World Quality Day

AI – en motor för framtidens hållbarhet och kvalitet

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When and Where did Al Begin?

A Brief History

 1949: Claude Shannon publishes the first article on developing a chess-playing computer program

50's

 1997: Deep Blue is the 1st computer to beat a reigning world chess champion

90's

2016: Google DeepMind's AlphaGo beats Go champion Lee Sedol

AlphaGo

2010's

 1956: Term "artificial intelligence" is coined at Dartmouth conference led by John McCarthy

70's

 2011: IBM's Watson defeats two former *Jeopardy!* champions for the win







Artificiell intelligens (**AI**) (Engelska: **Artificial intelligence**, även **machine intelligence**) är förmågan hos datorprogram och robotar att efterlikna människors och djurs naturliga intelligens,^[2] främst <u>kognitiva</u> funktioner såsom förmåga att lära sig saker av tidigare erfarenheter, förstå naturligt språk, lösa problem, planera en sekvens av handlingar, samt att upptäcka mönster och regler..

Machine Learning (ML)

A machine-learing system, conversely, can learn as it goes. With each new data set, it updates its models and the way it "sees" the world."

Types of Al



How you can split AI into pieces



Machine Learning



A step deeper ...



Why now



What is driving the development in AI



What AI can do for you



Al assists in five main business areas, which make most sense for you?





Demystifying the process



What can be done by AI today





MOST PROBABLE ORDER

	0

DESCRIPTION

Often orders get filed in a wrong way and customer service needs to find out what a customer wanted to order. For this we can use a distance measure between existing orders and the current one to show most similar orders

699	
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DATA REQUIREMENTS

We need Orders and their descriptive items (variables)

BUSINESS OUTCOME



Knowing what customer wants to order helps reduce the work related to incomplete orders

\$

RATING





IRL where AI could have saved....



SLOTTING OF GOODS

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DESCRIPTION

The unsupervised learning algorithm from the association-rule family is used to show relationships between goods and to show which goods are typically ordered together.

\$

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DATA REQUIREMENTS

Data from customer orders is used. Based on this the algorithm builds connection between goods that are associated with each other.



BUSINESS OUTCOME

Placing together articles that are often bought together reduces the picking time by 15-30%





Applied AI Result....where AI saves a lot..



Optimisation E.g. Al for warehouse management



Pick Tour Distance: 315.02 m



Pick Tour Distance: 217.12 m

Conclusion



- Computers are superior in calculation and memory capacity.
- Computers do not have any feelings nor sick-leaves ;-)

If humans stop taking the jobs from the computers, both sustainability and quality will improve, creating a better world!

• Why is this not happening today then...?

Traditional Organigram.....









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