

AI will have a huge effect on customer journeys
Will it improve the experience?

Richard Sheahan
September 2018

AI @ Forrester

Leverage AI To Improve Marketing Efficiency

Nine AI Marketing Use Cases That Have The Potential To Deliver Business Value — And What Marketers Must Do Now To Prepare

August 24, 2018



By **Xiaofeng Wang** with Frederic Giron, Michael Barnes, Joe Stanhope, Brandon Purcell, Diane Deng, Sukriti Dangi, Bill Nagel

Deep Learning: The Start Of An AI Revolution For Customer Insights Professionals

Artificial Intelligence Will Spark A Marketing Renaissance

CMOs Have A New Partner On The Block

August 3, 2018

The AI Revolution: CX Measurement

12 AI Use Cases That Can Improve How CX Pros Track CX And Drive CX Action — And What CX Pros Must Do Now To Prepare

August 1, 2018 | Updated August 9, 2018



By **Maxie Schmidt-Subramanian** with Harley Manning, Boris Evelson, Brandon Purcell, Kjell Carlsson, Ph.D., Ben Salamin, Shayna Neuburg

By **Brandon Purcell, Mike Gualtieri, Diego Lo Giudice** with Srividya Sridharan, Emily Miller, Jeremy Vale

AI Deep Learning Workload Approach To Infrastructure

GPUs Dominate New Workload Systems Infrastructure

By **Chase Cunningham, Joseph Blankenship** with Stephanie Balaouras, Srividya Sridharan, Barringham, Peggy Dostie

By **Mike Gualtieri, Christopher** with Srividya Sridharan, Michele Goetz, Renee Taylor

Change The CRM

Oracle, Salesforce, And SAP Leverage AI For Customer



By **John Bruno** with Daniel Hong, Kate Leggett, Brandon Purcell, Sarah Dawson, Peter Harrison



By **Craig Le Clair** with Glenn O'Donnell, J. P. Gownder, Srividya Sridharan, Ian Jacobs, Will McKeon-White, Rachel Birrell, Diane Lynch

AI Is Ready For Employees, Not Just Customers

Human-Machine Collaboration Should Start With Employees

March 27, 2018

AI Will Revolutionize Digital Experiences

AI Will Help Brands Win, Serve, And Retain Customers Across A Connected Experience Ecosystem



By **Julie A. Ask** with Martin Gill, Brandon Purcell, Rob Koplowitz, Andrew Hogan, Jaclyn Galan, Peter Harrison

Using AI For Evil
A Guide To How Cybercriminals Will Weaponize And Exploit AI To Attack Your Business

"A self-learning system that is able to interact with humans naturally, understand the environment, solve problems, and perform tasks that normally require human intelligence, qualities and abilities without the need to code instructions and rules."

Of course it is everywhere already – and has been around since the 1950s



Weather prediction

Fraud detection



Digital Assistants

Autonomous cars

Face recognition

Malware detection

Better spam filters

Friend recommendations

Chatbots

Predictive search suggestions

Photo tagging

Real-time translation

Recommendations

Drones

Its recent rise is powered by

- the explosion of data
- increases in computing power
- advances in deep learning

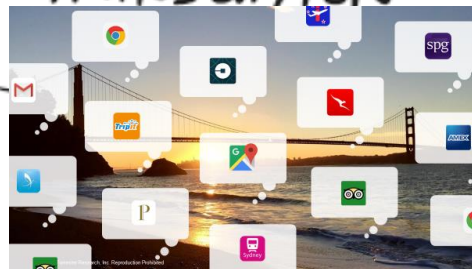
**Used in the right
way AI can help
organisations
identify customer
needs in advance
- and act on them**



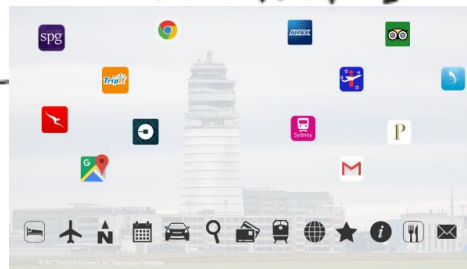
NEEDS

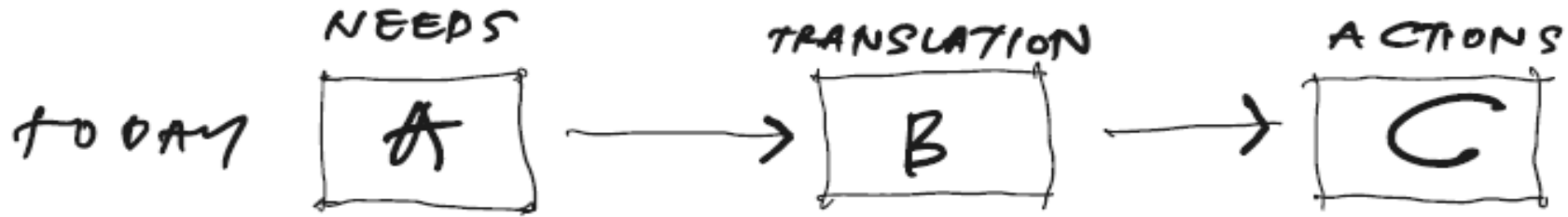


TRANSLATION

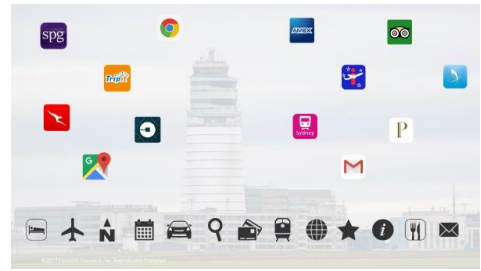


ACTIONS





FUTURE FUTURE



AI...

..relies on humans to

- label the training data
- understand which algorithm to use
- interpret and apply its results.

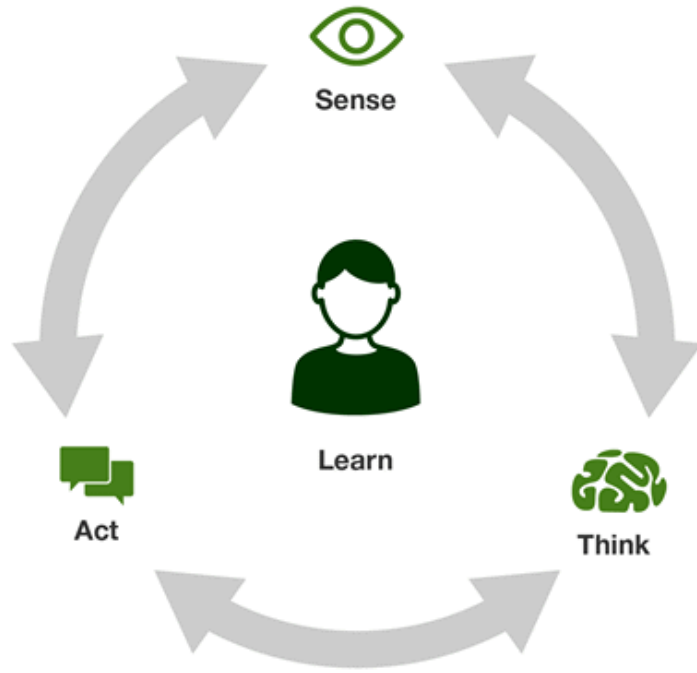
..needs lots of training.

- extensive training data
- good algorithms to create effective models

..is not general-purpose.

- AI can identify patterns at a scale that's beyond human abilities...
- ...but isn't the same as humans' general-purpose intelligence that allows us to reason, make judgments, and build relationships.

AI systems are only as good as the people who program them and the data they feed them



Sense

- Image and video analysis
- Facial recognition
- Speech analytics
- Text analytics



Think

- Machine learning platforms
- Deep learning platforms



Act

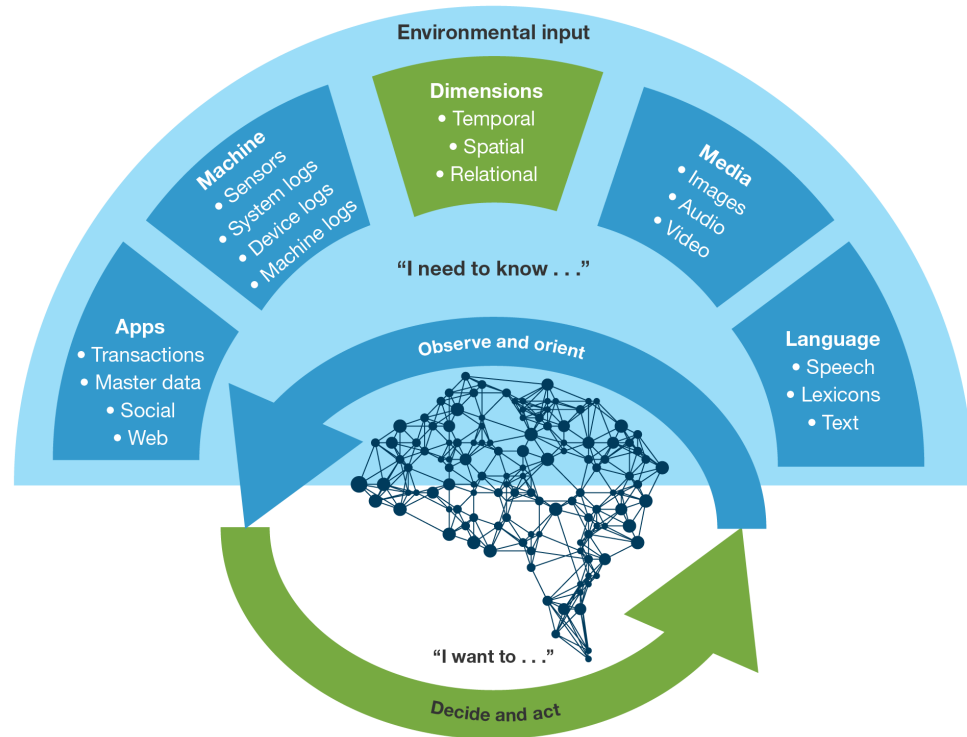
- Natural language generation

- › Bias occurs unintentionally when the training data ... does not accurately reflect the population the model will treat.
- › Historical human bias can also seep into models even if training data is representative.

What do machines need to know?

Provide *complete and representative* data

Design adequate *sensory* points



“The smallest ant may have 1 million times sensors than the most complicated robot.”
- David Hu, Mechanical Engineer, Georgia Institute of Technology

Source: Brief: How Machined Decide – Data Drives AI



Source: AIB

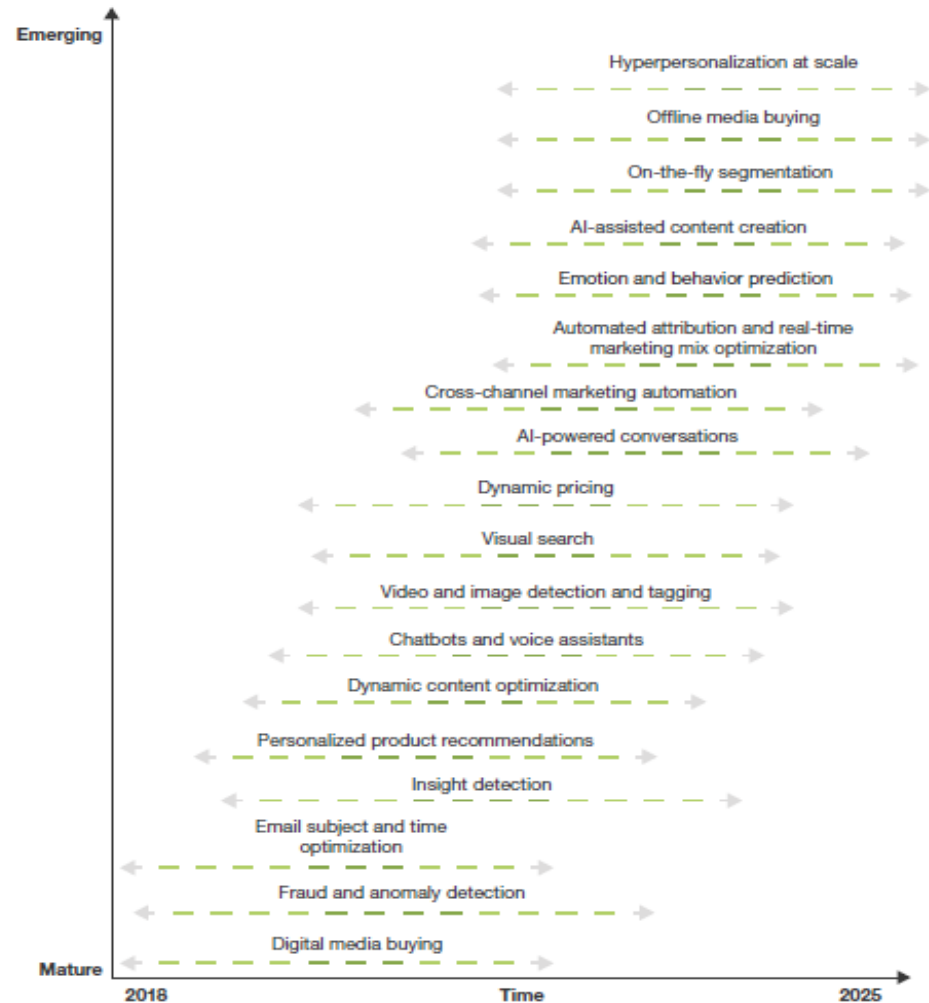
Alibaba used AI to deliver personalization at scale on Singles Day 2017



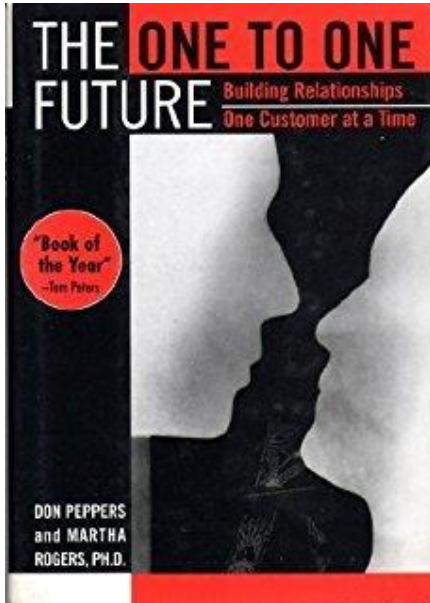
- › 400 million customized banner ads
- › 3.5 million customer inquiries
- › 60 billion personalized pages

Source: Alibaba

New use cases will emerge to extend and complement the automation and scaling of existing cases



We've been trying to get closer to customers for a long time: there are risks



Peppers and Rogers and
'Mass customisation'

Motivation

Needs

Context



[illegible][illegible][illegible]

The CX forms along 3 dimensions (the 3Es)

Effectiveness

Customers get value from the experience

Ease

Customers get value from the experience without difficulty

Emotion

Customers feel engaged by the experience

Quality

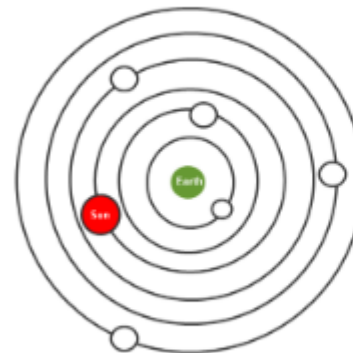
Usability

Experience

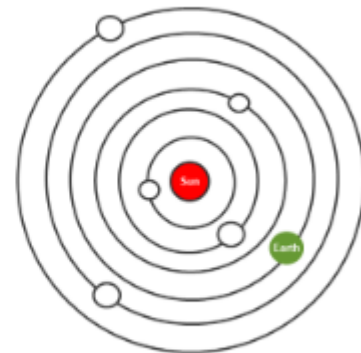
Source: June 2014 "Forrester's Next Generation Customer Experience Index"



Copernicus

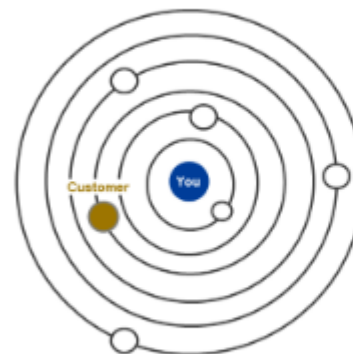


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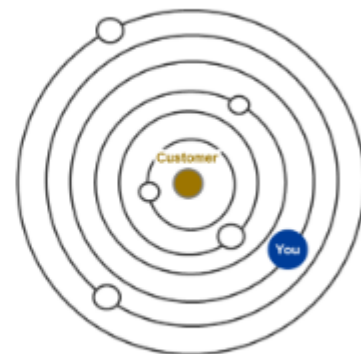


Copernicus

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Inside Out



Outside In

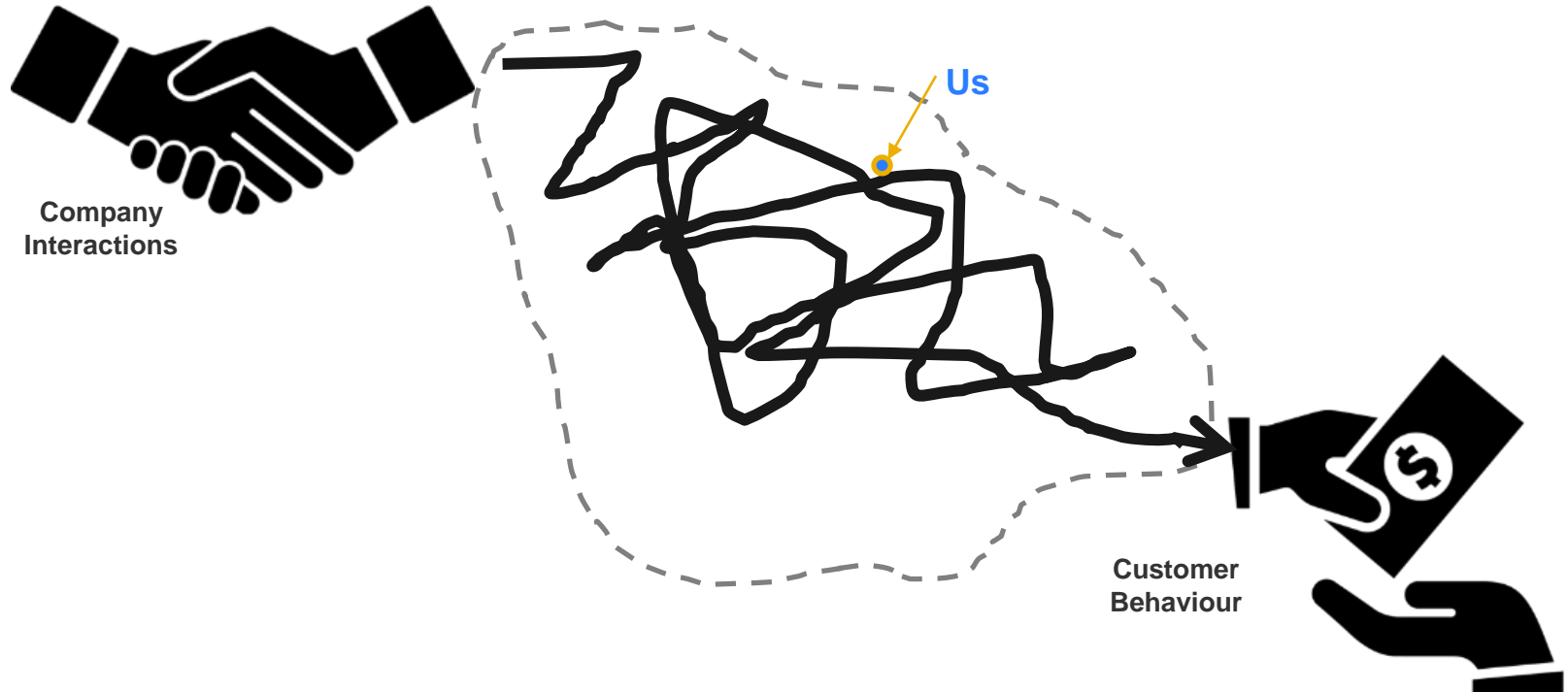
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A step in the right direction...

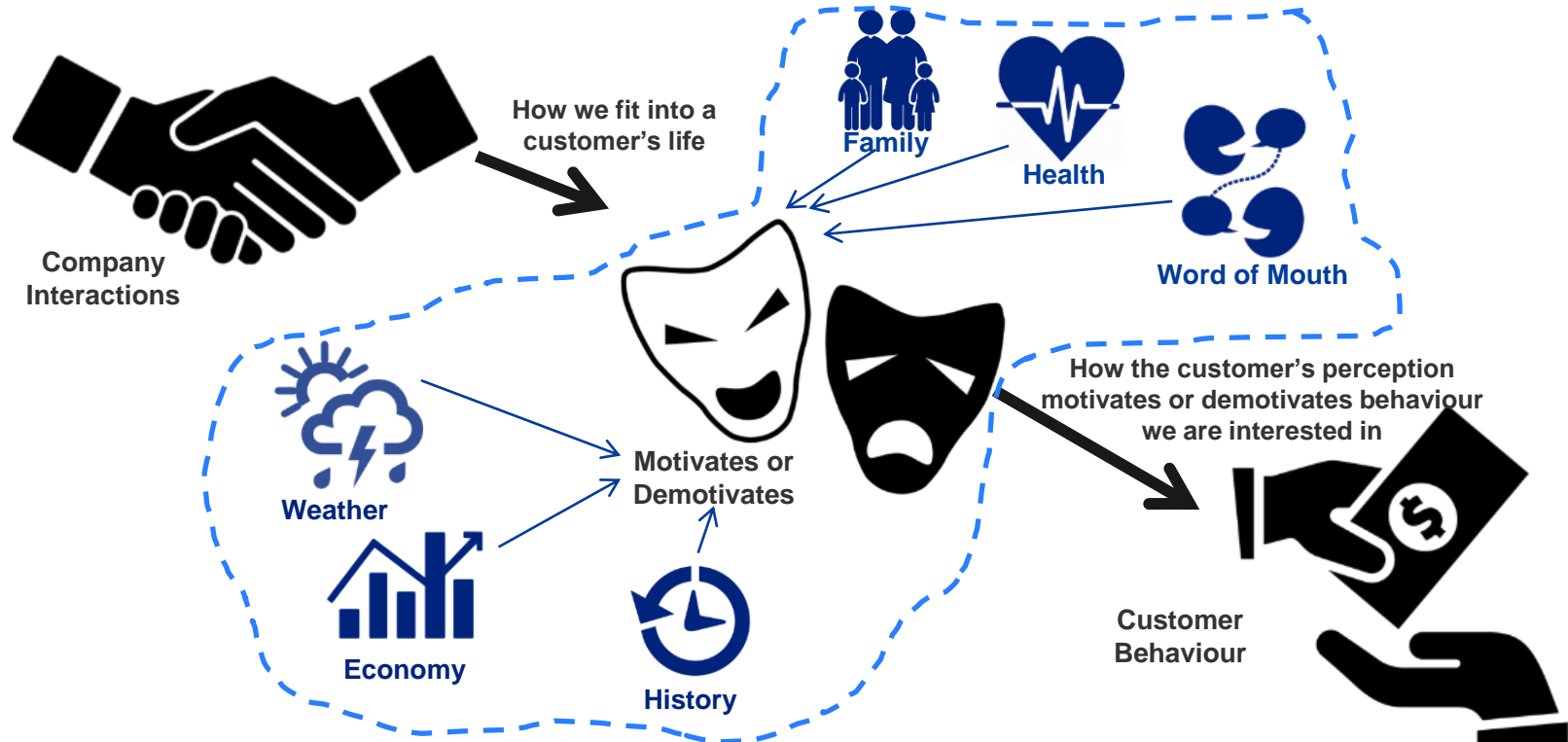
Alongside technology skills we need
people who are creative ...

...to make sure this is actually something
people want to interact with

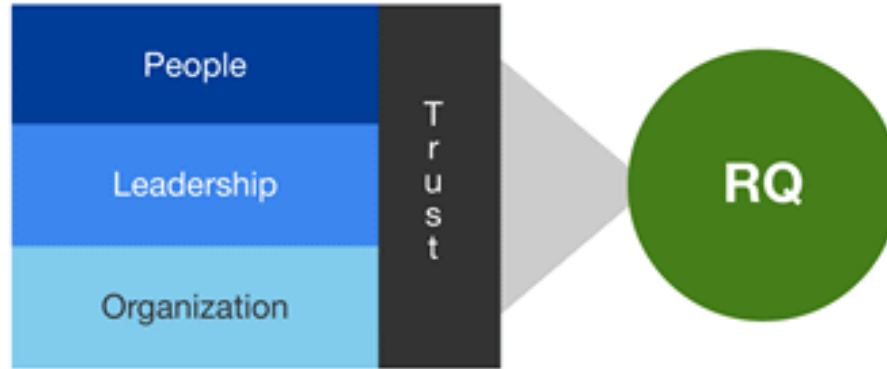
A company and its products are probably a very small part of a non-linear relationship with any company



So focus on the customer's life – not just their interactions with you



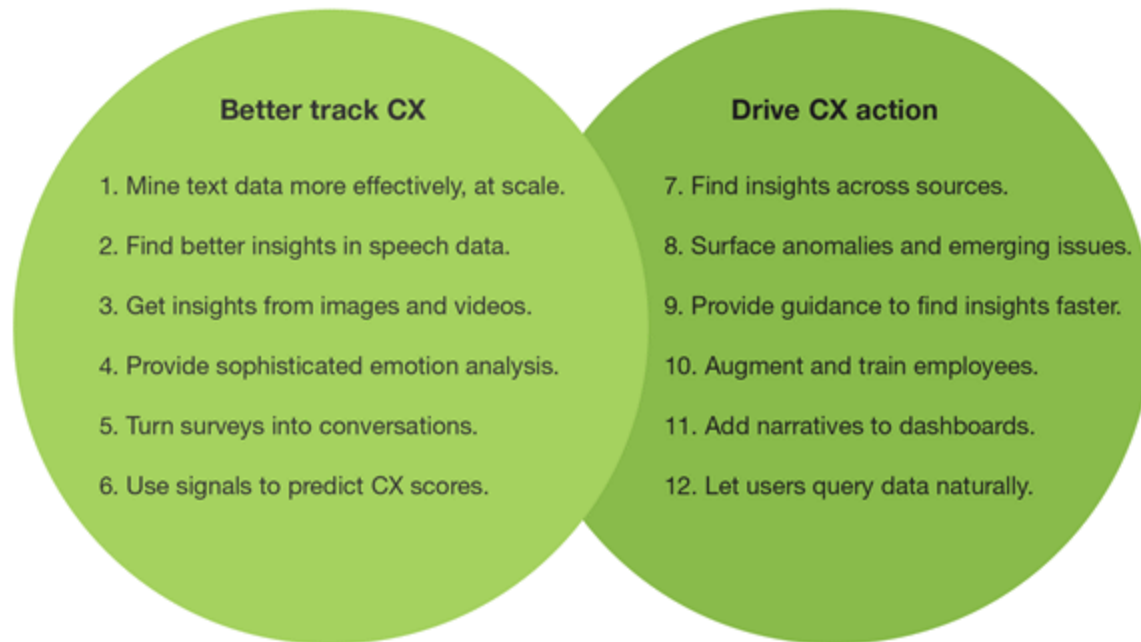
The technology still needs people with high RQ to guide it



Robotic Quotient
*(An extended version of
EQ - Emotional Quotient)*

the ability to engage in sophisticated information processing and task completion by understanding, adapting to, collaborating with, and exchanging data and insights with 'intelligent' machines

What we can do now: AI CX Use cases



In short...

- › Build customer trust as the ultimate differentiator
- › Master social and behavioural sciences to harness emotion.
- › Recruit and train new talent to use data and monitor performance.
- › Monitor the outputs of the AI black box.
- › Determine opportunities in the customer journey.
- › Define the customer's need.
- › Identify the data you need to help the customer.



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Thank you

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