

DATA-DRIVEN BUSINESS

INTEGRATION DAXS 2019 - JOURNEY TO THE CLOUD

BUSINESS VALUE WITH AI AND HOW TO UNDERSTAND IT

What's in it for me?

- Gain a simple understanding around the concept of AI
- Understanding the difference between BI and AI.
- Peeking on how a business could transform into being more data driven.
- Get inspired on how AI could lead to business value for you!
- Demonstration of Machine Learning

Data is the foundation which enables smarter decision making.Yet 80% of all data is inaccessible, untrusted or unanalyzed.

ALLENSO-OF -14-00 - HALLENS



Al Philosophy

Learn from experience



data Learn from experience



Follow instructions/explicitly programmed







Chatbots – Voice controlled devices using Natural Language Processing



Robots



Autonomous Cars



Al in Decision Support



Understanding Relationships Within the AI Sphere



- ✓ AI is the simulation of intelligent behavior within computers.
- Machine Learning is the science of getting computers to act without being explicitly programmed.
- ✓ Deep Learning is a subset of Machine Learning algorithms which leverage neural networks.

Al is a good compliment – Not a substitute – for human subject matter expertise



- Data beyond human scope
- Analysis more powerful than any mind
- Patterns too complex to perceive
- At lightning speed

- Effectively tackles tasks you feel bad asking a human to do
- Takes rapid action based on human direction

Al automates

standard

processes



- Struggles with long tail of possible situations
- Cannot reason or explain
- Struggles to instill trust and build engagement





Climbing the AI Ladder

- Trust Achieve trust & transparency in data
- Automate Apply Machine Learning algorithms (Everywhere)
- Analyze Scale your insights on demand
- Organize Build a trusted analytics foundation
- Collect Make your data simple & accessible

Inject intelligence into your solutions



Artificial intelligence is like a heart, it needs vessels to distribute knowledge

Distribute insights back to CRM, data warehouses or to specific target groups or even machines.



New data from data warehouses, sensor readings, other sources like CRM.

AZURE MACHINE LEARNING STUDIO -CLOUD SOLUTION - CASE STUDY

Al in practice within various fields

Manufacturing

Preventive Maintenance (End User) – Using sensor data for anomaly detection to prevent machine failure and put in the right measures just in time.

Preventive Maintenance (Supplier) – Develop new services for the machines provided based on sensor data in combination with AI.

Logistics – Dynamic route optimization that is reflective to everyday change.

Warehouse Optimization - Derive more accurate stock levels based on predicted demand

Warehouse Optimization - Derive accurate pallet locations based on the above statement to lower route distances and other wastes.

Forecast – Locate and asses external factors which impact on future sales.

Al in practice within various industries

Consumer goods

Propensity Modelling - Could be used to predict and suggest the propensity of future actions by trends in historic data. This can be applied on individual customers or groups of customer sharing the same behavior.

Retail

Classification Modelling - Could use data to segment customers based on predefined classes and gain business insight by understanding the hidden layers of segmentation that are not as obvious as age and income.

Campaign Success Rate – Find out if consumers really change buying behaviour because of your campaigns or not.

Customer Insights – Who is coming and most importantly who is leaving you along with pattern recognition to forecast what customers are on the verge to enter or exit.

Take offs

"AI" is an umbrellaterm which stretches' over many areas and is typically used to replicate and mimic humans interaction within some context. Having one thing in common, that they both evolve with time and gain experience.

Why are these concepts so popular now, when the mathematics has been available for centuries?

- The perception of Big Data and the organizational needs which demands the data-processing stage to be rapid together with computers having greater processing powers has raked the way for these models to emerge practical.

AI and Machine Learning is not only "Rocket Science"! You can implement AI in some level in your existing BI platform to enhance business value.

The availability of powerful tools in combination with a low threshold to get it up and running makes these models easy to use, deploy and maintain.

- If you want to preserve your competitive advantage you need to start your journey of AI

THANK YOU

Headed in the same direction – walk there together?

Johan Rastenberger Flead of Al and Analytics johan.rastenberger@enfogroup.com

Milad Yarahmadi Al Architect milad.yarahmadi@enfogroup.com