation & Technology coming together



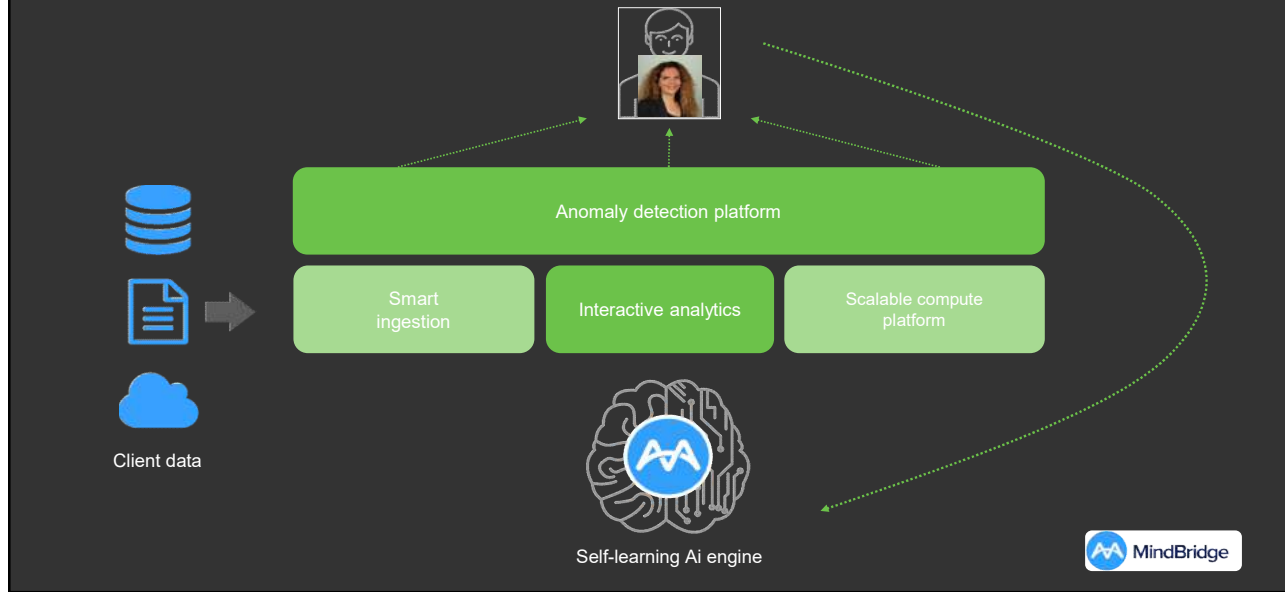
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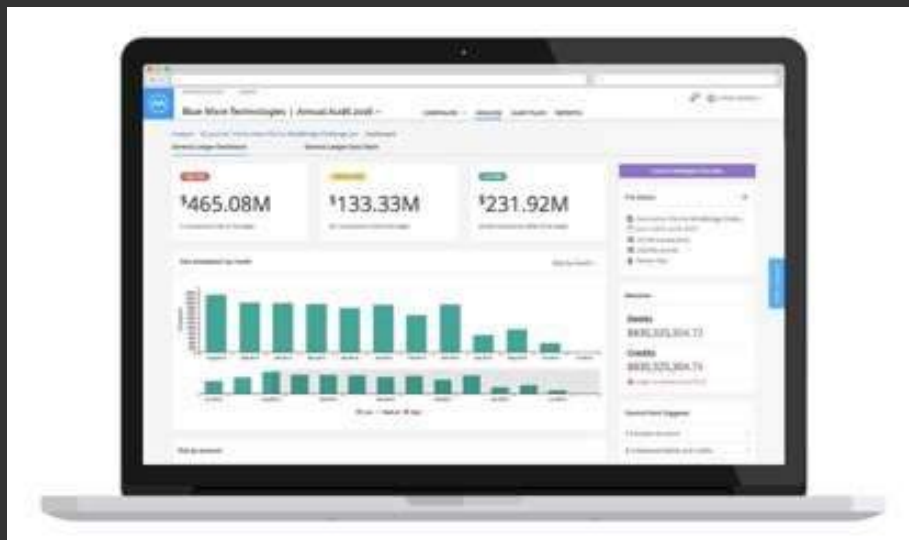
Automated insights powered by Artificial intelligence: Example: Best of breed techniques



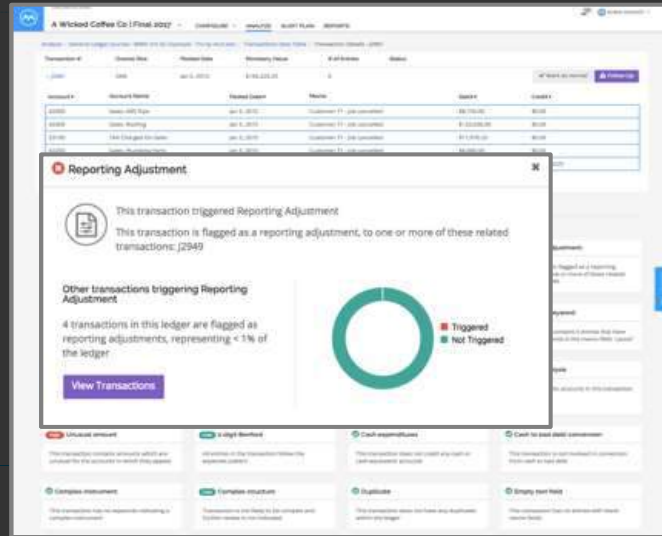
Example Architecture: Ai learns from humans



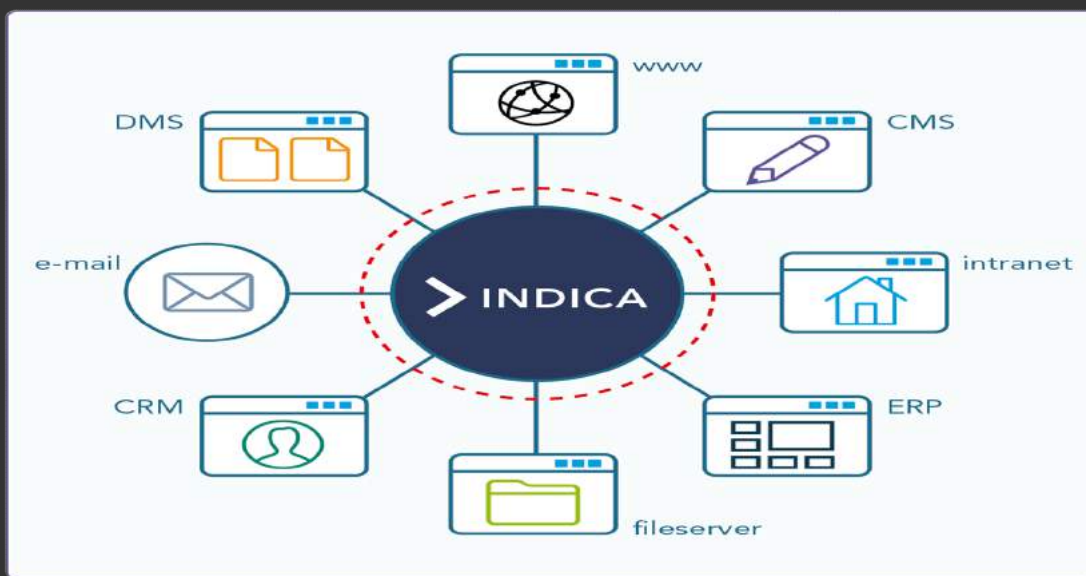
Example: "Intelligently Guiding Humans"



Example: "Intelligently Guiding Humans"



Example: Enterprise search - INDICA (<https://indica.nl/esearch/>)



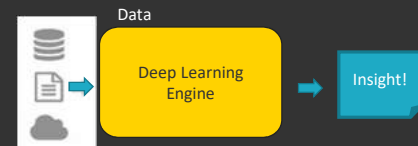
Think about this Concerns about using Ai (towards deep learning)

Opportunities:

- ▶ No need to do feature extraction as the 'Deep Learner' will figure out for itself what is important ...

Challenges:

- ▶ Lots of computing power is required
- ▶ Bias in machine learning is potentially a problem
- ▶ Tends to create Black Boxes and the outcomes are hard to explain, and often not understood even by experts
- ▶ Lack of understanding about these technologies could cause issues
- ▶ Can be used as a 'focusing function' but not an explanation



"AI won't replace CPAs, but CPAs that
use AI will replace the ones that
don't"

-John Bednarek, MindBridge Ai

The Future of Auditing



Auditors and Machines Working Together



Thank You!



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