Al for Business Intelligence:

KEEPING HUMANS IN THE LOOP

Vladimir Kaladan Petkov

About



7 YEARS

→ D→TA PRO

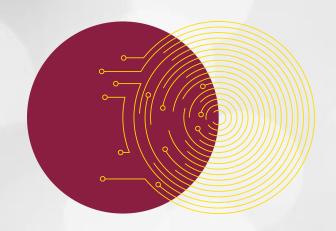
CTO of A Data Pro

3 YEARS



CEO of Identrics

Strategy



AS OF 2015

Integrating humans with technology



Data issues

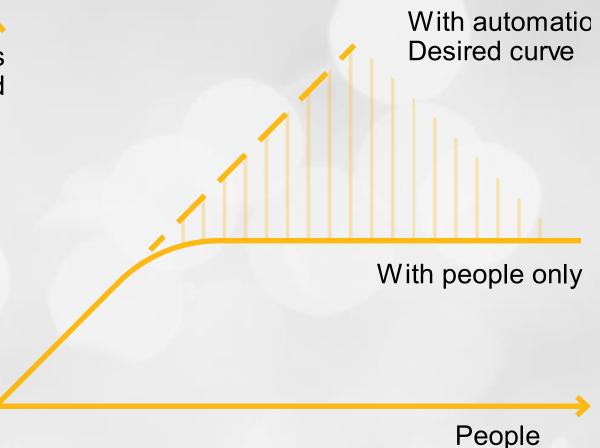
- Information is scattered
- · www is like a mish-mash
- Data is increasing exponentially
- Semantic web unadopted



Human issues

Number of documents to be processed with high quality

- Flatline with big datasets
- High cost of manual labour
- Training times
- Knowledge loss



Machine issues

Computers are naturally unintelligent

They're too dumb to automate knowledge extraction and representation by themselves

The solution

CREATÉ YOUR OWN SEMANTIC WEB

Our method

Human-in-the-loop machine learning



human-in-the-loop, adj.

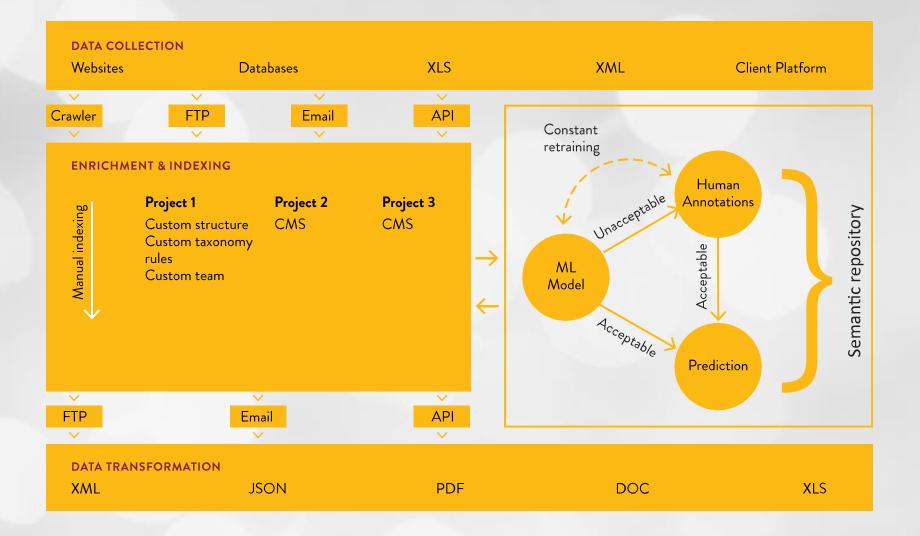
A strategic approach that integrates humans throughout the machine learning process, ensuring tailored and continuous model training, and solving problems associated with tasks such as document classification, entity and topic extraction, and sentiment analysis.

How it works



Data

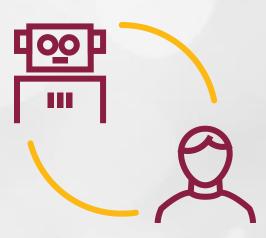
Semantic repository



End goal

Collective intelligence

Humans & technologies working in perfect synergy





The good

- Less man-hours on menial tasks
- Increased human productivity
- More insight based on bigger datasets



The good

- Constantly learning machine
- Increasingly accurate model
- Human supervision throughout



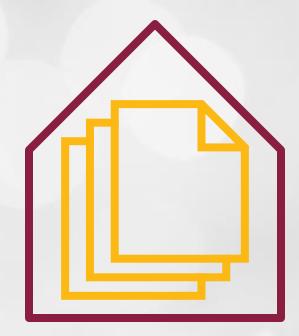
The good

- What gets inside stays inside
- No human knowledge is lost
- Acquired knowledge can be reused



The bad

- Data collected & converted
- Data stored locally
- Mirroring the www



The bad

- Technical setup & initial training lead to longer startup times
- Needs constant retraining via backpropagation
- Not that flexible, compared to human teams [shorten points]



The ugly

100% ACCURACY IS IMPOSSIBLE FOR MACHINES

THANKS Any questions? Shoot. → DATA PRO vladimir.petkov@adata.pro www.adata.pro