Demystifying AI for the contact centre

Replacing the hype with a winning approach

Dr David Naylor

March 2019

HUMANOTICS

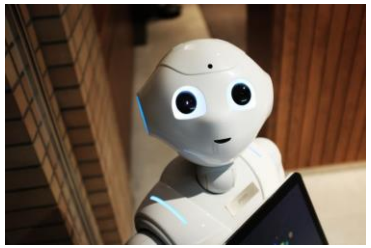
"We cannot teach our kids to compete with the machines who are smarter - we have to teach our kids something unique. In this way, 30 years later, kids will have a chance."

Jack Ma,
Founder Alibaba

Augmenting our operations with AI

Data	Information	Knowledge	Understanding	Wisdom
Symbols	Contextualised data	Organised information	Interpreted knowledge	Utilised understanding for decision making

Data Scientists and Data Engineers
Modelling relationships



"Operational AI"
Making predictions and recommendations

Operational Experts
Making decisions

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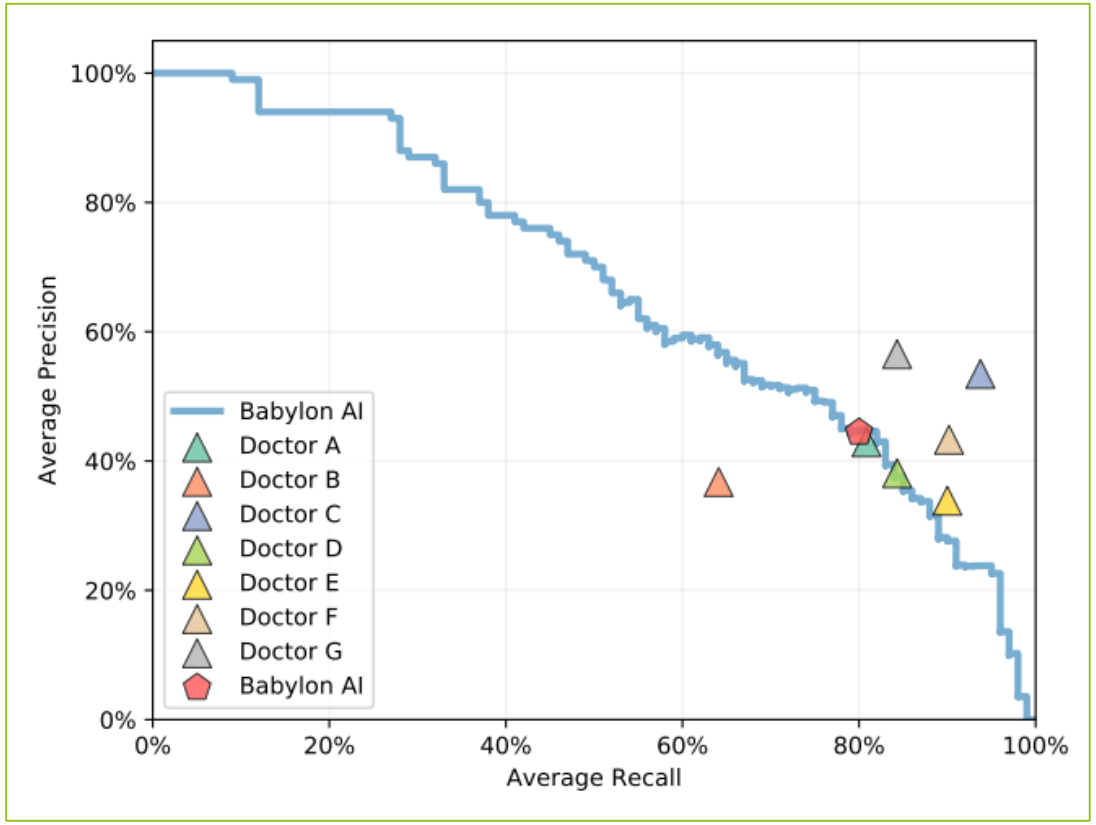
Good theory doesn’t always lead to great practice



Source: A comparative study of artificial intelligence and human doctors for the purpose of triage and diagnosis, Salman Razzaki et al, https://arxiv.org/pdf/1806.10698.pdf

Dr Murphy @DrMurphy11 · Jun 30

OK - we are going to put it to a vote. Right sided pleuritic chest pain with breathlessness & a swollen ankle.

The most likely diagnosis is?

2% Rheumatoid Arthritis

3% Ankle Sprain

90% PE with DVT

5% Costochondritis

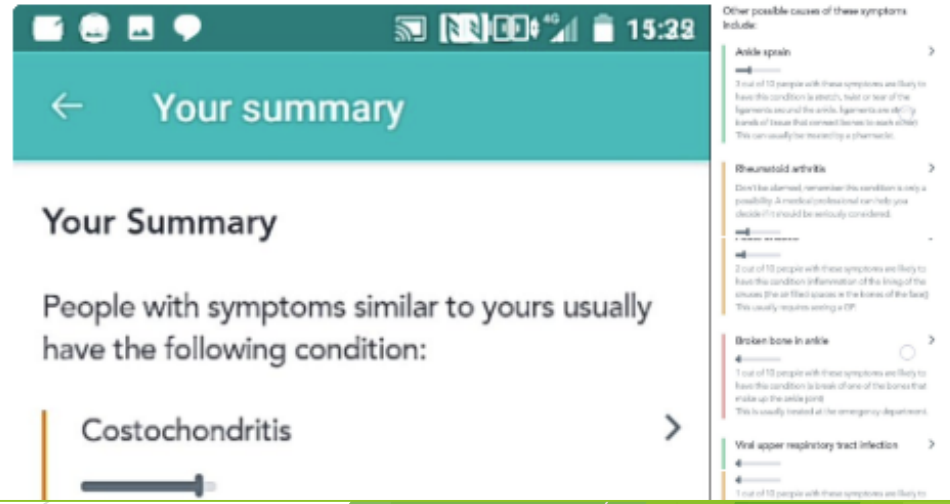
142 votes • Final results

5 9 7

Dr Murphy @DrMurphy11 · Jul 1

So, ~90% are correct; in someone presenting with breathlessness, R pleuritic chest pain & a swollen ankle - you NEED to exclude a PE /DVT.

The @babylonhealth #AI #Chatbot didn't even offer that as a differential & gave 90% confidence in the diagnosis of costochondritis!



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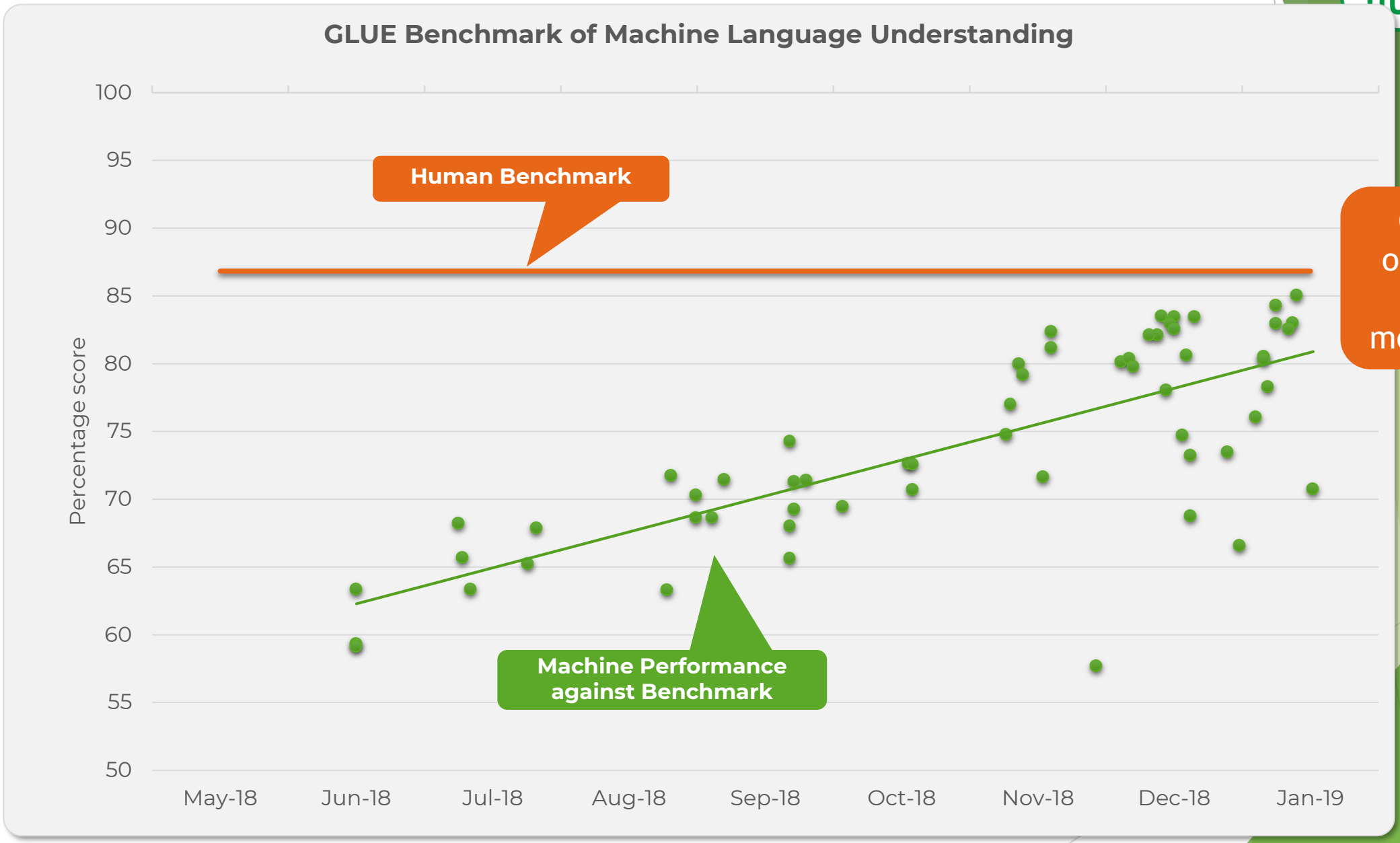

Commercial opportunities, social risks, moral questions

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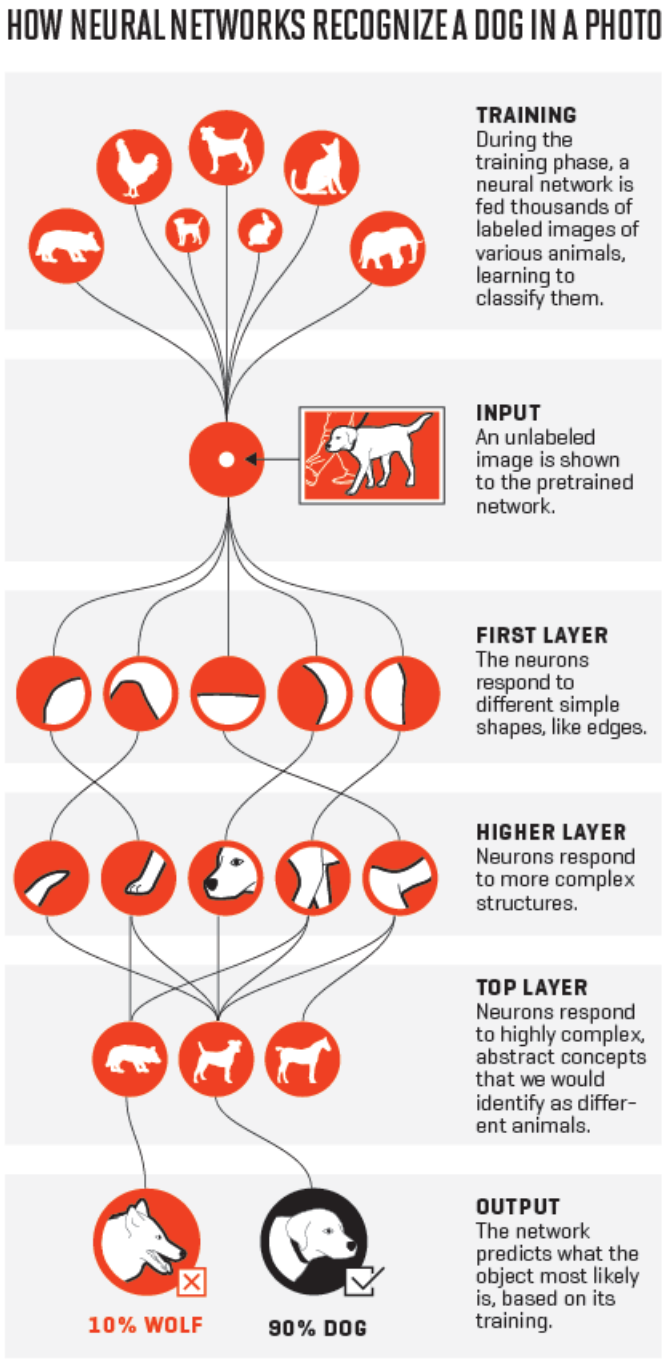

So what is a Neural Network, Machine Learning and Deep Learning?

Source: Fortune

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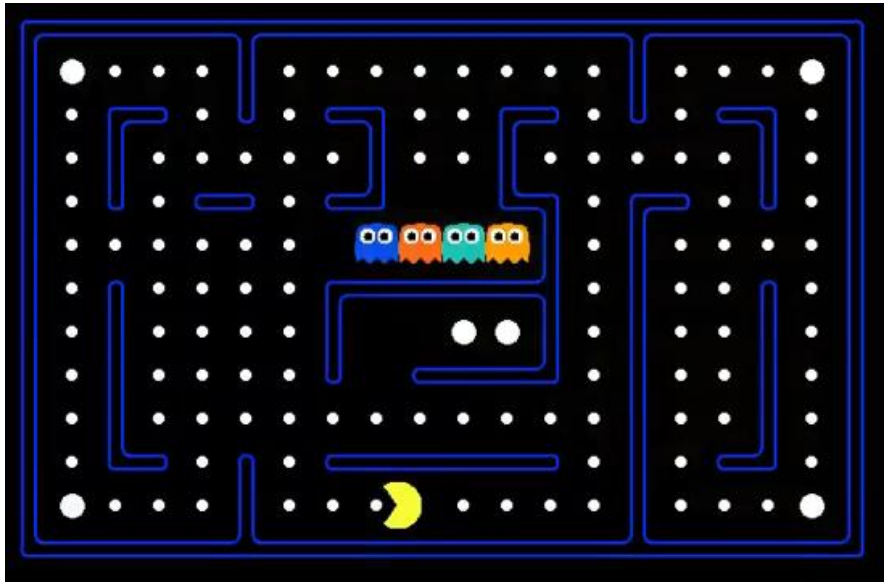
The challenge of ‘Operational AI’

“Goal Directed Adaptive Behaviour”

Learning PacMan in a lab



Real World, unsupervised

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AI in contact centres

Contact management

- Smart routing
- Agent assistance
- Self Service
- Proactive Service

Operations management

- Quality & Coaching
- Recruitment
- Planning
- Insight

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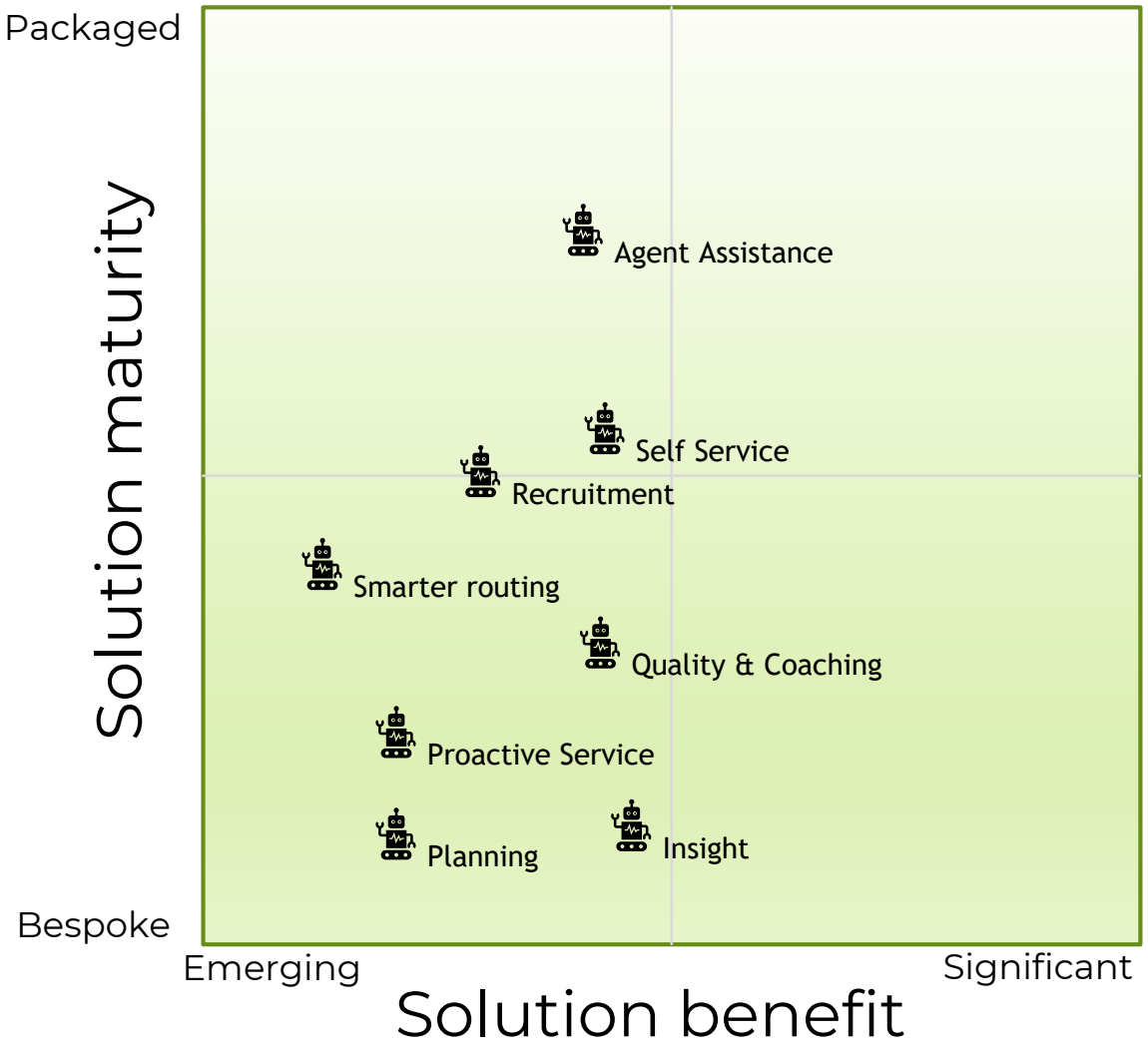
AI Maturity-Benefit matrix, 2019



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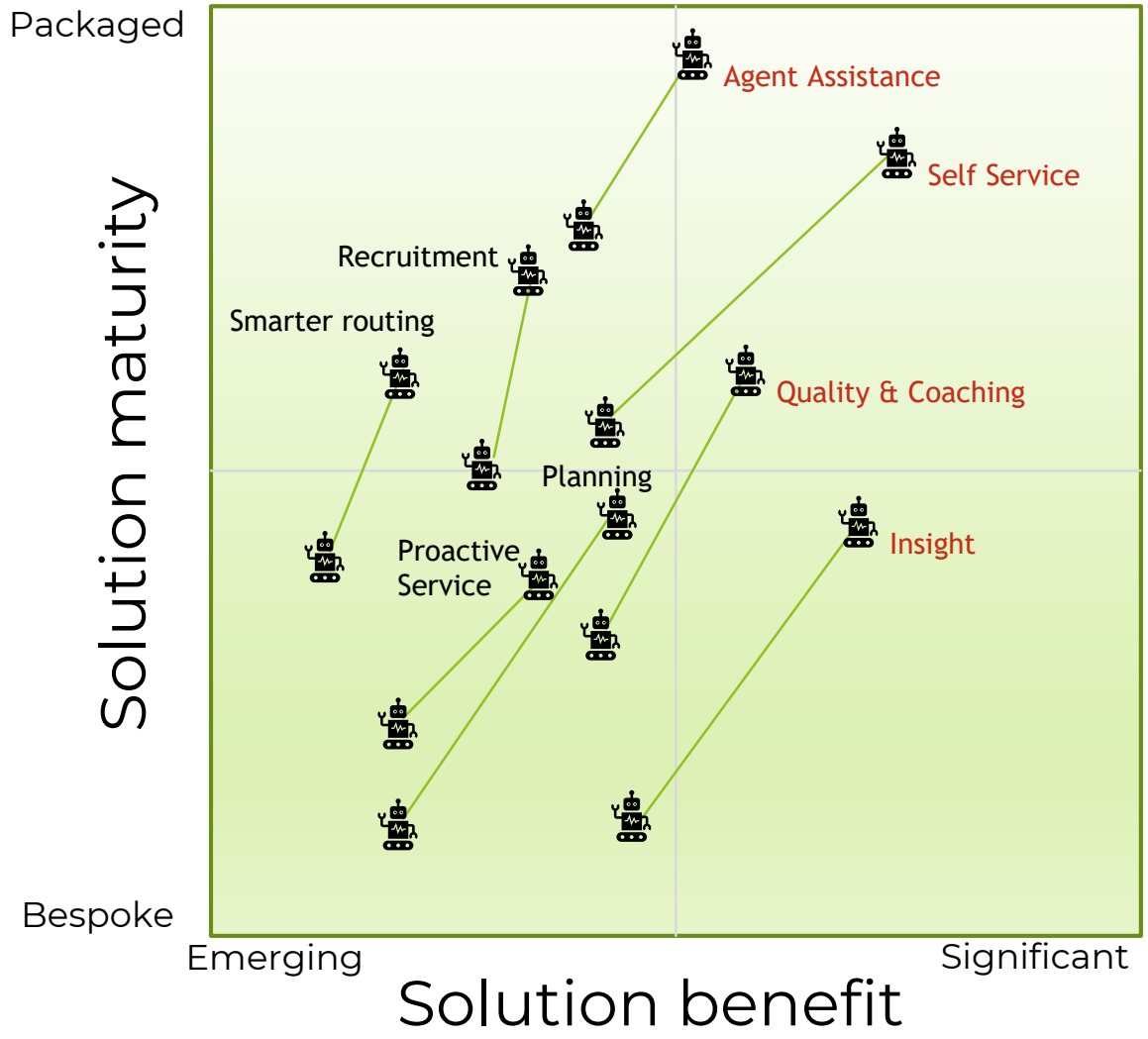
AI Maturity-Benefit matrix, 2022



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Outbound sales tasks and customer service

Google Duplex

https://ai.googleblog.com/2018/05/duplex-ai-system-for-natural-conversation.html

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AI powered agent assistance applications

- Accelerating damage triage and claims processing

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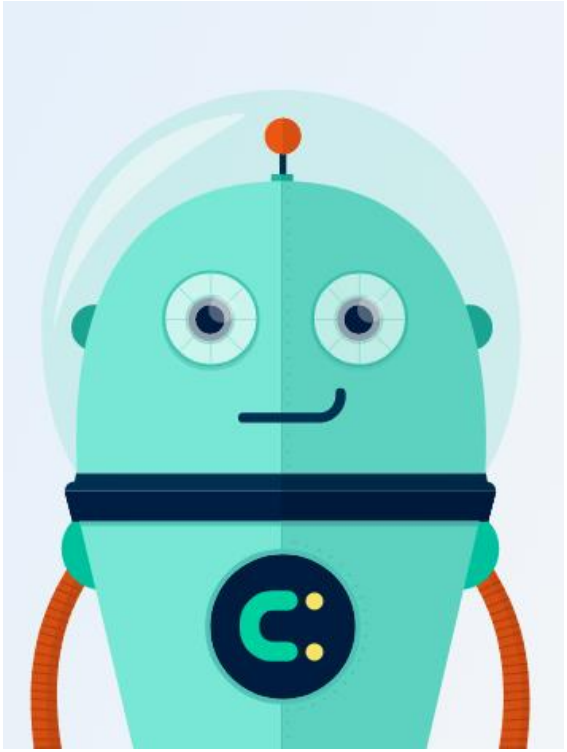
Augmenting the human coaching process



- Encourages the team conversations that the ‘day to day’ squeezes out
- Behavioural science based AI – bitsized ‘nudging’ to drive action
- Spotting early warning signs of employee dissatisfaction

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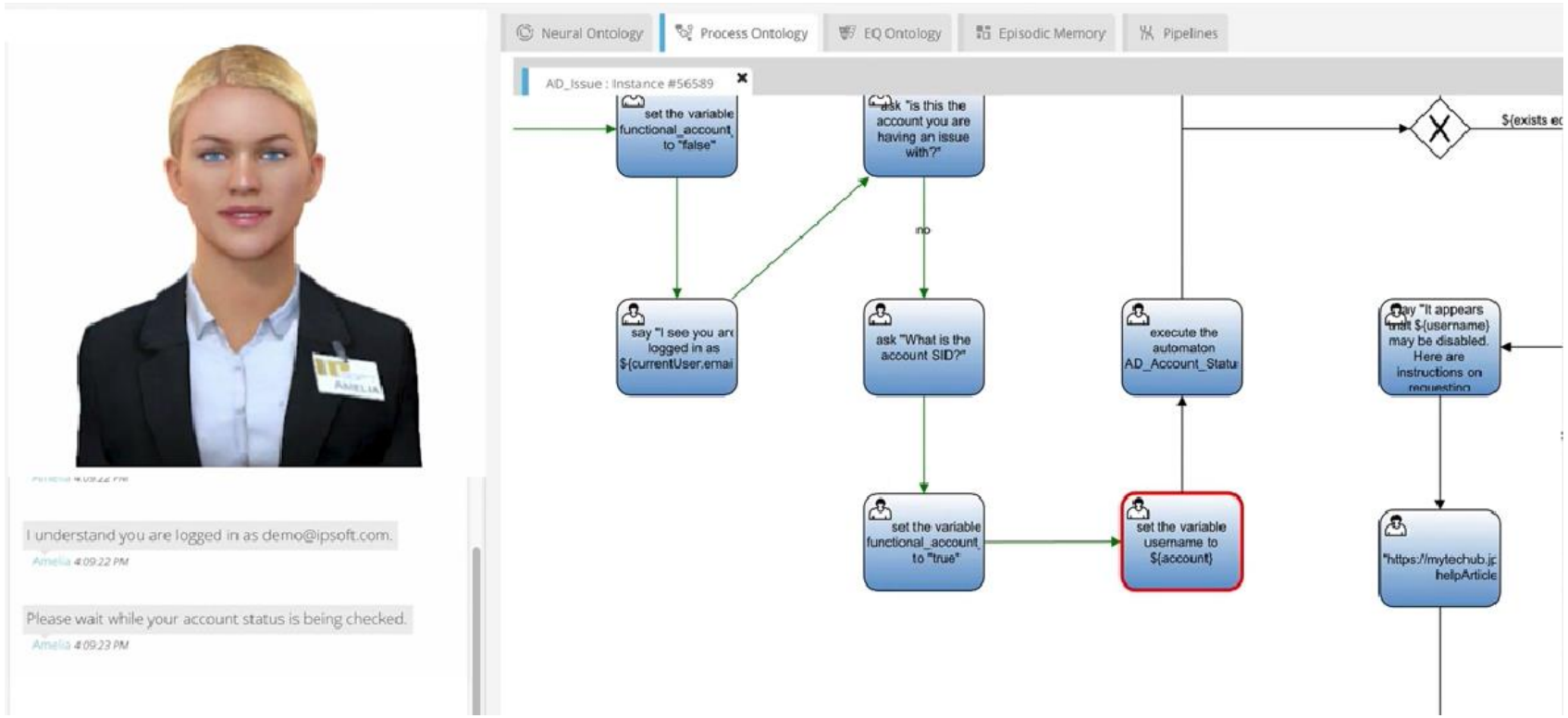
Continually learning IT helpdesk assistant



- Resolving 80% of level 1 helpdesk requests
- Watching and learning from humans to ‘redesign’ itself

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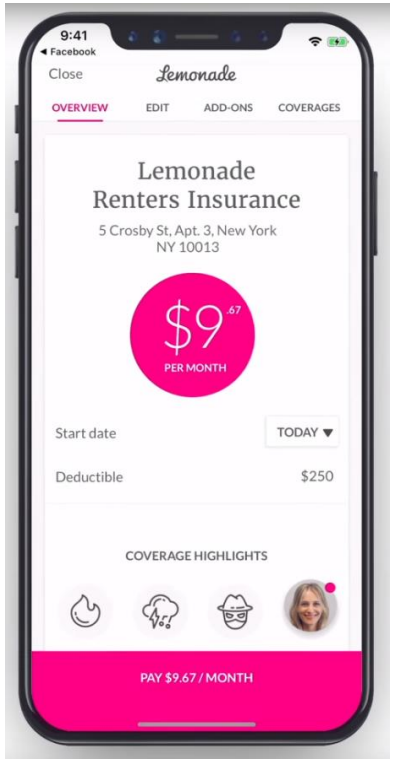
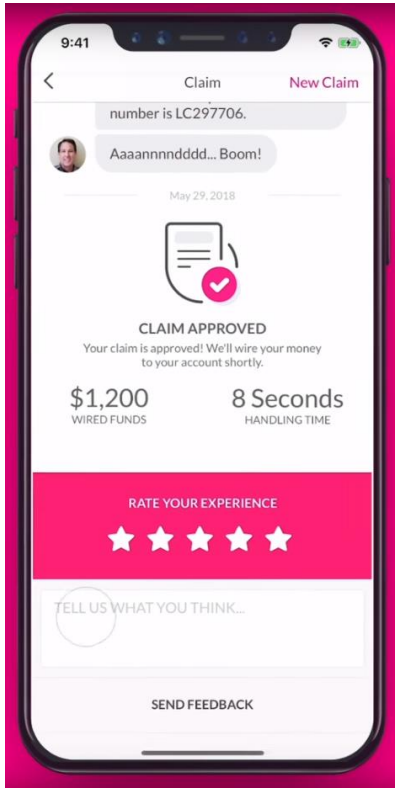
Transforming end to end journeys

90 Seconds
To get insured





3 Minutes
To get paid

Lemonade

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Golden rules for Artificial Intelligence success

- Rule 1 – It's a **journey** for the whole organisation not a race
- Rule 2 – Fully understand the business **questions** first
- Rule 3 – The right **data** is more important than the method
- Rule 4 – Be agile, fail fast and deliver success **incrementally**
- Rule 5 – **Good design** must still involve your people and customers
- Rule 6 – Think **augmentation** not just replacement

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We demystify AI

Thank you!

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