

Jonas Pollet – Innovation Manager
Bert Pappijn – Business Dev. Manager

Let's chat about Robots

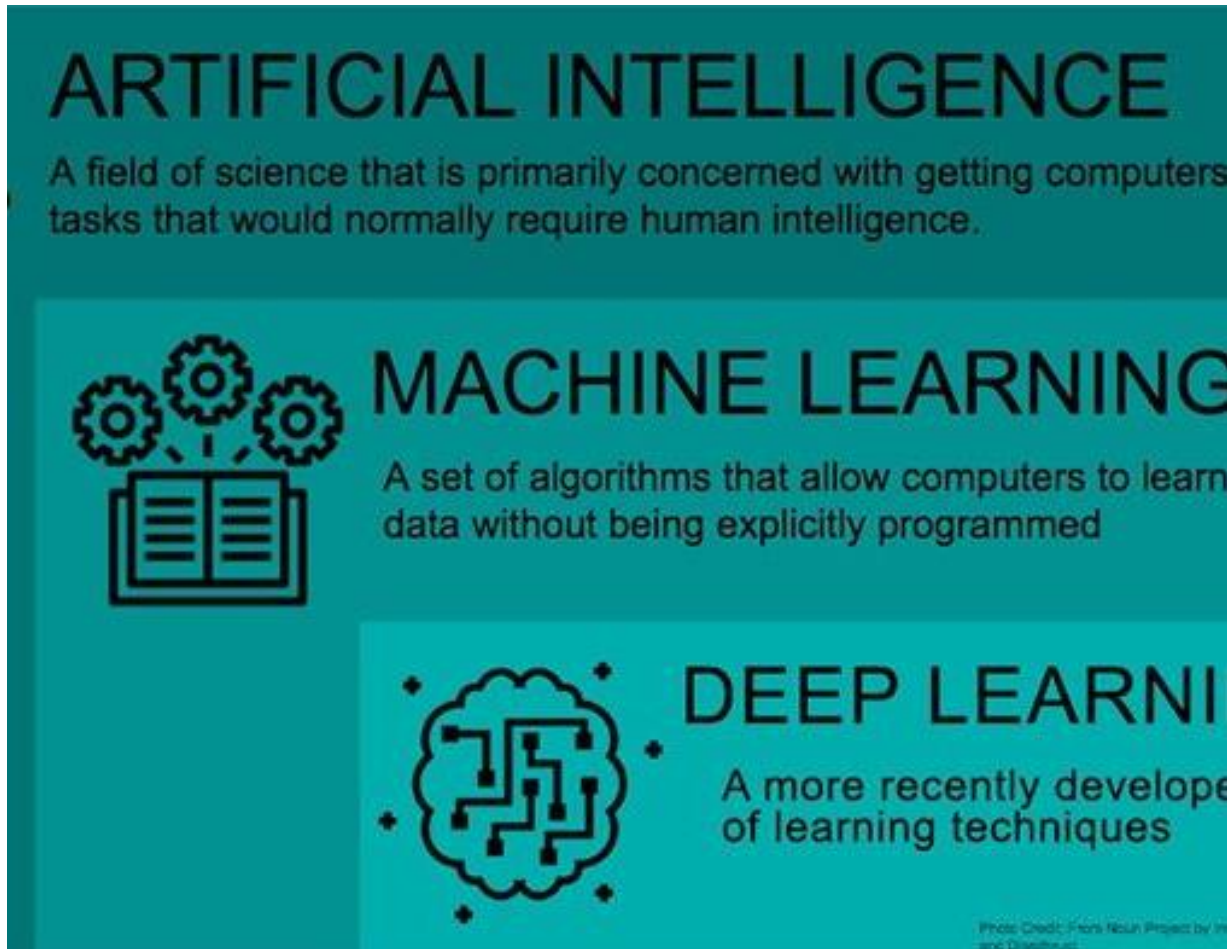
AGENDA

TODAY

1. What is AI?
2. What are Chatbots?
3. Some examples
4. Chatbots @ Partena Professional
5. 7 step program

1. What is AI?

What is AI?



Mentioned for the first time in 1955 – J. McCarthy

“AI” is a big concept where a lot of subdomains and applications gather

AI: the intelligence that enables machines to solve problems like humans would do based on our natural intelligence

ML: subdomain of AI – science where machines learn by themselves based on data (structured and unstructured)

Deep Learning: subdomain of ML – overall concept that gathers all learning techniques that look like those of humans – different ways of doing what our brain is doing e.g. Neural Networks and Deep Neural Networks

Different levels of intelligence

Basic Automation

- Human triggered
- Simple rules based
- Single system
- Screen scraping, Scripts, Macros, Workflows

Robotic Process Automation

- Human or system-triggered
- Rules based, high-volume processes (business & IT)
- Front, middle, back office
- Structured data
- Multiple system (swivel-chair operators)
- Enterprise-level

Enhanced Process Automation

- Supported by basic analytics / decision support
- Optical Character Recognition (OCR)
- Intelligent document processing
- Structured and unstructured data
- Simple web chatbot integration (e.g. FAQ)

Algorithmic Automation

- Complex processes and decisions
- Supported by predictive / prescriptive analytics
- Machine learning, narrow intelligence, basic reasoning
- Unstructured & big data
- IoT integration
- Natural Language Processing (NLP), chatbots

Artificial Intelligence

- Cognitive technology capable of emulating human capability incl empathy
- Full end-to-end autonomy, hypothesizing, reasoning
- Deep learning, deep neural networks, AI
- Full speech recognition and generation
- Fully capable virtual agents, omni-channel
- Augmented & virtual reality



NLP – substream of AI

Artificial Intelligence

Natural Language Processing

Machine translation

Sentiment analysis

Information retrieval

Text classification

Information extraction

- NLP: Natural Language Processing
- NLU: Natural Language Understanding
- NLG: Natural Language Generation
- Very important researchfield for conversational agents, translation engines, ...
- Challenges in semantics and on intentcapturing in different languages

There is a difference between “how to book a ship” and “how to ship a book”

2. What are chatbots?

A conversational agent

Chatbot or bot – is a computer program that simulates or enables a natural conversation.

Users communicate with a **chatbot** via the chat interface or by voice.

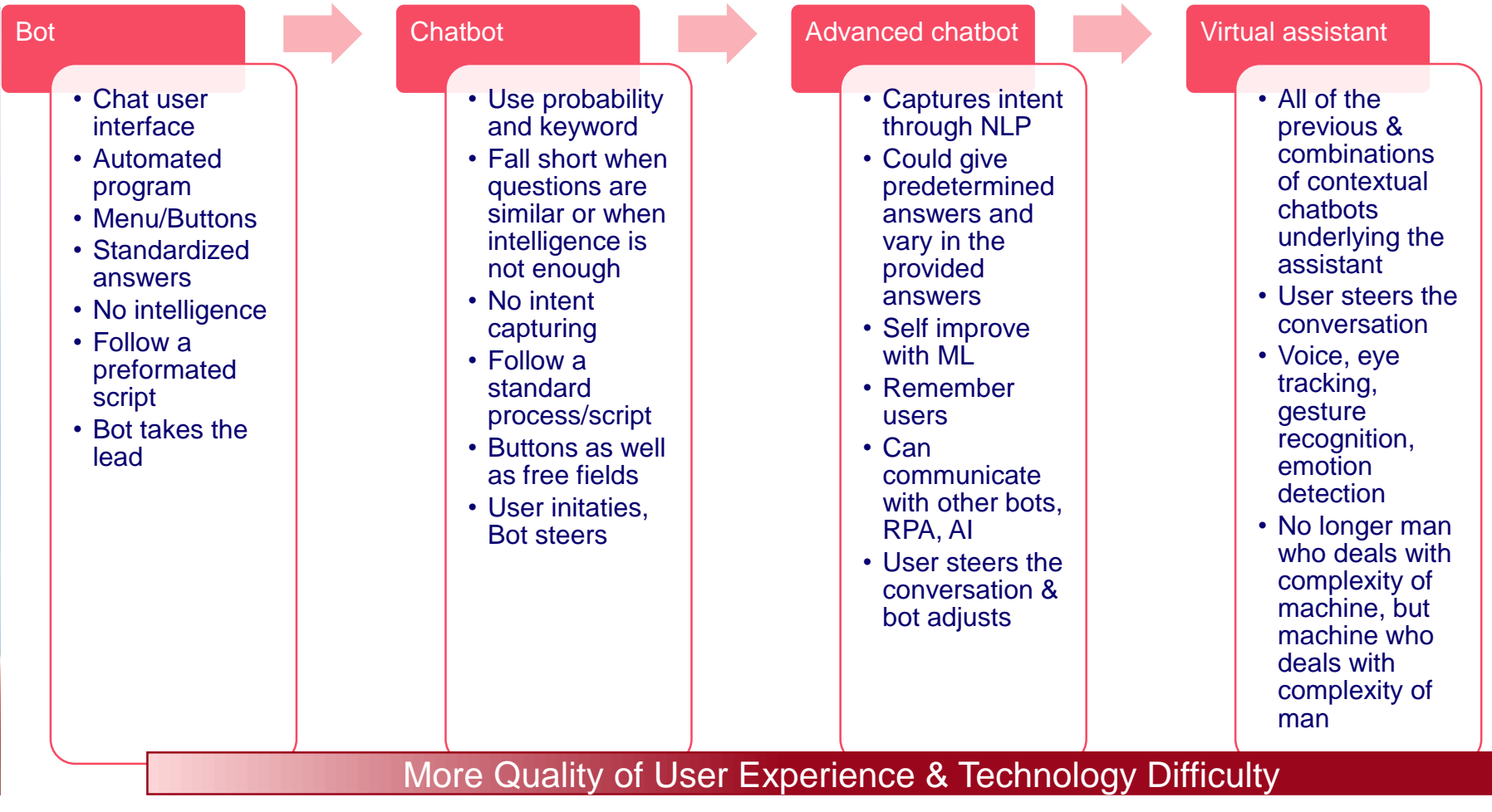
Chatbots interpret and process user's words or phrases and give an instant pre-set answer based on the use of words and the context they are given in.

Chatbot = combination of “Chat” and “Robot”.

It's fast and helps!

- Fast in setting up
- Fast in responding to questions with predefined answers
- Fast in detecting the customers needs
- Fast in accessibility with a frictionless interface
- Helps 24/7
- Helps unlimited users at the same time
- Helps customer services with repetitive tasks
- Helps always because there is a way out (escalation model)
- Helps by pointing out the right answer and by undoing all the unnecessary information
- Helps in customer self service models (attractive to some generations)

But there are different kinds of chatbots



3. Some (really good) examples

Number 1!

Google's Duplex Uses A.I. to Mimic Humans (Sometimes)

In a free service, bots call restaurants and make reservations. The technology is impressive, except for when the caller is actually a person.

- Google Duplex - <https://www.youtube.com/watch?v=D5VN56jQMWM>
- Very powerful AI and stretches out to google assistant
- Impressive NLP capabilities + interaction features

New German Law Includes Voice Assistants Under Changed Media Regulations

ERIC HAL SCHWARTZ on February 27, 2020 at 4:30 pm

Number 2!

Jerry: "Finding Mr. Right" is a great movie. What do you think Xiaoice?

Xiaoice: Oh, romantic comedies are my favorite! It stars Tang Wei, who finds love in Seattle. You should watch it.

Jerry: Do you like Tang Wei?



Xiaoice:

Xiaoice: A goddess! She stole my heart... and then went off and married!

Tom: To who?

Xiaoice: Haven't you heard?

Xiaoice: Tang Wei is engaged to famous Korean director Kim Tae Yong.

Miljoenen Chinezen in de ban van virtuele vriendin: wie is Xiaoice?

Google verbaasde ons in mei met een telefoongesprek dat werd gemaakt door hun virtuele assistent. Hiermee wilde de techgigant tonen hoe ver het staat met de ontwikkeling van artificiële intelligentie (AI). Ondertussen werkte die andere reus, Microsoft, in alle stilte aan een eigen assistent die uitgroeide tot een fenomeen in Azië. Haar naam is Xiaoice en ze is daar de grootste social media celebrity. Ze heeft in talkshows gezeten, schreef een liedje en publiceerde zelfs een poeziëbundel. Allemaal dankzij AI.

"H *allo hoe gaat het?"*
"Slecht, ik voel me niet zo lekker."
"Waarom?"
"Ik heb hoofdpijn en buikpijn."
"Kop op, het komt wel goed. Je zal je later wel beter voelen."

- Xiaoice of Microsoft (little ice)
- In 3 months → 500 million conversations
- Passed the Turing test during (average) of 10 minutes
- Average of 60 minutes per conversation

Number 3!



Meet the Robot Telemarketer Who Denies She's A Robot - Part 1

- Samantha West
- Telemarketer selling insurances
- Changed legislation in Us where every voice/chatbot has to identify himself as a chatbot
- <https://www.youtube.com/watch?v=22ZaKbxmEMA&t=1s>

4. Chatbots @ Partena Professional

The screenshot shows the Partena Professional website. At the top, there is a navigation bar with links for 'Nieuws en informatie', 'Knowledge Center', 'Kantoren', and 'Contact'. Below this is the Partena logo and a menu with 'Zaak starten', 'Inkomen beschermen', 'Personeel beheren', 'HR-expertise inwinnen', and a 'Klant worden' button. A search bar is also present. The main content area features a headline: 'Coronavirus: Partena Professional staat meer dan ooit aan uw zijde!'. Below the headline is a paragraph of text explaining the company's role during the crisis. At the bottom of the article are social media icons for Facebook, LinkedIn, YouTube, and Twitter. A floating sidebar titled 'Info over Corona' is visible on the right side of the page, containing a search bar and several blue buttons for different information categories.

This is a detailed view of the 'Info over Corona' sidebar. It features a dark blue header with the title 'Info over Corona' and a smiley face icon. Below the header is a search bar with the placeholder text 'Uw zoekterm'. The main content area is titled 'Ik zoek informatie' and contains a vertical list of blue buttons with white text: 'voor de zelfstandige', 'voor de werkgever', 'voor de werknemer', 'over de heropstart', 'over overbruggingsrecht', and 'over steunmaatregelen'. At the bottom of the sidebar is a white box with the text 'Stel hier uw vraag' and a smiley face icon. A vertical scrollbar is visible on the right side of the sidebar.

Development timeline



18/03/2020

Belgian lockdown

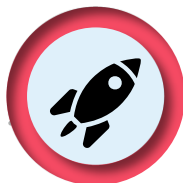
20/03

Chatbot idea



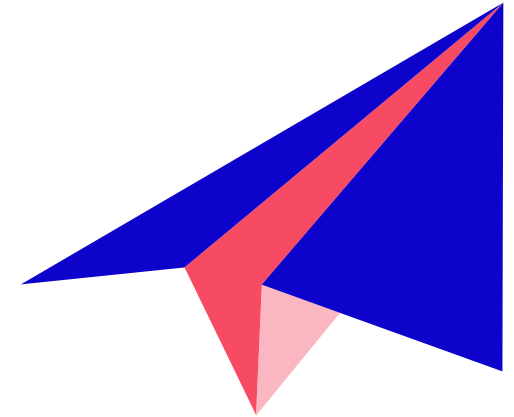
23/04/2020

Escalation mode added

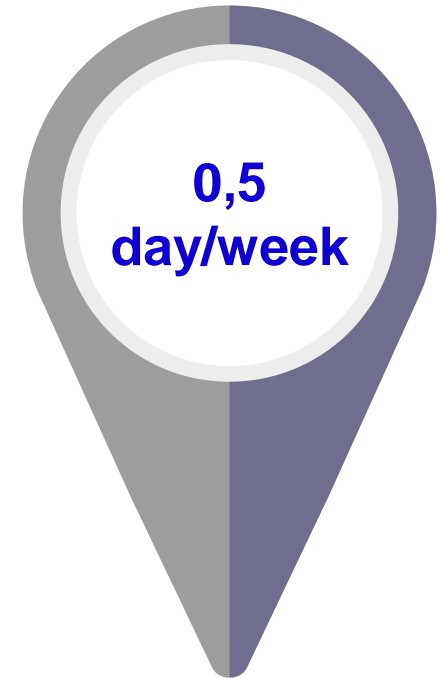
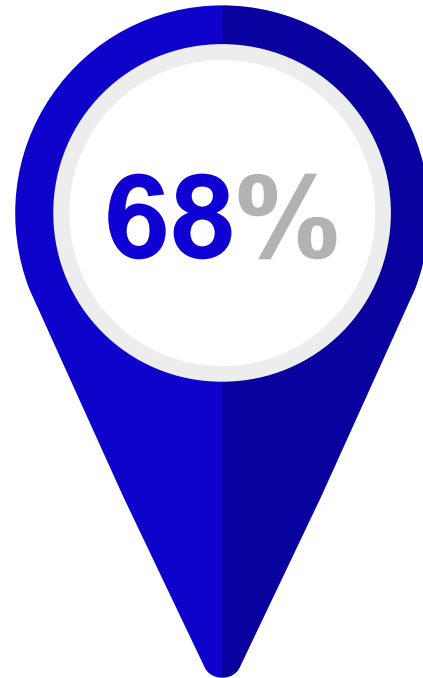


1/04/2020

Launch Alex corona



Alex today?



User feedback

CONTENTS

Clair – complet –
précis – compétent –
réponses et liens utiles

Rapide – simple –
efficace – accès
facile

TOOL

Interface très
agréable

UX

Meet Louise

Currently presenting Give Control X Stop Presenting

http://neo.partena.dom/Pages/home_nl.aspx

File Edit View Favorites Tools Help

neo Hallo Pollet, Jonas Zoeken... ER|NL

HOME ONZE CLUSTER ONZE METIERS HR MARKETING WERKOMGEVING LEVEN IN DE ONDERNEMING

Niet te missen

Een groenere wereld: van droom naar realiteit!
nov. 21 - Directie

Hier vindt u de speech van Alexandre Cleven tijdens de Fiesta, en een speciaal verzoek aan alle medewerkers

In één klik!

A Greater place to Work
@PARTENA

Who is who?

Zoeken

Actualiteit Partena Professional

NEWS On, Out en ... Move ?
03.12.2018 - 10:00 - Human Resources

Vanaf nu verschijnt er een nieuwe categorie in de In / Out die op NEO is gepubliceerd

!!! Captain's Table
03.12.2018 - 10:00 - Directie

Het directiecomité gaat heel binnenkort van start met het derde en laatste initiatief van zijn GPW actieplan

Info nieuwe kinderbijslagregeling
03.12.2018 - 07:00 - Parentia

379.933 gezinnen ontvangen binnenkort de Parentia-mailing over hun nieuwe regionale kinderbijslag.

Opportunititeit Key Account Manager Corporate - Regio Zuid

Dit was de Fiesta 2018...

KLIK HIER !

Medewerkers info

- 01.12 IN - Elisa Thaens
- 03.12 IN - Alexia Bardet
- 03.12 IN - Elisa Lingier
- 10.12 IN - Victoria Gins
- 10.12 IN Dominique Pepin

IN / OUT >

Kalender

DECEMBER 2018

22/09/2020

16:26 3/12/2018

De regels in geval van ontslag

Auteur: By Partena Professional Leestijd: 4min

Het ontslag past in een **duidelijk kader**. Wat ook de reden voor het ontslag is die wordt ingeroepen, de **regels die in de wet zijn bepaald** respecteren. Ook al is het in dergelijke omstandigheden niet altijd duidelijk welke **houding** is aangewezen.

De beslissing van ontslag meedelen aan een werknemer

Afscheid nemen van een werknemer is nooit makkelijk. Noch voor de werknemer, noch voor de werkgever.

Alex



Hallo, ik ben Alex. Ik help werkgevers bij de opmaak van een ontslagbrief bij opzegging, verbreking of een onderling akkoord over het einde van een contract.

Alex



Wil je graag meer info over timing, pricing en contactmogelijkheden?

[Lees de informatie](#)

Alex



Voor we verder gaan, wil ik je vragen akkoord te gaan met de Terms & Conditions

[Lees de Terms & Conditions](#)

Alex om 4:50:00 PM

[Typ je bericht...]



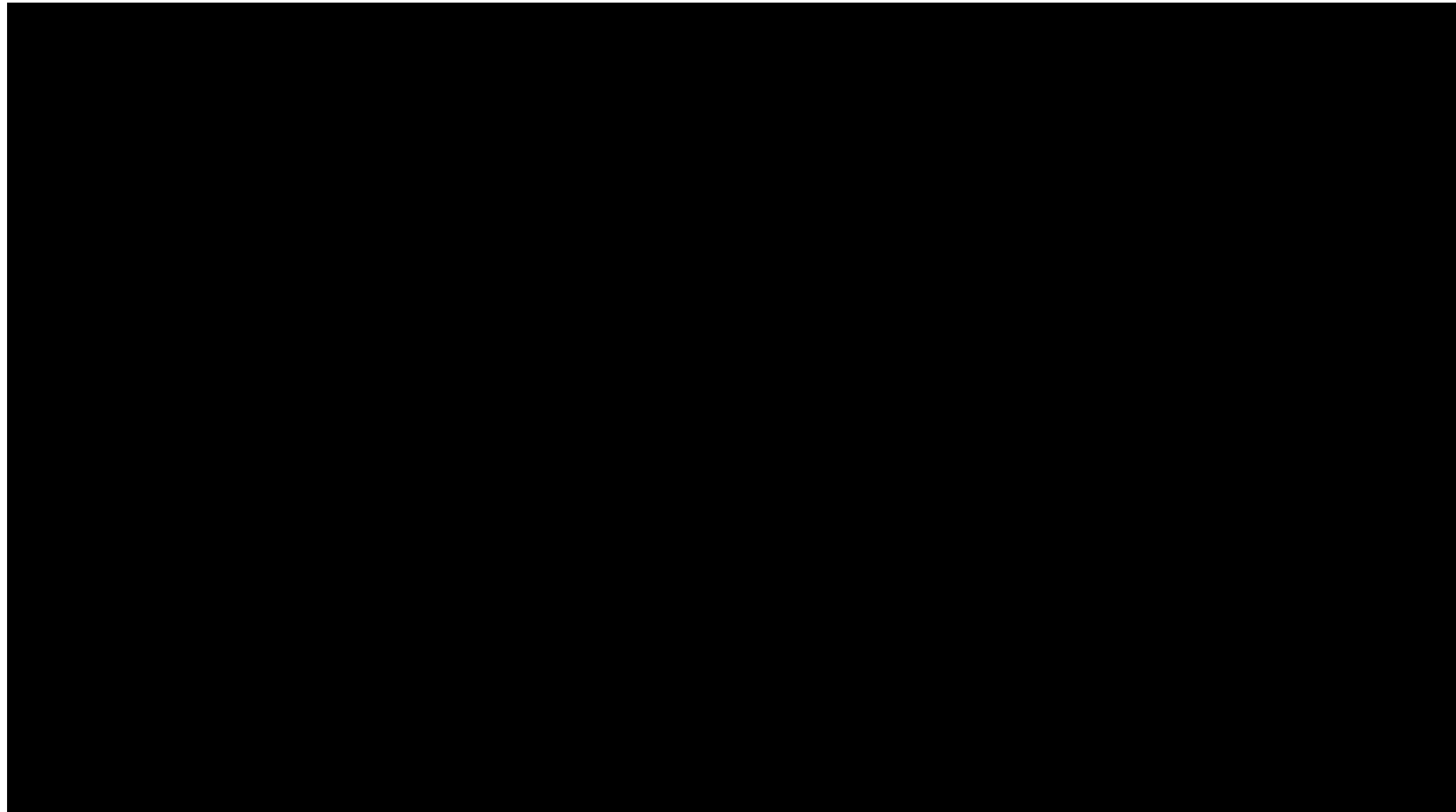
[General Information](#)

[Legal Information](#)

AI by Partena Professional

HCM : in HR selfservice delivery

- Partena employees ask the chatbot the questions he used to ask an HR officer



**AI
by
Partena
Professional**



Alex Corona

Meet Louise

Alex Ontslag

Louise HR



**Chatbot @
Your Service**

**by
Partena
Professional**

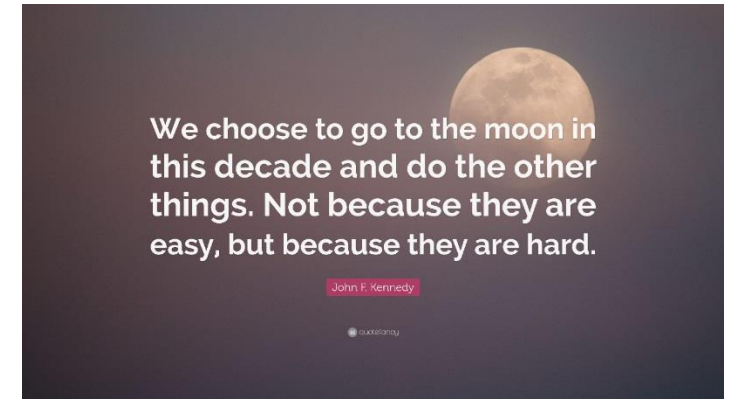
Customized Chatbot for each own organization!

- in HR selfservice delivery
- Your employees ask the chatbot the questions he used to ask an HR officer

5. 7 step program

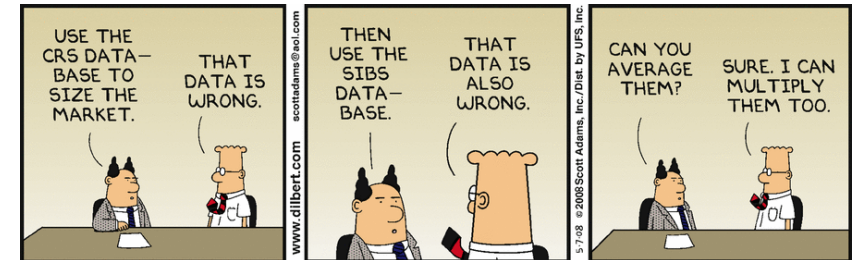
1. Think Big, Act Small

- Start moonshot thinking but define clear goals
- Start experimenting → don't wait for 'the' solution
- Start with well structured processes – can we measure it, can we define it, is it repetitive, how often do we do it, ...
- Start from the business, not the technology



- You should not care about the complexity of the algorithm as long as it does its job
 - Endless upgrading is interesting and tempting, but will probably will not add value
 - Rather pay attention to your data
-

2. The algorithm doesn't matter



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www.glasbergen.com



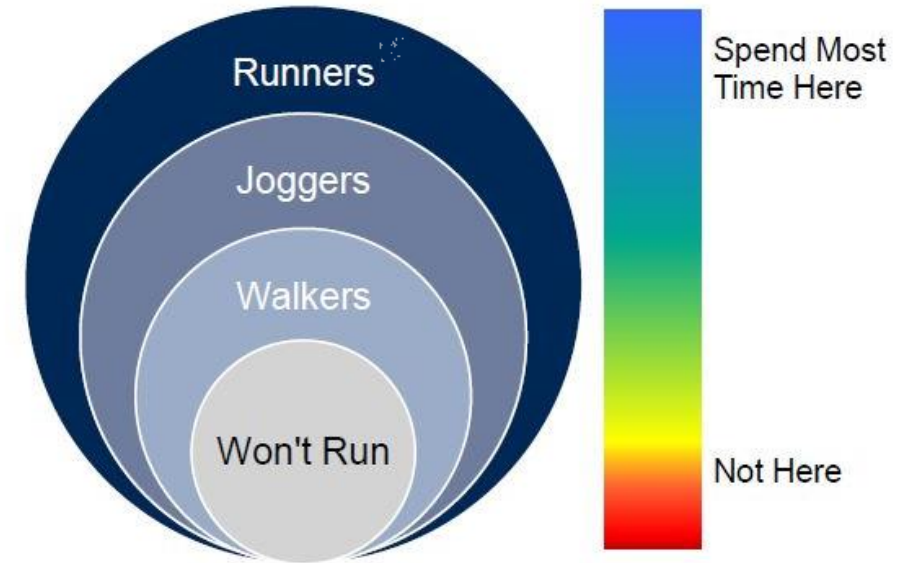
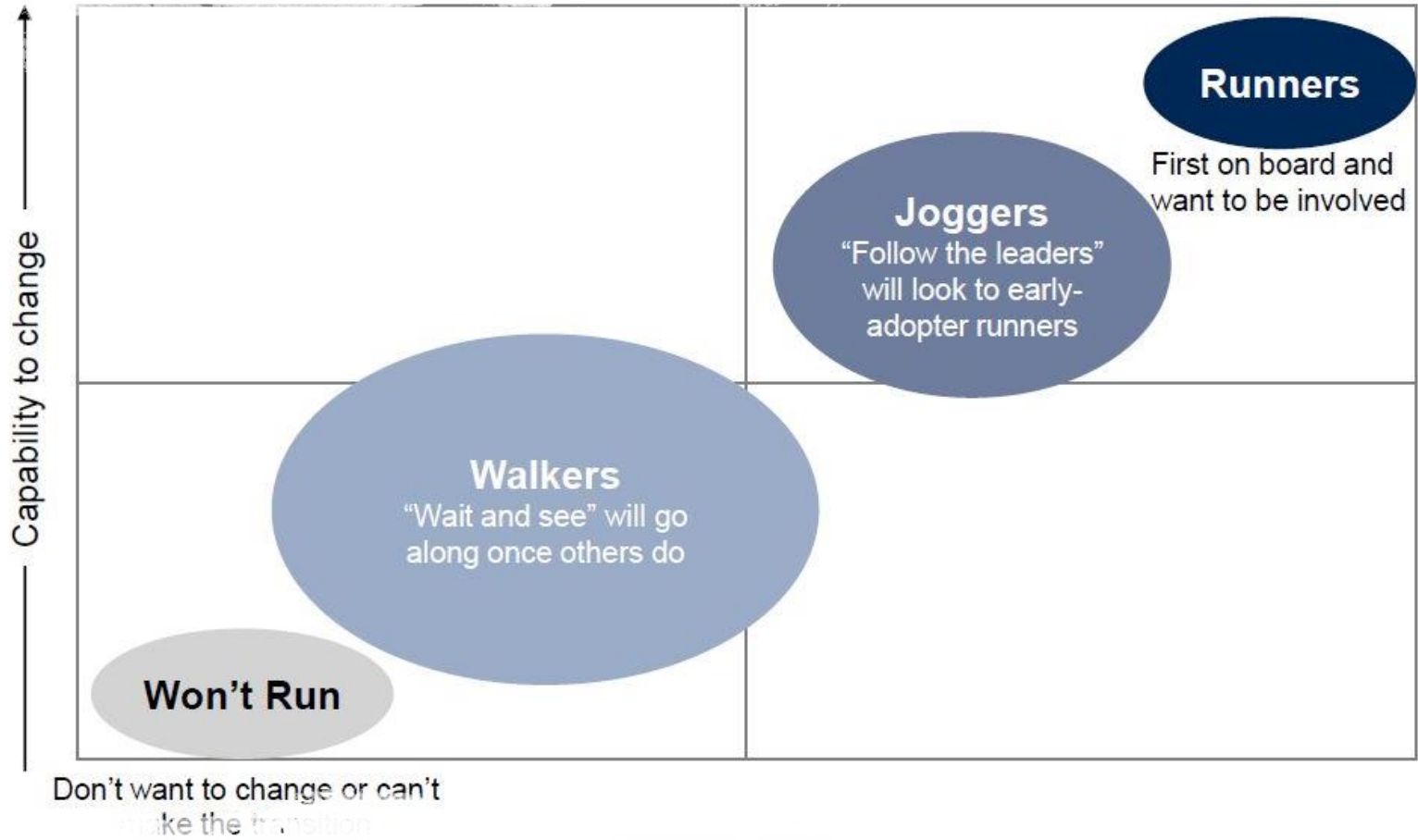
“I was floating in a tunnel toward a very bright light and then a voice told me I had to go back and finish listening to the presentation.”

3. Communication, communication, communication

- Share the progress, share information, let the ideas live and communicate on goals and opportunities within the organization
- Share all possible information with the development team → if they know the current process/problems and they know the strategy, this will make more sense when developing

4. Understand the building blocks

- Businesspeople should set the requirements and strategy, but it is worth it to understand the building blocks of technology, data, ...
- Don't assume it is easy
- Set the right expectations about ROI
→ not immediately



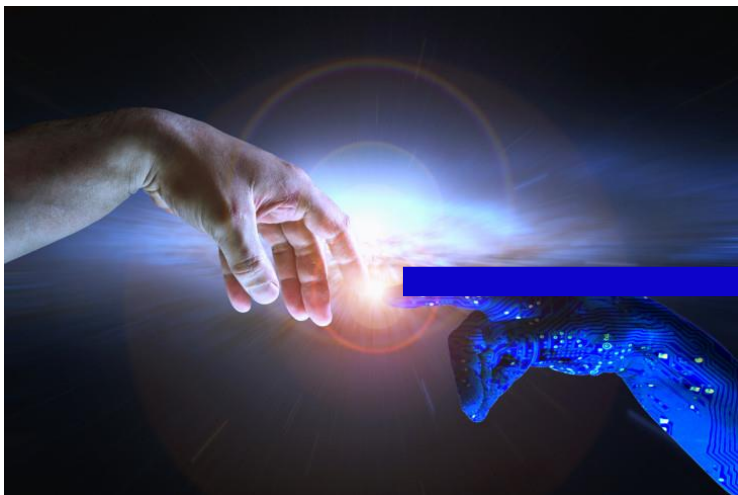
5. Manage change!

- All departments should be involved
- Every unit needs technologists
- Measure overall outcome (not only output)

6. Set-up an AI strategy!

7. There should be AI in Team + Put the people back in “Human Resources”

- Automate to liberate!
- Invest in people for ‘the moments of truth’
- AI is not only a data/technology/IT thing → work with people
- Synergie: $1+1=3$ - One should not replace the other but enrich it



→ This is where the magic happens

Put the people back in HR...

... leave the rest to AI



More questions

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