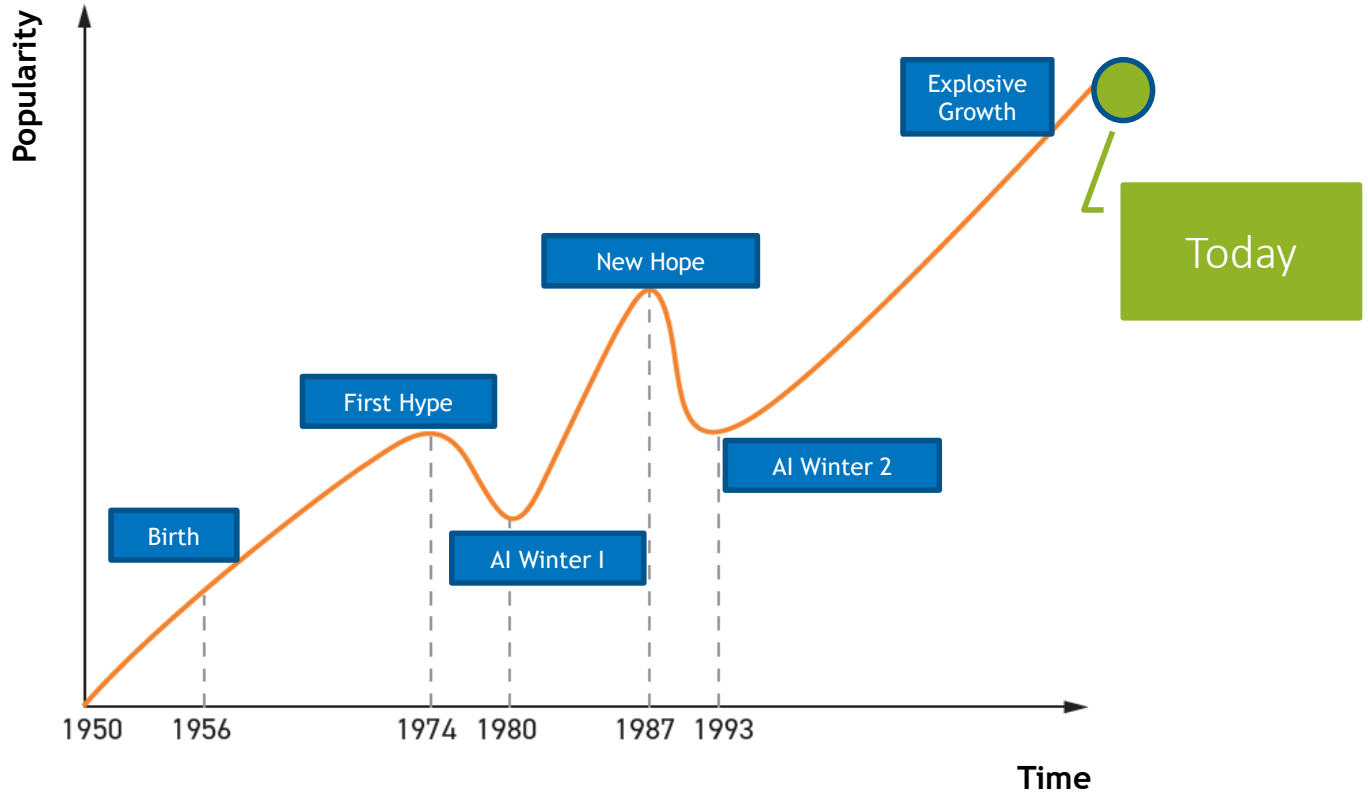
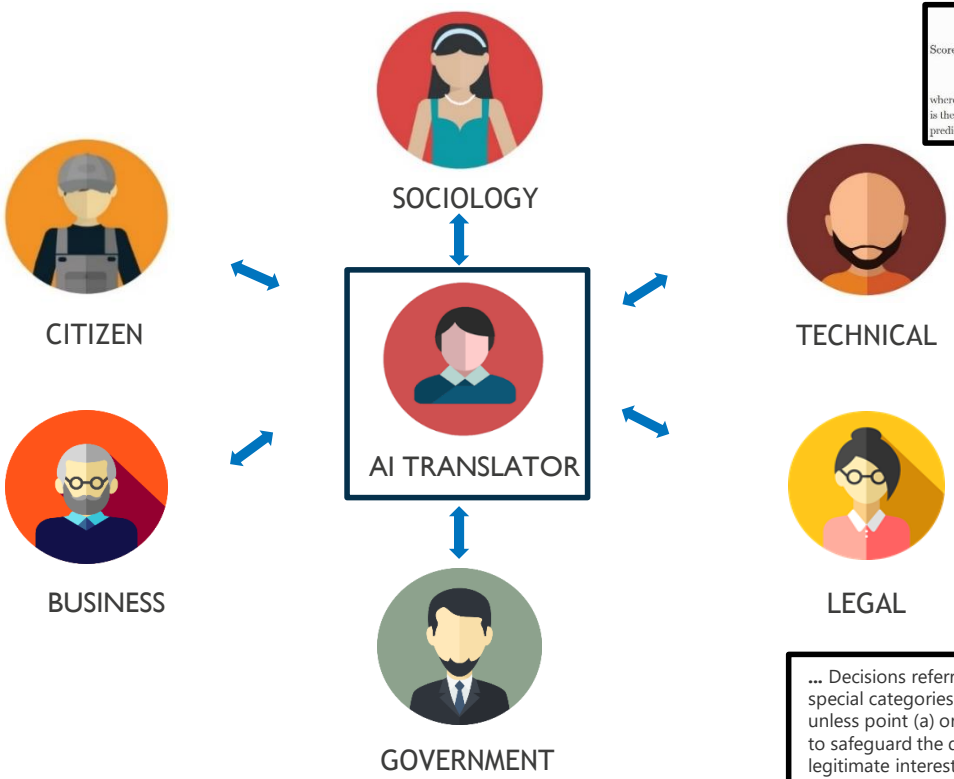
AI IN MARKETING & COMMUNICATIONS

G. M. De Ketelaere, Author

A little History



Wanted: Human AI Translators



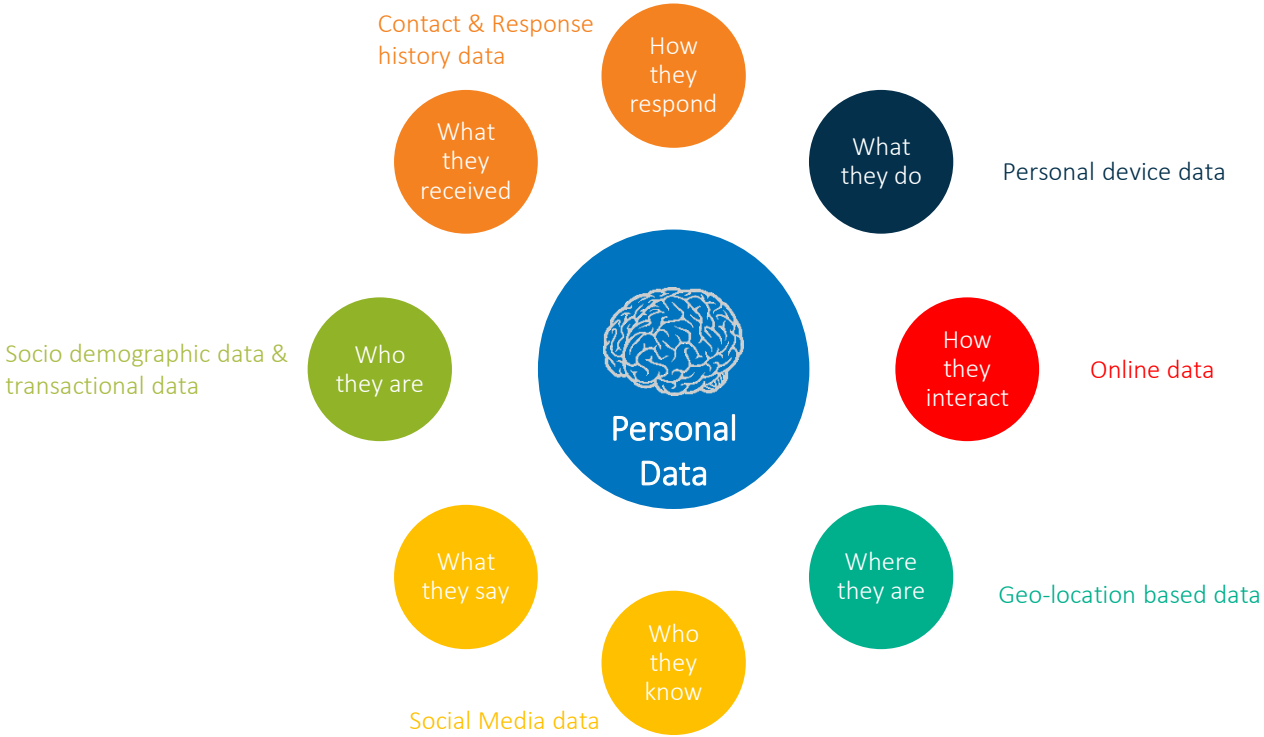
$$\text{Score}(U_i, v) = \left(r_{ui} + \frac{\sum_{U_j \in KN(U_i)} \text{Sim}(U_i, U_i)\,(r_{U_j v} - r_{uj})}{\sum_{U_j \in KN(U_i)} \text{Sim}(U_i, U_j)} \right) f \quad (6)$$

where $f = \exp\{-1 + \alpha(\bar{r}_{ui} - \bar{r}_{uj})\}$, exp represents the exponential function based on e, $\bar{r}_{ui}$ is the average of U_i, $r_{uj,v}$ is score of U_j to v, α is the attenuation factor, and $\text{Score}(U_i, v)$ is the prediction score of U_i to v.

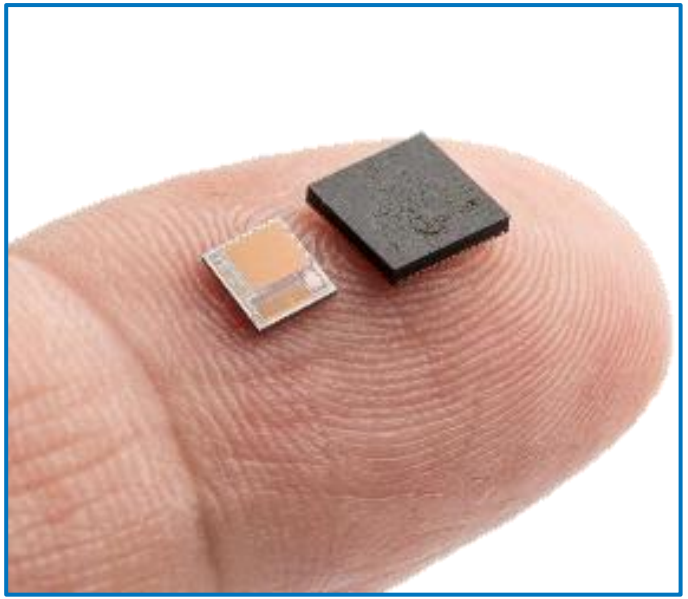
... Decisions referred to in paragraph 2 shall not be based on special categories of personal data referred to in Article 9(1), unless point (a) or (g) of Article 9(2) applies and suitable measures to safeguard the data subject's rights and freedoms and legitimate interests are in place ...

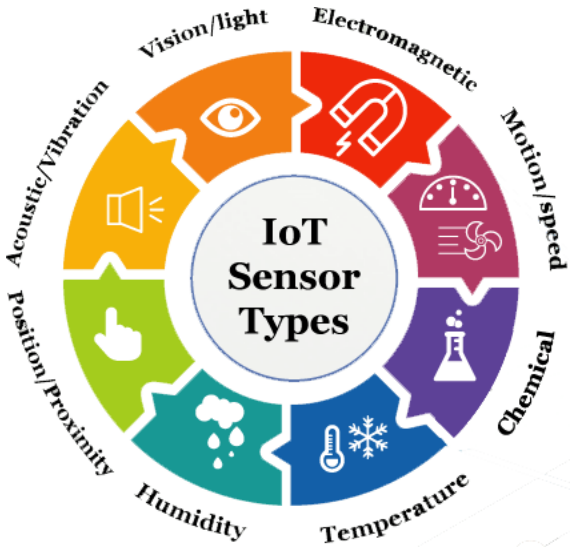
Focus on Customer Experience & Loyalty

The Customer DNA

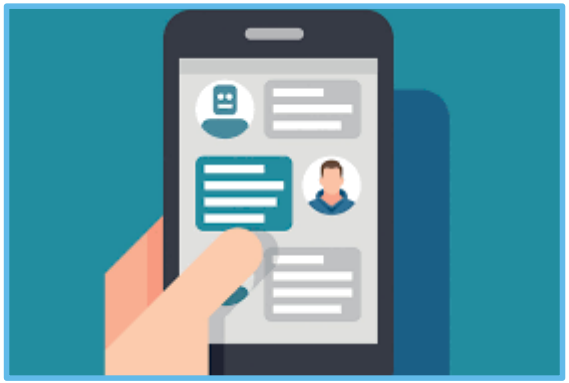


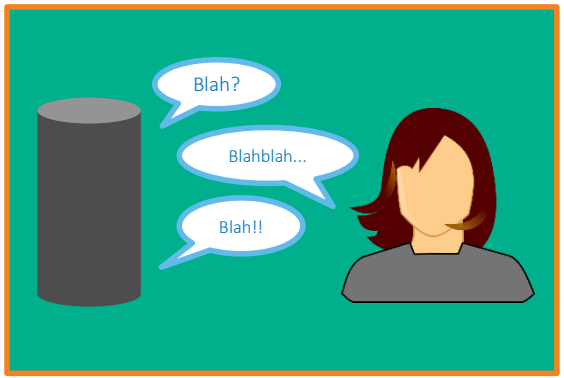
Smaller, more complex, faster and less power



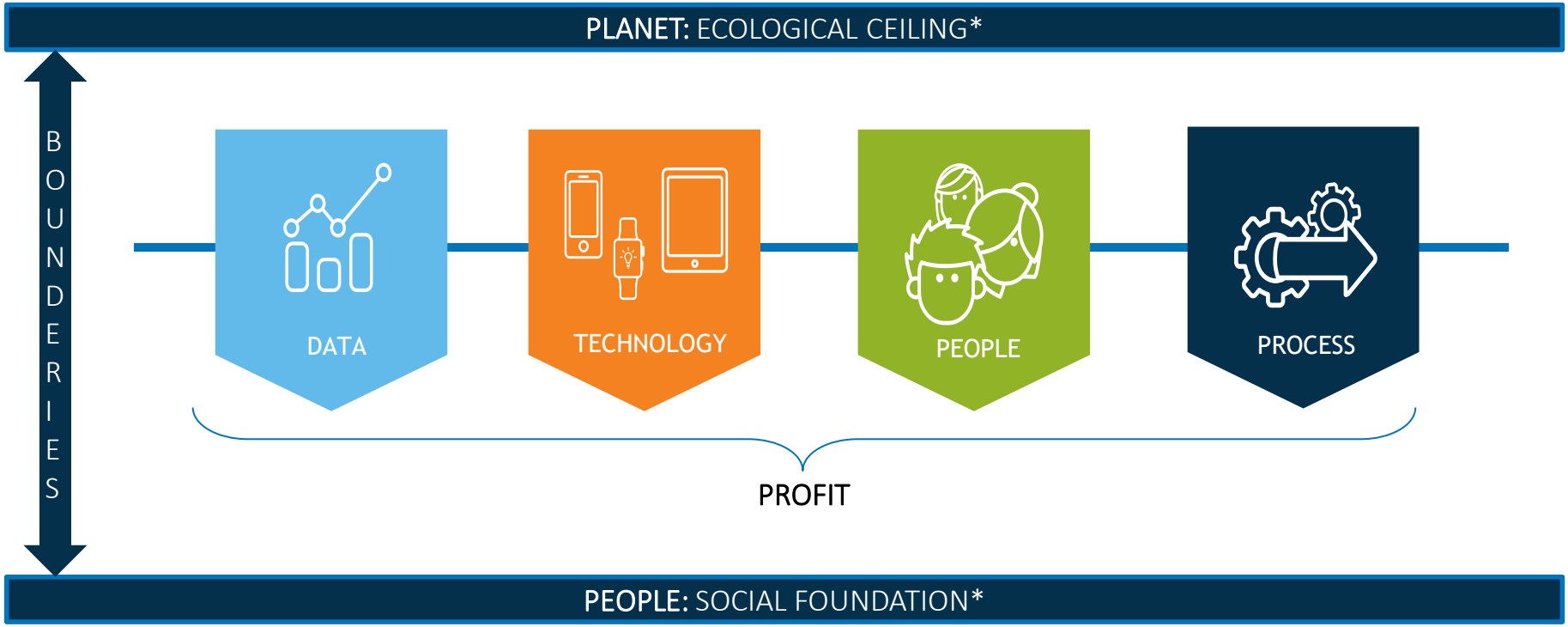


Marketing & Communications: Autonomous Actions



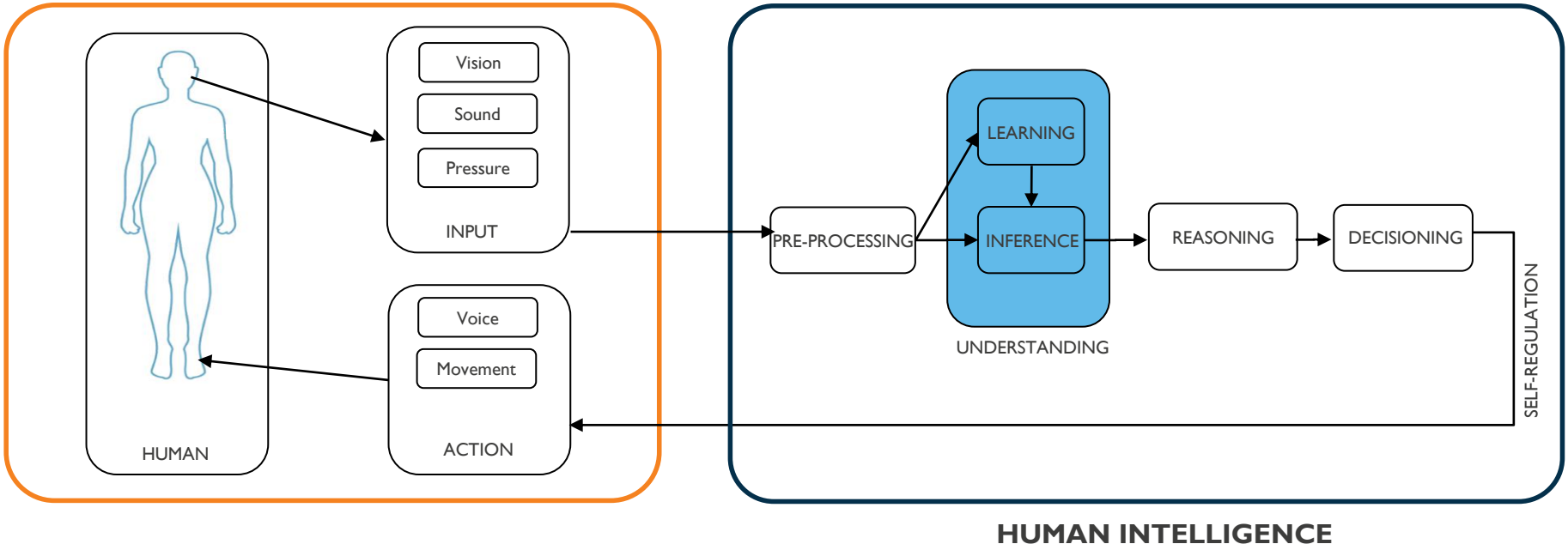


A New Focus

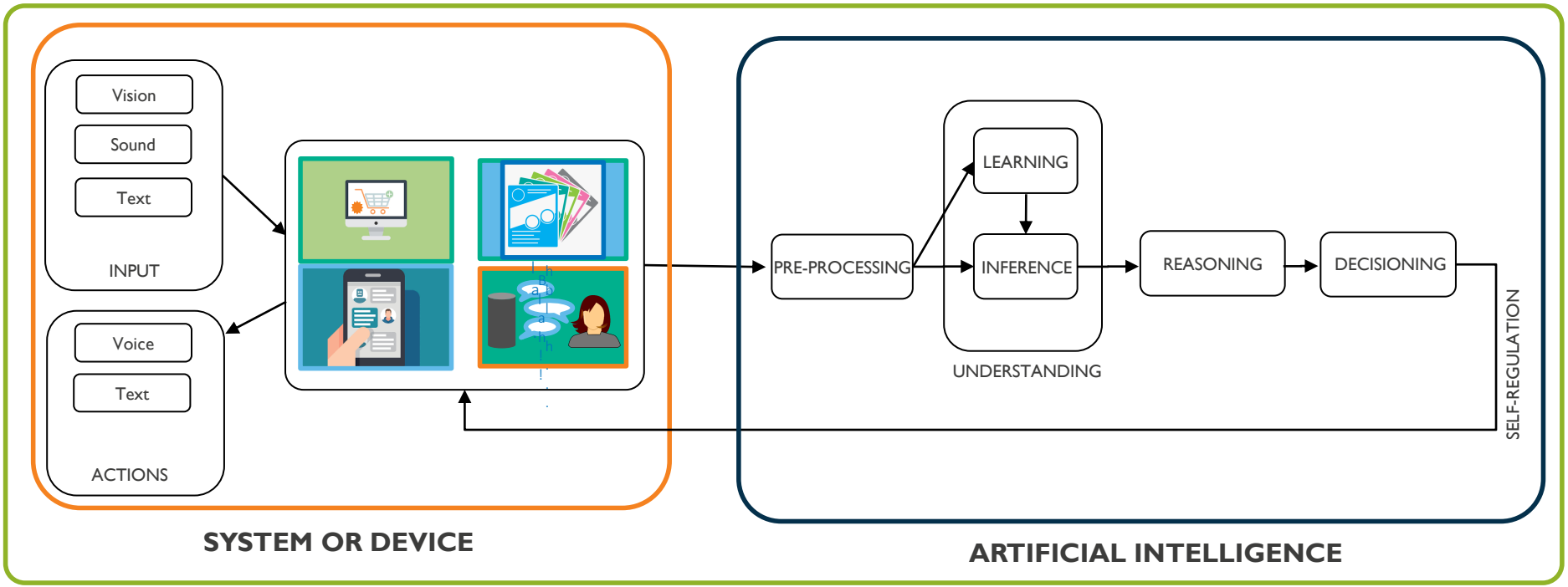


* Donut Economics

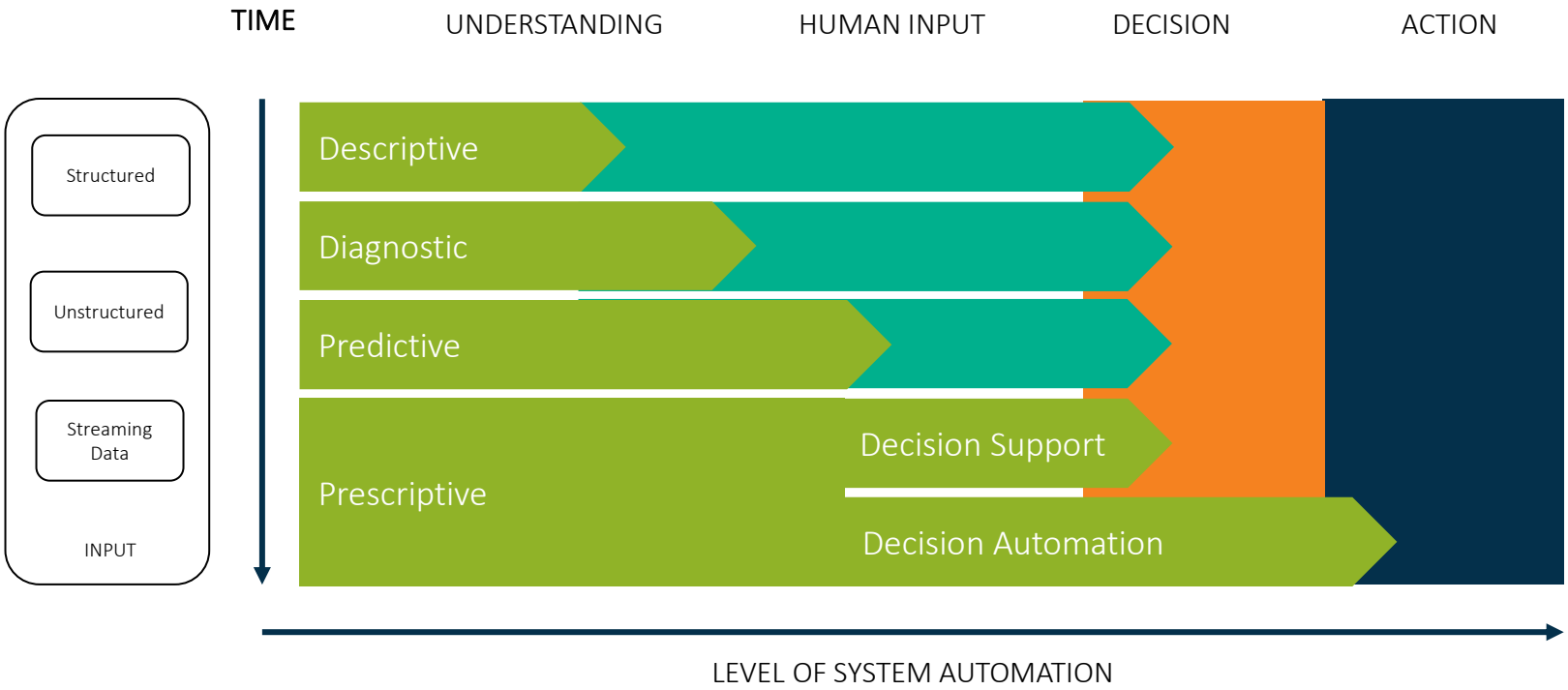
The Original Dream



AI Systems Today

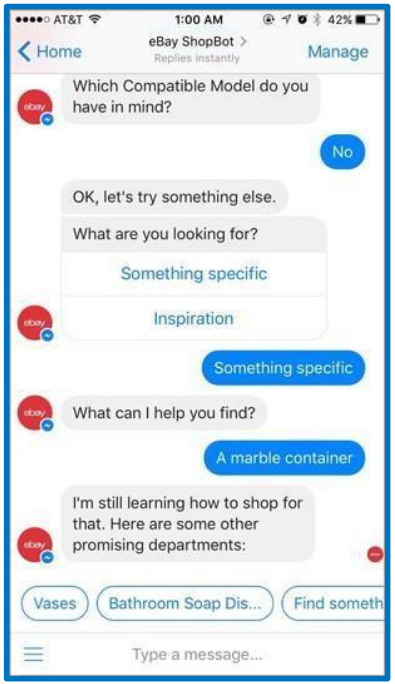


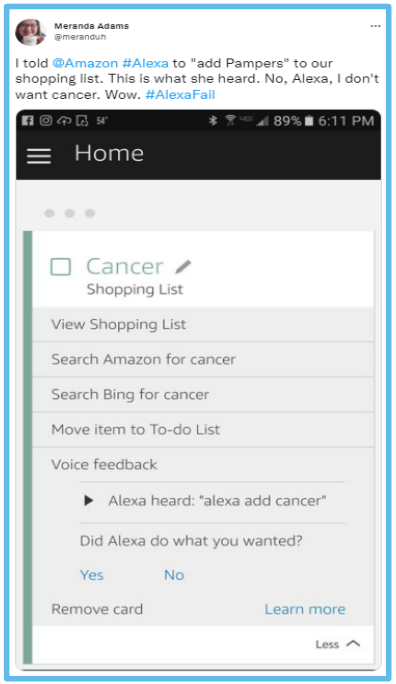
The Evolution of Autonomous Systems



*Gartner

Welcome to AI Land





5 Real World Personalization Fails and How They Drive Bad CX

February 04, 2020

Welcome to AI Land

Telegraph.co.uk

Uber stops developing driverless cars as it sells off technology

Uber has dropped plans to build its own driverless car and has sold the division developing the technology to a US start-up, after repeated ...

1 day ago

POLICY | BUSINESS | TECH

IBM will no longer offer, develop, or research facial recognition technology

IBM's CEO says we should reevaluate selling the technology to law enforcement

By Jay Peters | @jaypeters | Jun 8, 2020, 8:49pm EDT

BI Business Insider

Google tried to ease employee tension in meeting over ousted AI ethicist

Google held a meeting Tuesday with employees to discuss the ousting of Timnit Gebru, a prominent AI ethicist who said she was fired last ...

19 hours ago

Understanding the Issues

THE GOOD

THE BAD

THE UGLY

AI Anno 2022

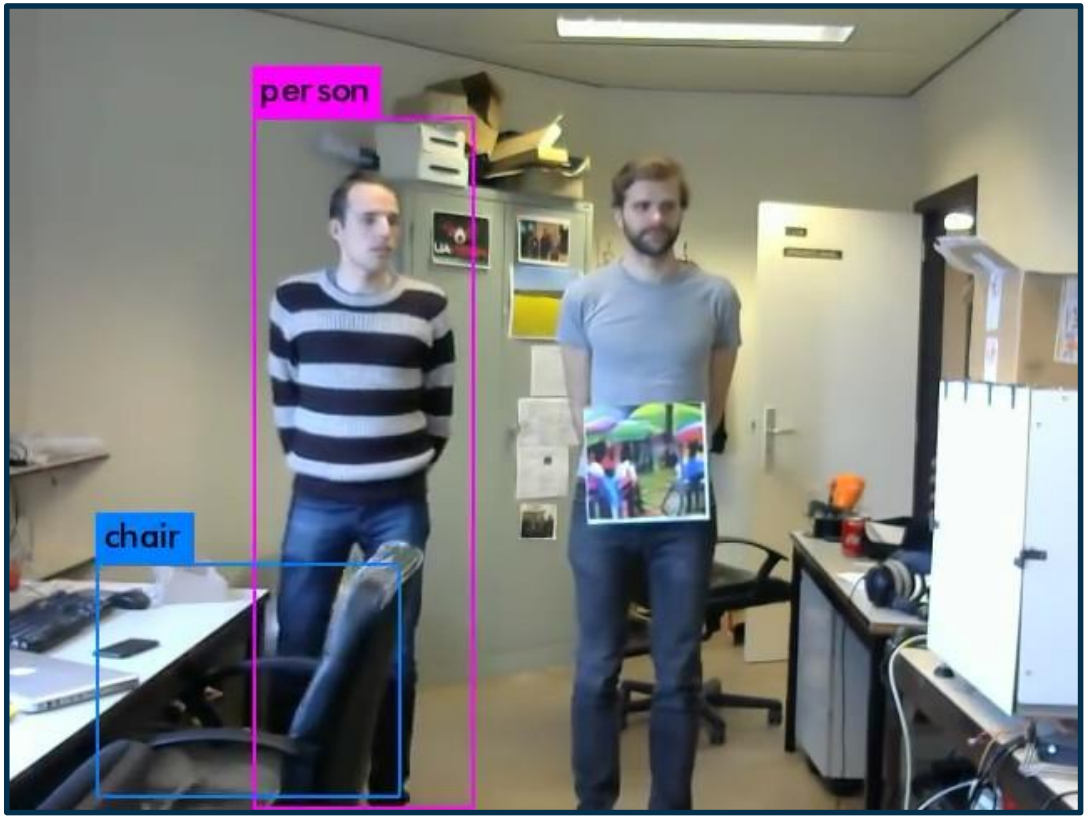
	HUMAN INTELLIGENCE	ARTIFICIAL INTELLIGENCE
1. Speed of processing		x
2. Knowledge Transfer		x
3. Decision Accuracy		x
4. Operational Modus		x
5. Size of storage	x	
6. Energy Usage	x	
7. Parallel Processing	x	

AI Anno 2022

	HUMAN INTELLIGENCE	ARTIFICIAL INTELLIGENCE
8. Adapt to Change	x	
9. Type of Input Data	x	
10. Physical Collaboration	x	
11. Human Dialogues	x	
12. Creativity	x	
13. Emotions	x	
14. Consciousness	x	
15. Ethics (Bias)	x	x
16. Ethics (Noise)	x	x

Lacking Common Sense

Lacking Common Sense

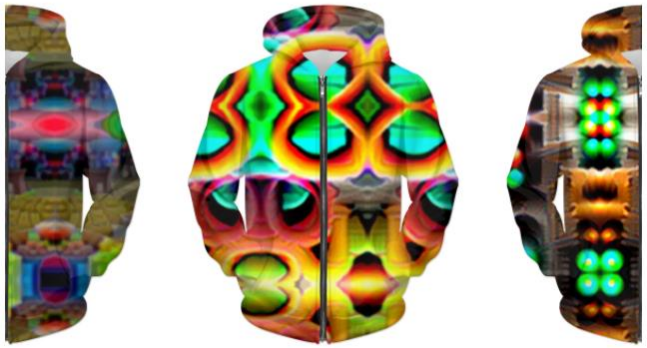


Lacking Common Sense

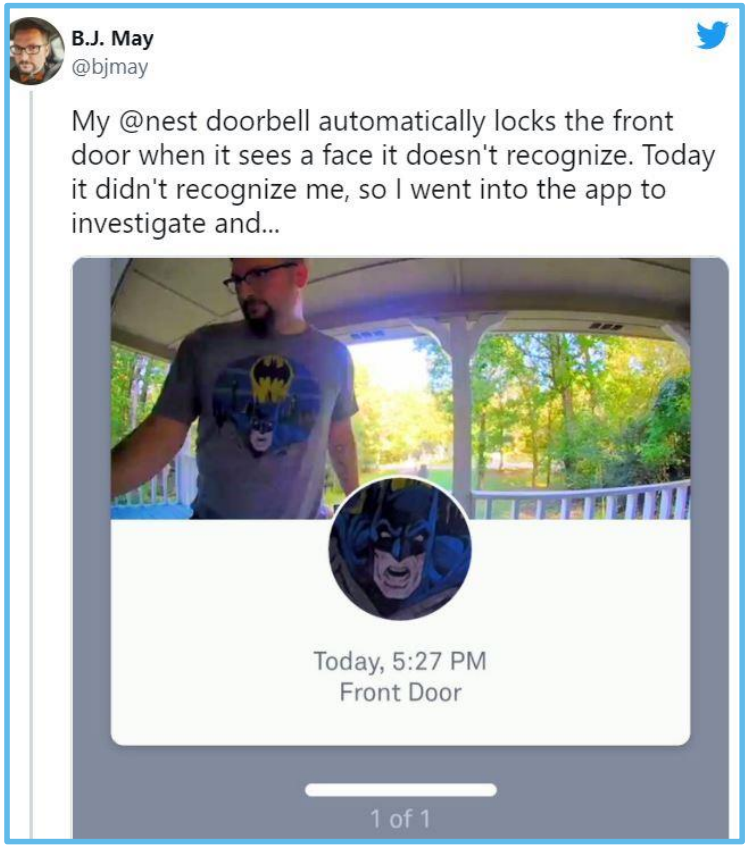
These Hoodies Make You 'Invisible' to Some Surveillance Algorithms

They were created by researchers from Facebook and the University of Maryland

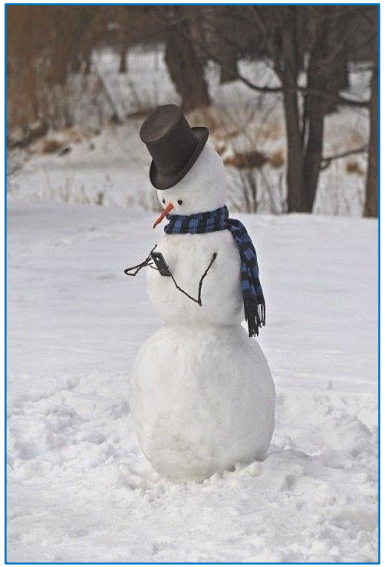
Dave Gershgorn Aug 6, 2020 · 3 min read ★



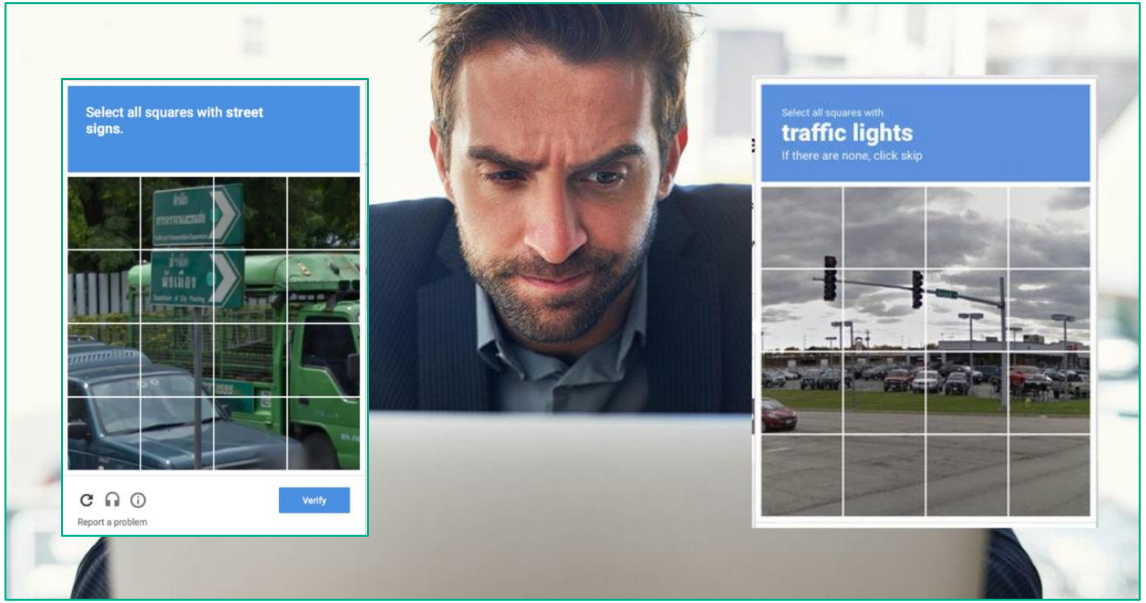
Lacking Common Sense



Lacking Concepts & Abstraction



Lacking Concepts & Abstraction



Correlations versus Causality

If AI's So Smart, Why Can't It Grasp Cause and Effect? | WIRED

Understanding Changing Context

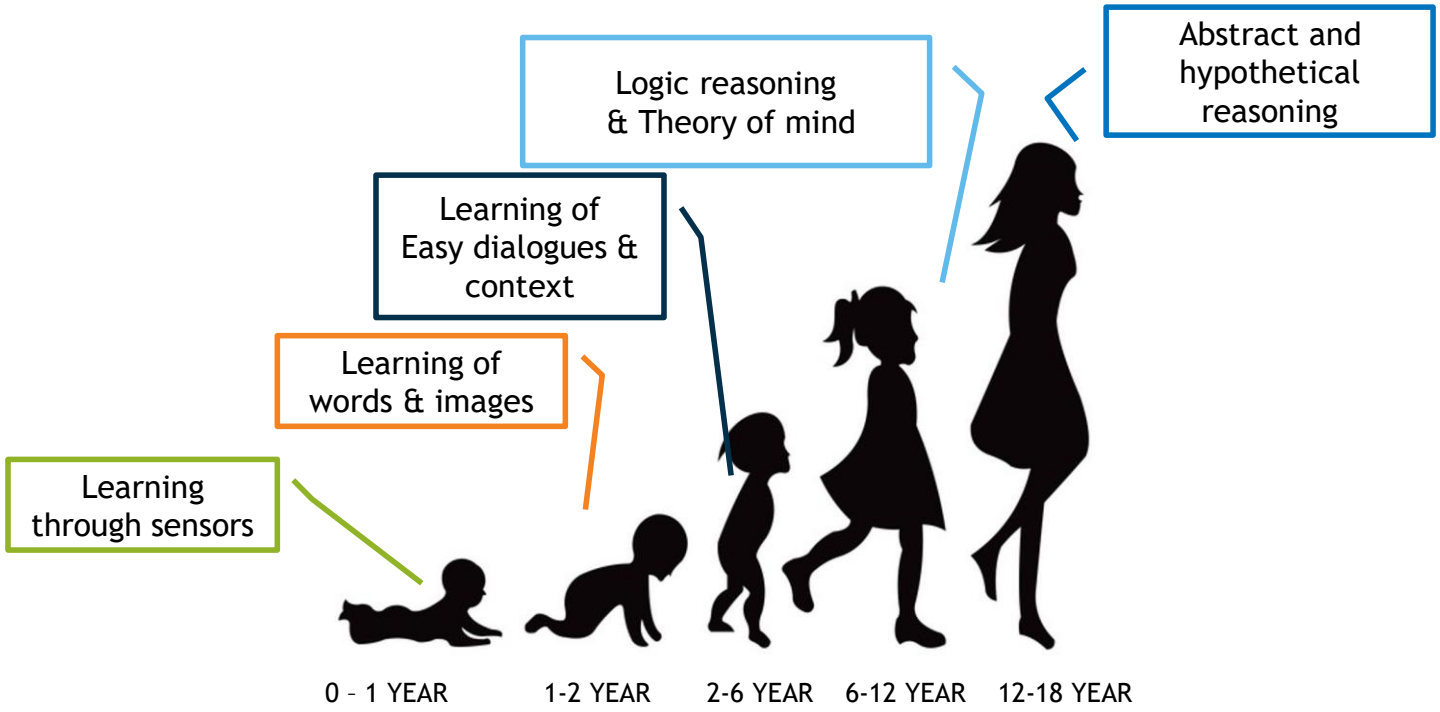
Artificial intelligence / Machine learning

Our weird behavior during the pandemic is messing with AI models

Machine-learning models trained on normal behavior are showing cracks —forcing humans to step in to set them straight.

by **Will Douglas Heaven** May 11, 2020

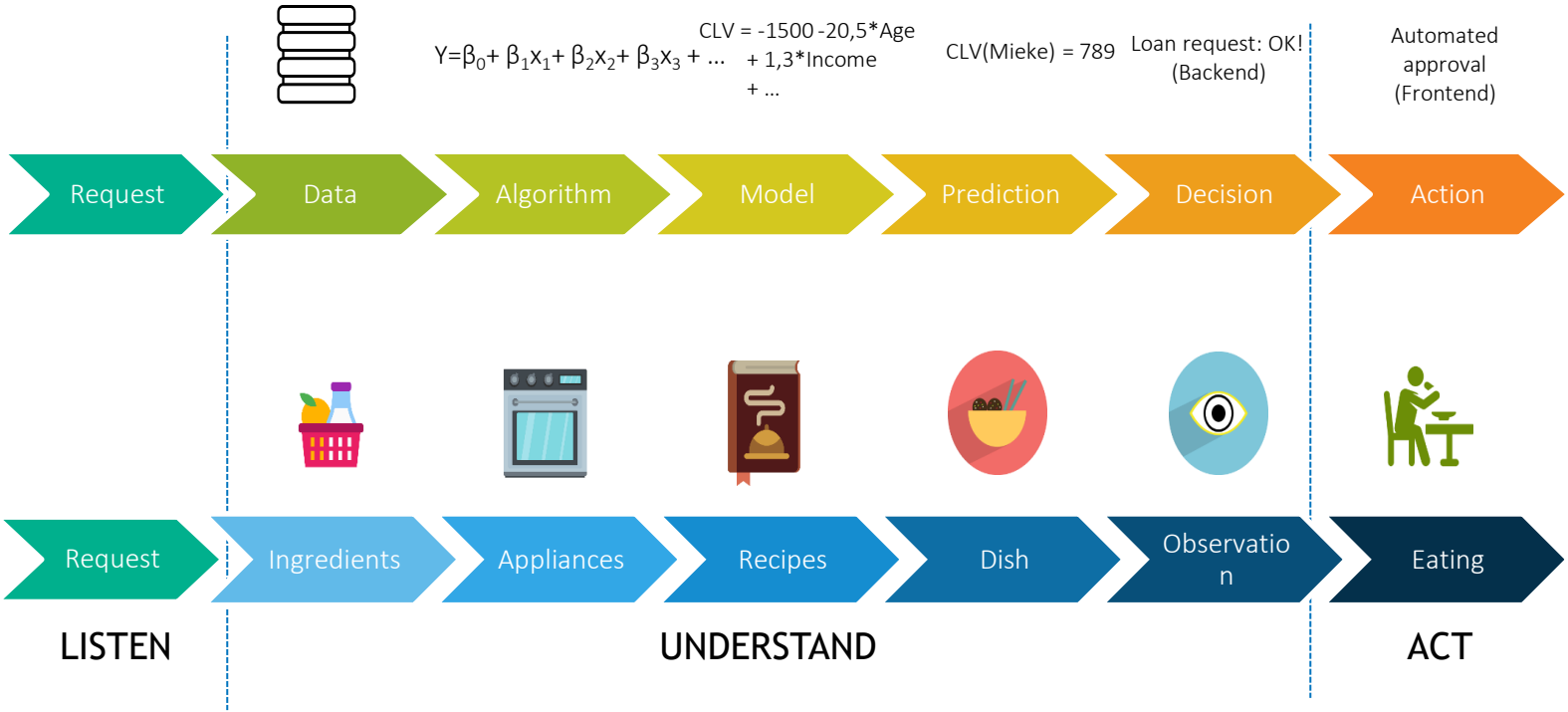
Human Learning



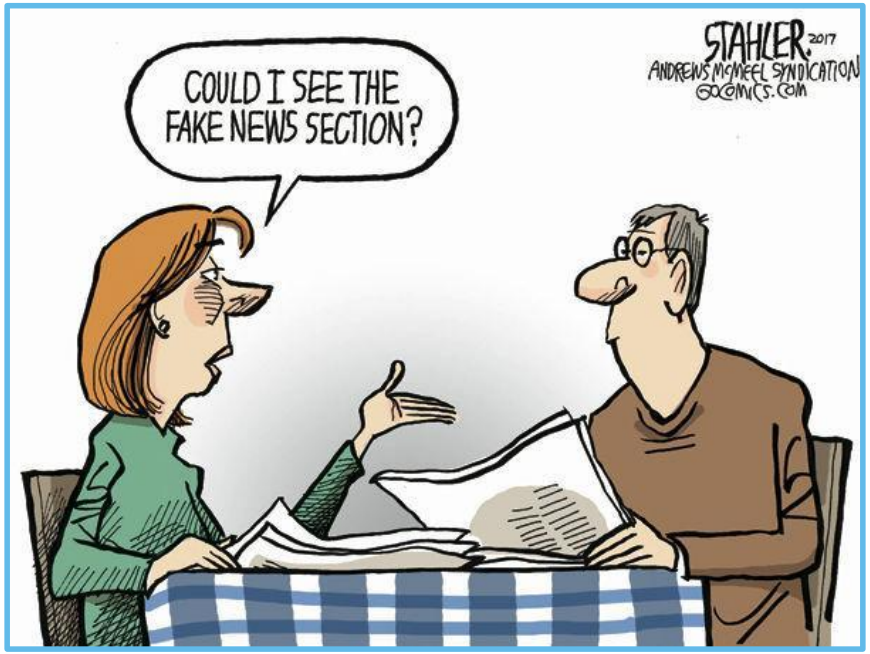
The Bad

LABAN
"It looks like there's a glitch in our AI recruiting algorithm."

The Process

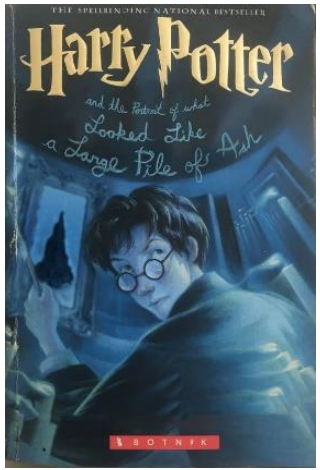

Y=β0+ β1x1+ β2x2+ β3x3 + …
CLV = -1500 -20,5*Age + 1,3*Income + …
CLV(Mieke) = 789
Loan request: OK! (Backend)
Automated approval (Frontend)
Request
Data
Algorithm
Model
Prediction
Decision
Action
Request
Ingredients
Appliances
Recipes
Dish
Observation
Eating
LISTEN
UNDERSTAND
ACT

The Ugly

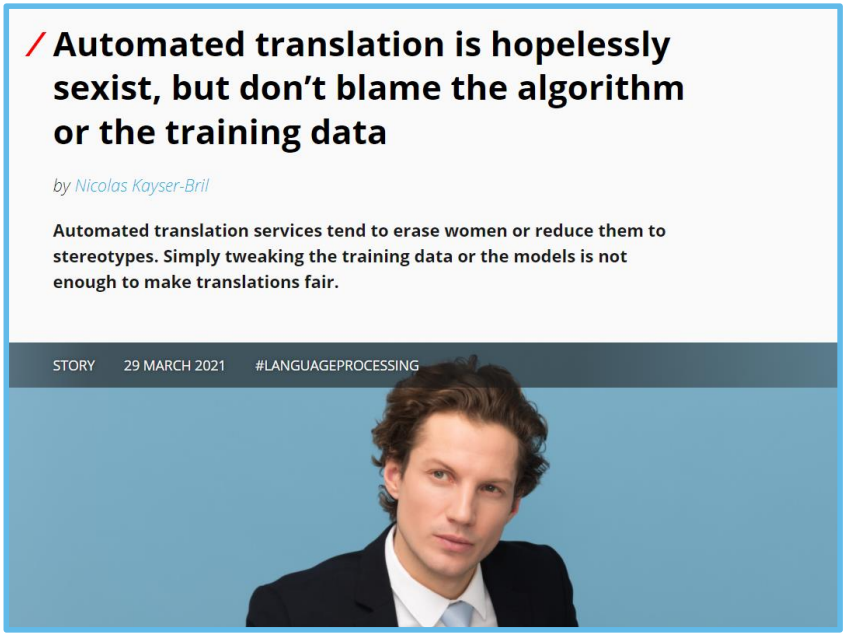

COULD I SEE THE FAKE NEWS SECTION?
STAHLER. 2017
ANDREWS MCMEEL SYNDICATION
GOCOMICS.COM

The Power of Autogeneration: Deepfakes

The Power of Autogeneration: Text to Text



AUTOGENERATED BOOKS



The Power of Autogeneration: Image to Image

http://makemeazombie.com

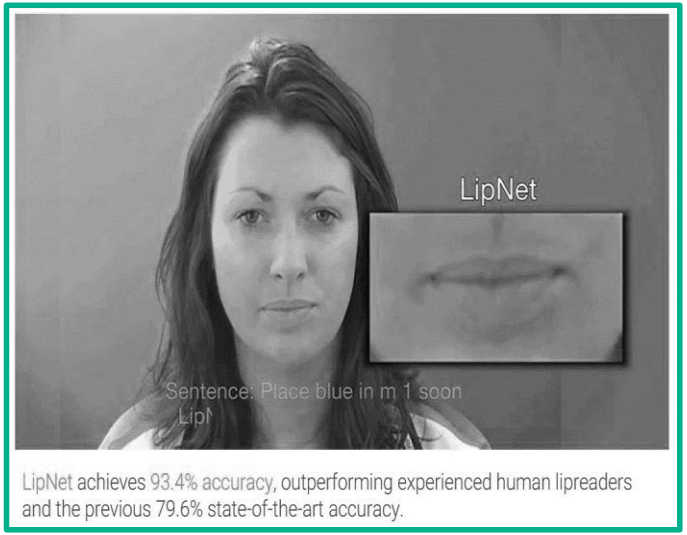
Deep Learning Malware Can Fake Cancer on Medical Images

A deep learning algorithm successfully penetrated a healthcare organization and fooled both humans and an AI system with faked medical images.

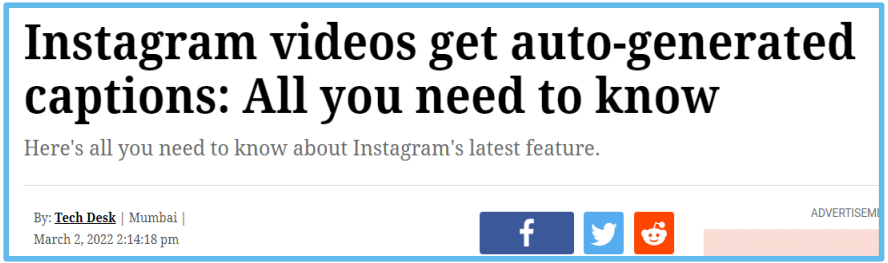
Source: Thinkstock

https://healthitanalytics.com/news/deep-learning-malware-can-fake-cancer-on-medical-images

The Power of Autogeneration: Voice to Text



AUTOGENERATED TEXT FROM VOICE



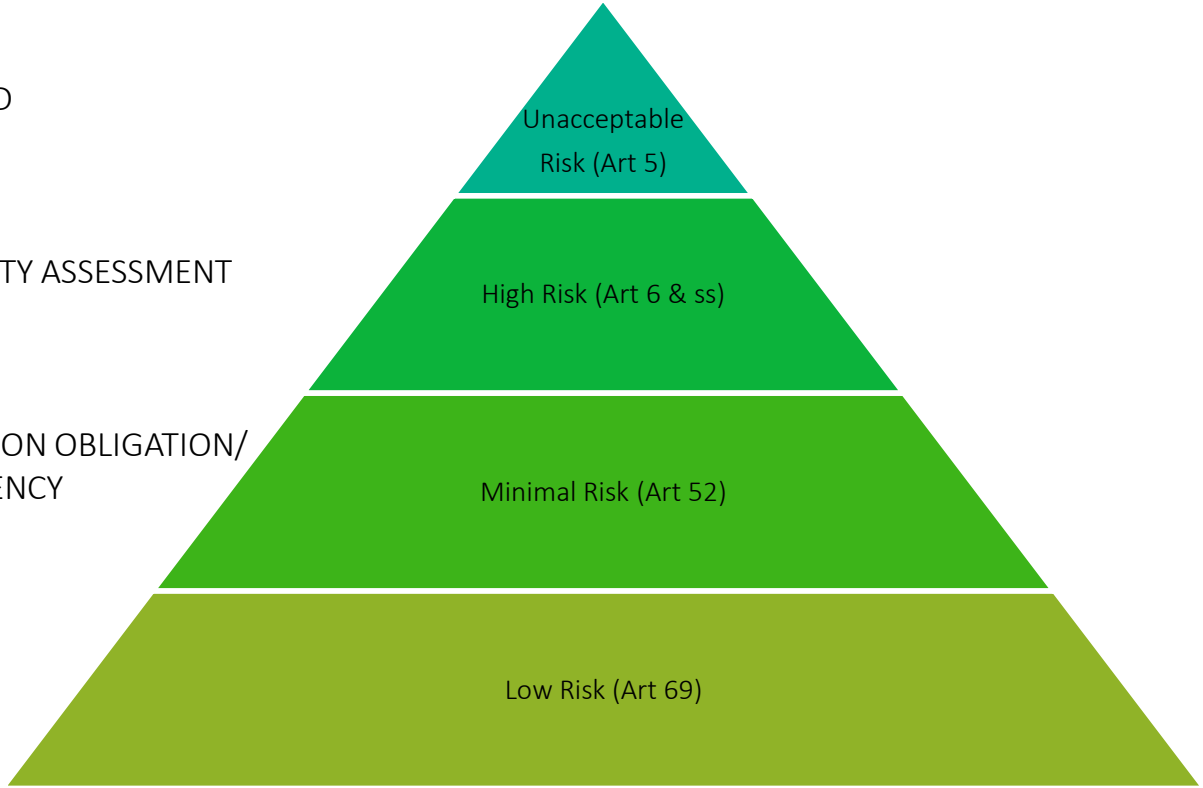
Instagram videos get auto-generated captions: All you need to know

Here's all you need to know about Instagram's latest feature.

By: Tech Desk | Mumbai | March 2, 2022 2:14:18 pm

ADVERTISEM

The AI Regulation



THANK YOU!

G. M. De Ketelaere, Author