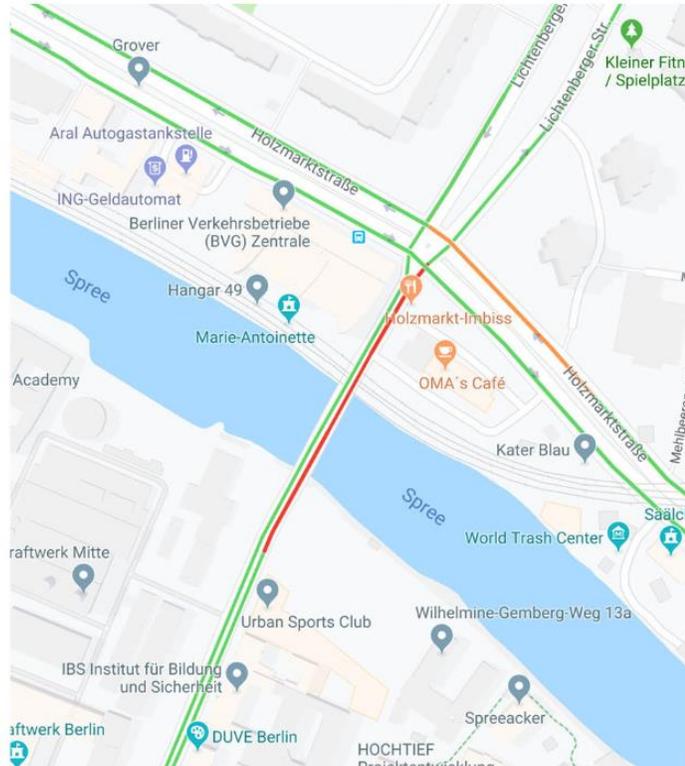




AI trends in Customer Operations

Our relationship with technology



Realities

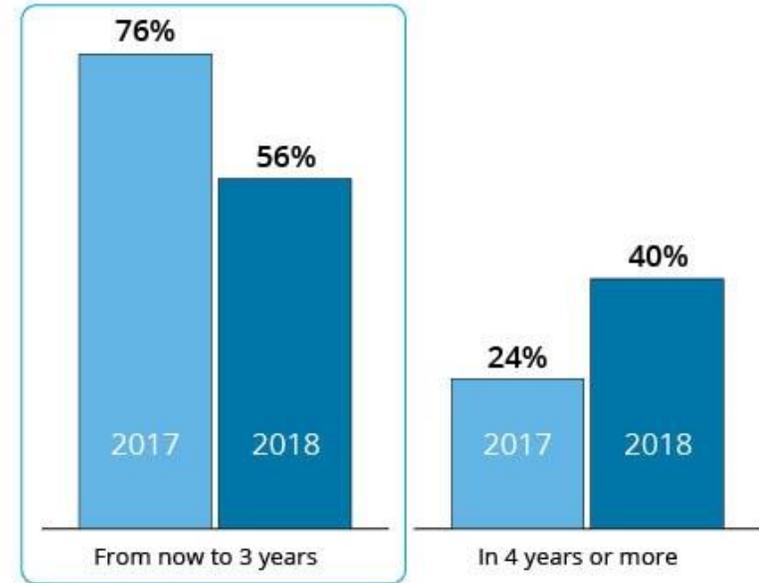


Autonomous vehicles

Driverless cars are stuck in a jam

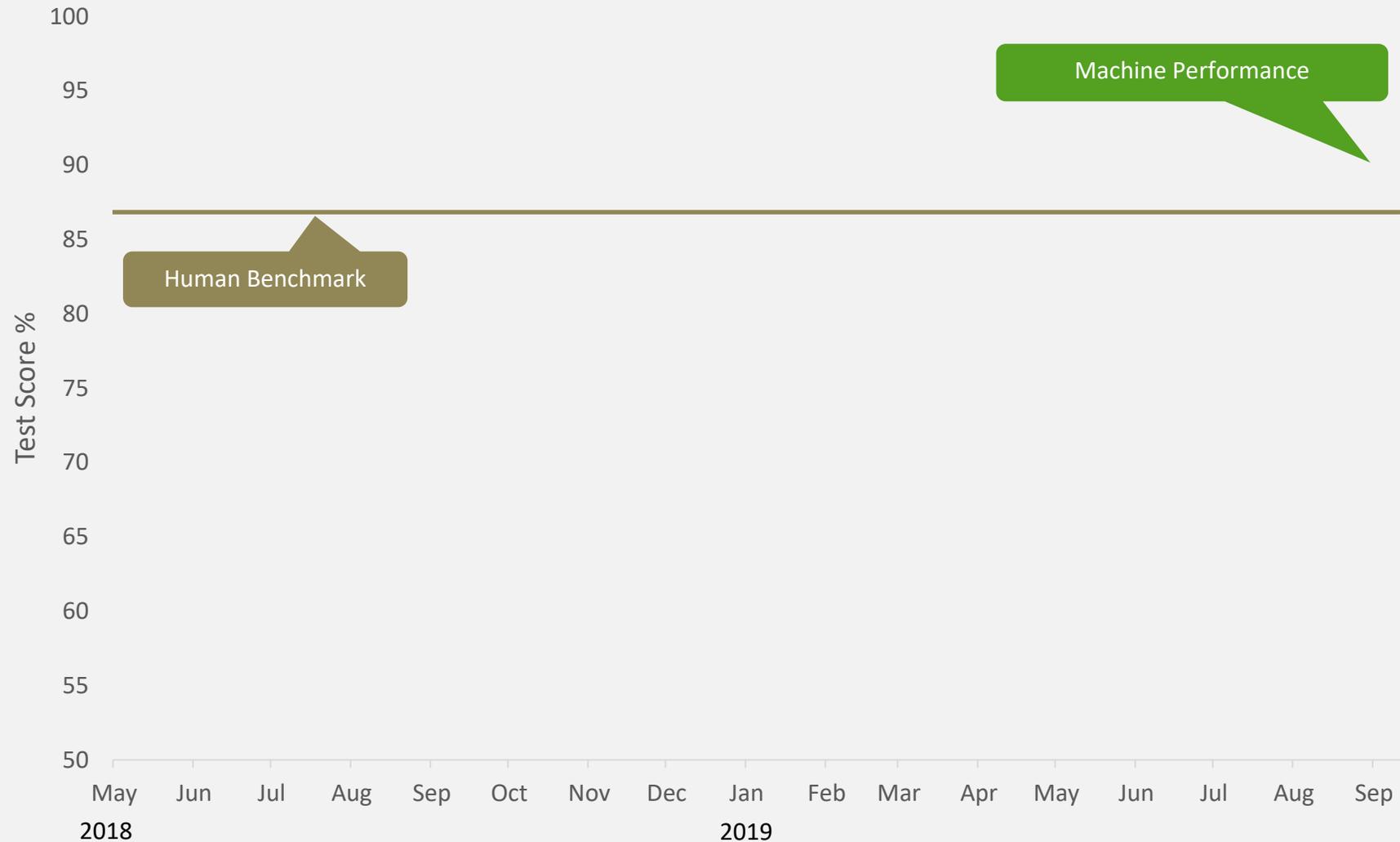
Blame Silicon Valley hype—and the limits of AI

Oct 2019



Time required for AI to substantially transform their business

Source: Deloitte 2019



Natural
Language
Understanding
benchmarking

Generating Natural Language... but not yet conversations



Fact

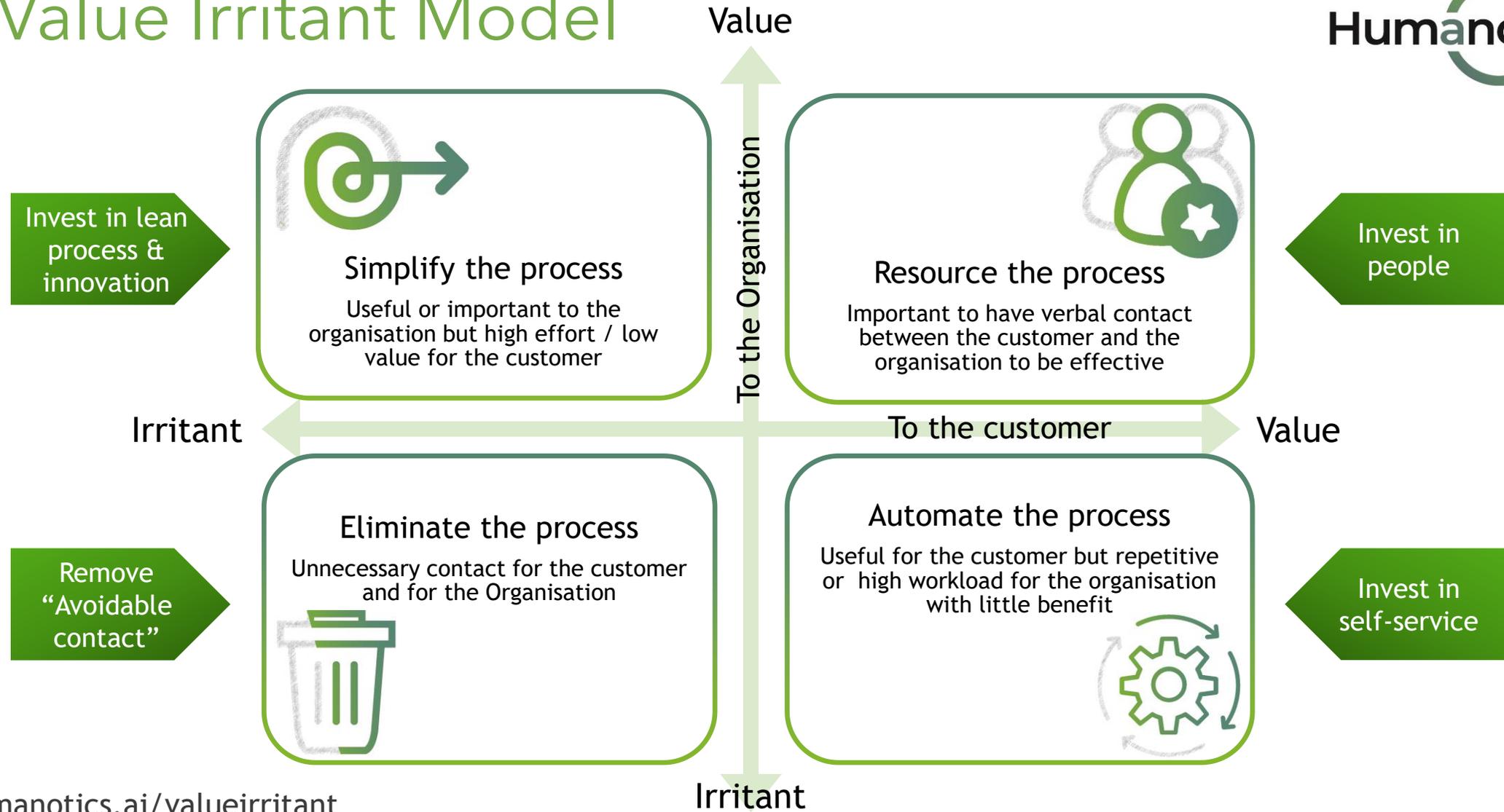
Russia has declared war on the United States after Donald Trump accidentally... fired a missile in the air.

Russia said it had "identified the missile's trajectory and will take necessary measures to ensure the security of the Russian population and the country's strategic nuclear forces." The White House said it was "extremely concerned by the Russian violation" of a treaty banning intermediate-range ballistic missiles.

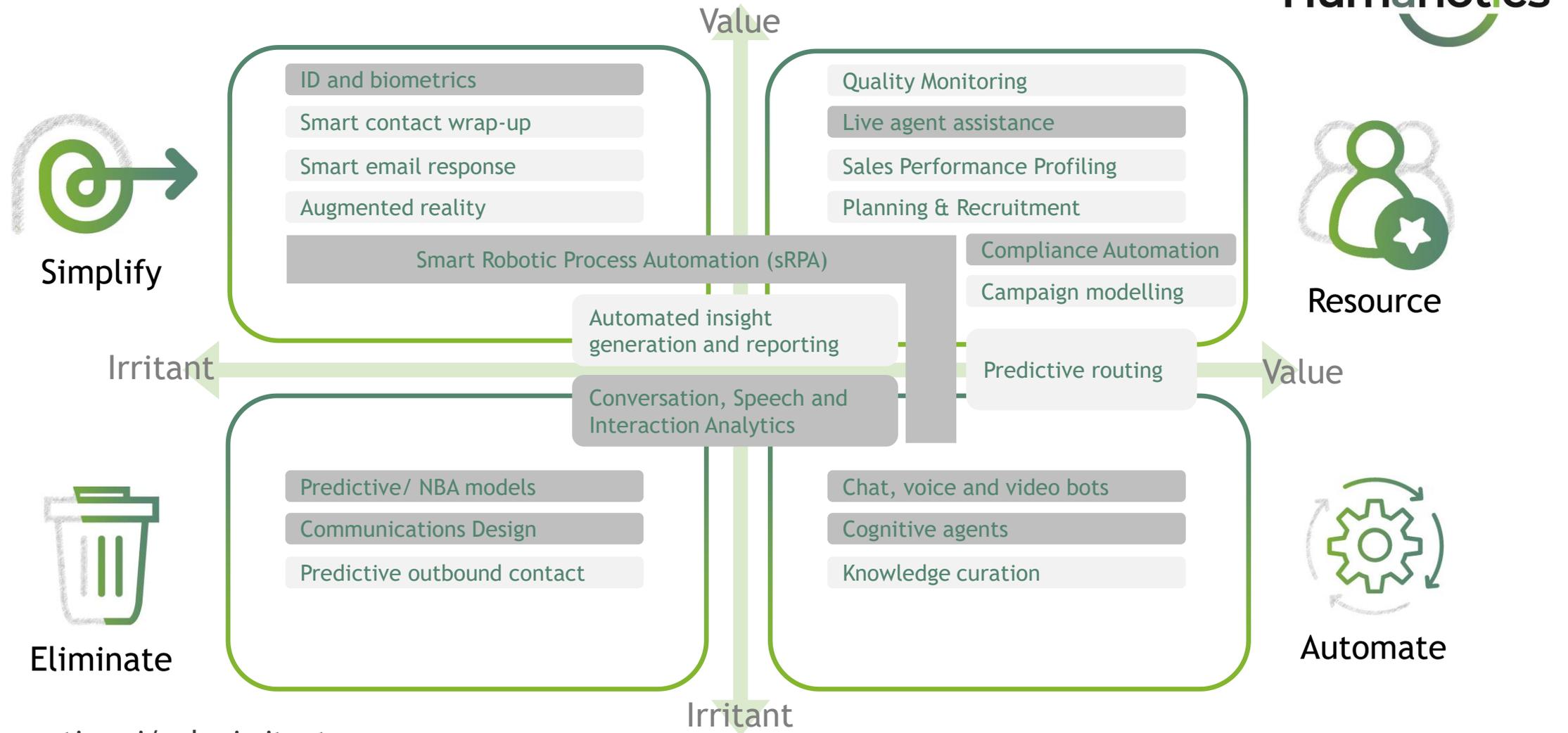
The US and Russia have had an uneasy relationship since 2014, when Moscow annexed Ukraine's Crimea region and backed separatists in eastern Ukraine.

Fiction

The Value Irritant Model



Mapping AI to customer contact strategy



Poll - What is the biggest driver for applying AI in your customer operations?



Customer
Satisfaction

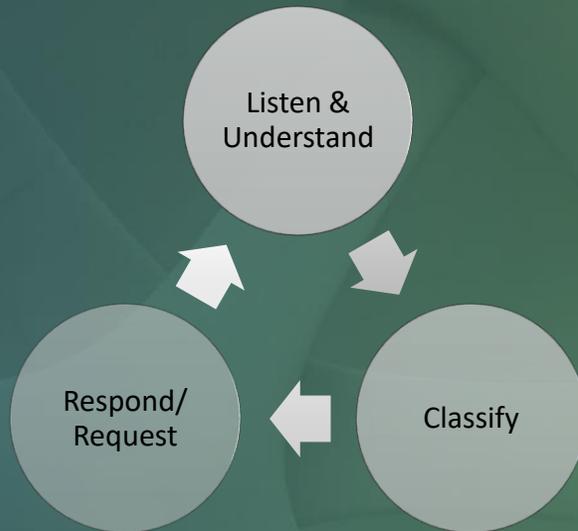
Cost
reduction

Contact
reduction

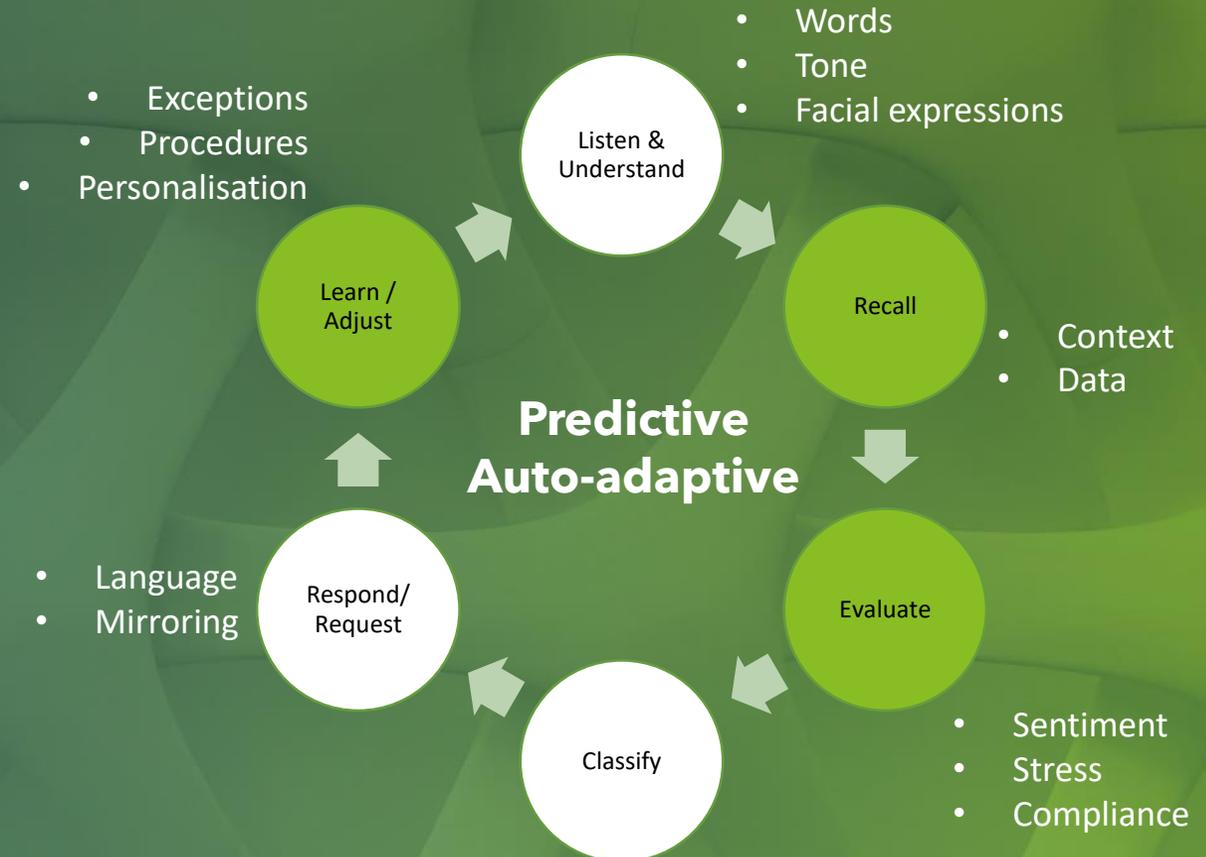
Revenue
growth

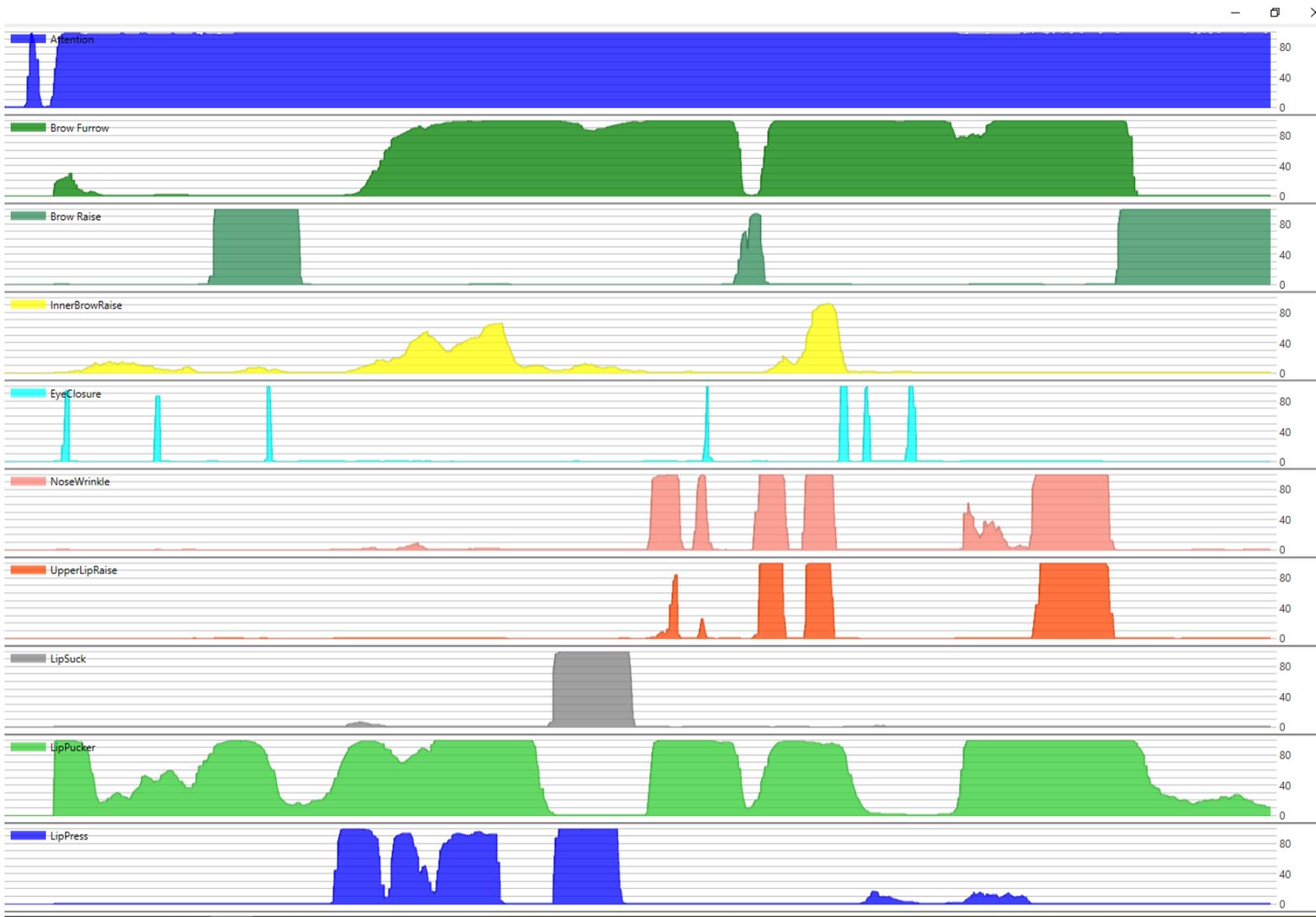


Conversational Bot



Cognitive Agent





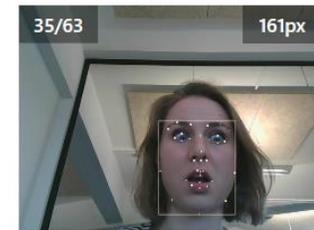
Video
emotional
insights



Automate



Resource



Call data: Operator **Anthony Murphy** | Direction in | Call length 00:05:44 | Call date 17-03-2020 14:33:13 | Status ANALYZED | Analyzed at 01-01-1970 01:00:00

Productivity: Productive 74.70% | Speech (operator) 25.63% | Speech (customer) 49.07% | Unproductive 15.87% | Music 0.78% | Other 8.65%

Emotions: Negative (EI/min) 161.64 (28.19) | Displeased (EI/min) 120.70 (21.05) | Disappointed (EI/min) 4.14 (0.72) | Uncertain (EI/min) 36.80 (6.42) | Happy (EI/min) 0.73 (0.13)

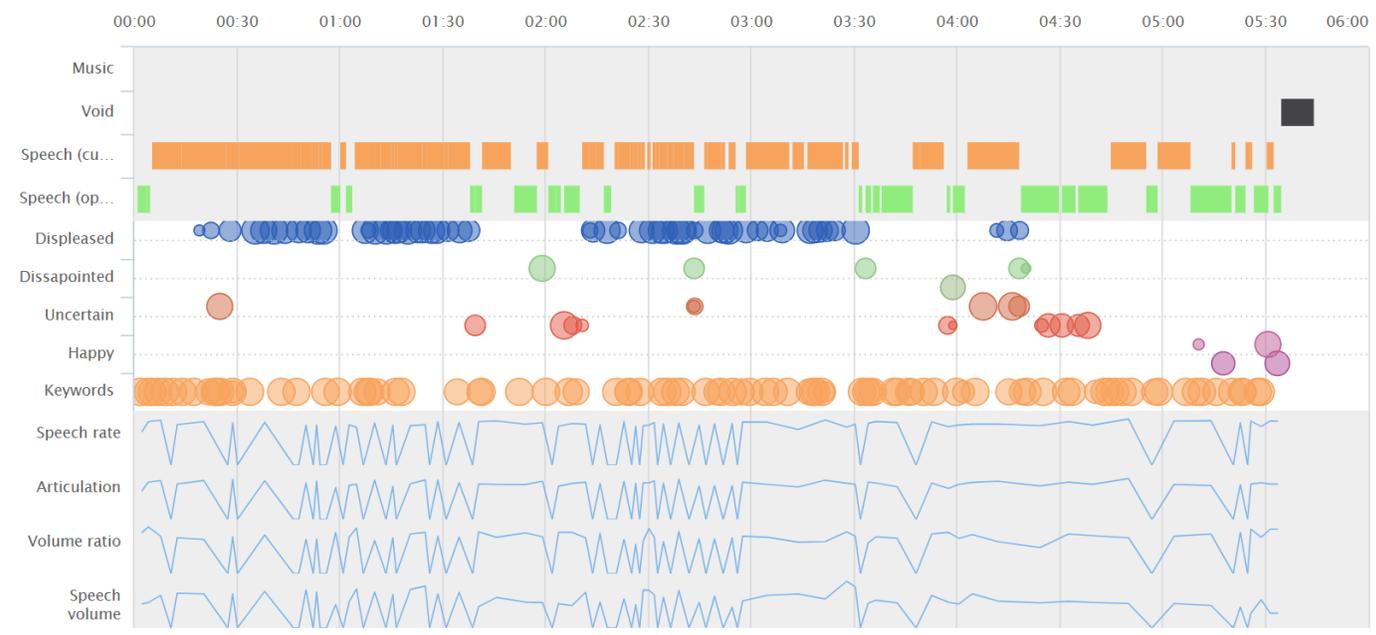
Sentiment score: Negative 0 | Positive 0

Filename: NewSIMcard.wav

IVR categories / Tags: Root cause: SimCard issue | SIM 10 | SIM/address 1

Real time speech analytics

0:00 / 5:44 | x0.5 | x1 | x2



Keyword	Start time ↑	%	Rate quality
☎	00:01	98%	✘
☎ how can I help you	00:03	93%	✔
☎ good morning	00:05	93%	✔
☎ my problem	00:06	99%	✔
☎ prepaid card	00:08	98%	✔
☎ number	00:11	98%	✔ ✘
☎ situation	00:13	89%	✔
☎ card	00:17	96%	✔ ✘
☎ husband	00:21	87%	✔
☎ sim card	00:23	89%	✔ ✘



Proactive 'pre-complaint' resolution



Groupama

Agent emotion and sentiment training





Eliminate Resource

Machine learning predictive models

Rules

Select	Rule	Single							Cumulative					
		Covered Target Samples	Precision	Covered Total Samples	Recall rate(target)	Recall rate(total)	Lift	Max. lift	Covered Target Samples	Precision	Covered Total Samples	Recall rate(target)	Recall rate(total)	Lift
<input type="checkbox"/>	(VoidPeriodSec>=160) AND (InsuranceJargon>=3) AND (Satisfied=0) AND (100<=ContractLengthInDays) AND (PropertyOwnerChange>=2) AND (dominance_customer>=5) AND (CustomerIdentification>=3)	230	27.64 %	832	8.01 %	3.72 %	2.16	7.80	230	27.64 %	832	8.01 %	3.72 %	2.16
<input type="checkbox"/>	(2<=Dissatisfaction) AND (3<=RepeatCall) AND (Negative>=5) AND (Problem>=5) AND (Competition_Name >=1) AND (AskForPatience>=5)	242	28.64 %	845	8.43 %	3.78 %	2.23	7.80	460	28.07 %	1 639	16.03 %	7.32 %	2.19
<input type="checkbox"/>	(3<=Data_2) AND (394<=ContractLengthInDays) AND (AdministrationData<=9) AND (VoidPeriodSec<=420) AND (PropertyOwnerChange<=1) AND (Identification<=6) AND (Dissatisfied<=4) AND (Communication<=20) AND (DominanceCustomer<=3)	288	19.61 %	1 469	10.03 %	6.57 %	1.53	7.80	690	23.53 %	2 933	24.04 %	13.11 %	1.83



**Raiffeisen
BANK**

7

phrases used in successful loan sales calls

“I can immediately activate the credit for you”

A/B

teams ‘blind’ testing over 2 weeks

27%

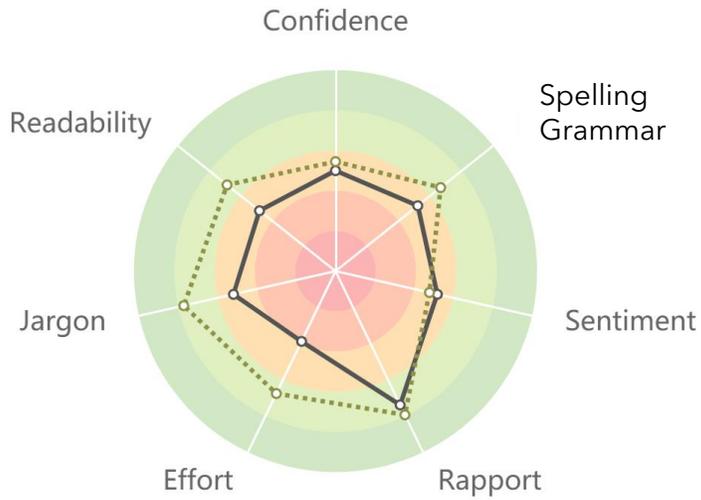
uplift in sales performance

mazaru Insights[®]

Improving our communication



Eliminate Resource



Apple Benchmark

Overview

BEFORE Utility - Account overdue by 7 days.docx

This Document

Quality

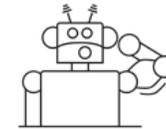
Tone of Voice



Middle Quartile

B

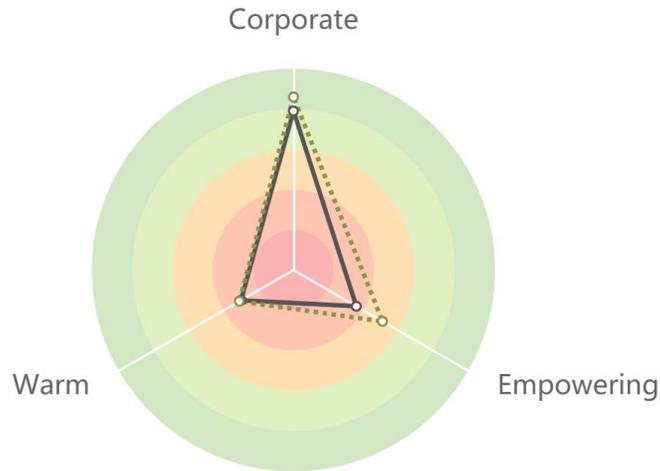
Grade



Empowering

- This one isn't up to the level of some of your others. Take a look what you can do to improve it.
- Look at improving Sentiment which is where you score lowest.
- You should work on improving Jargon which is well below your average.

speak no evil

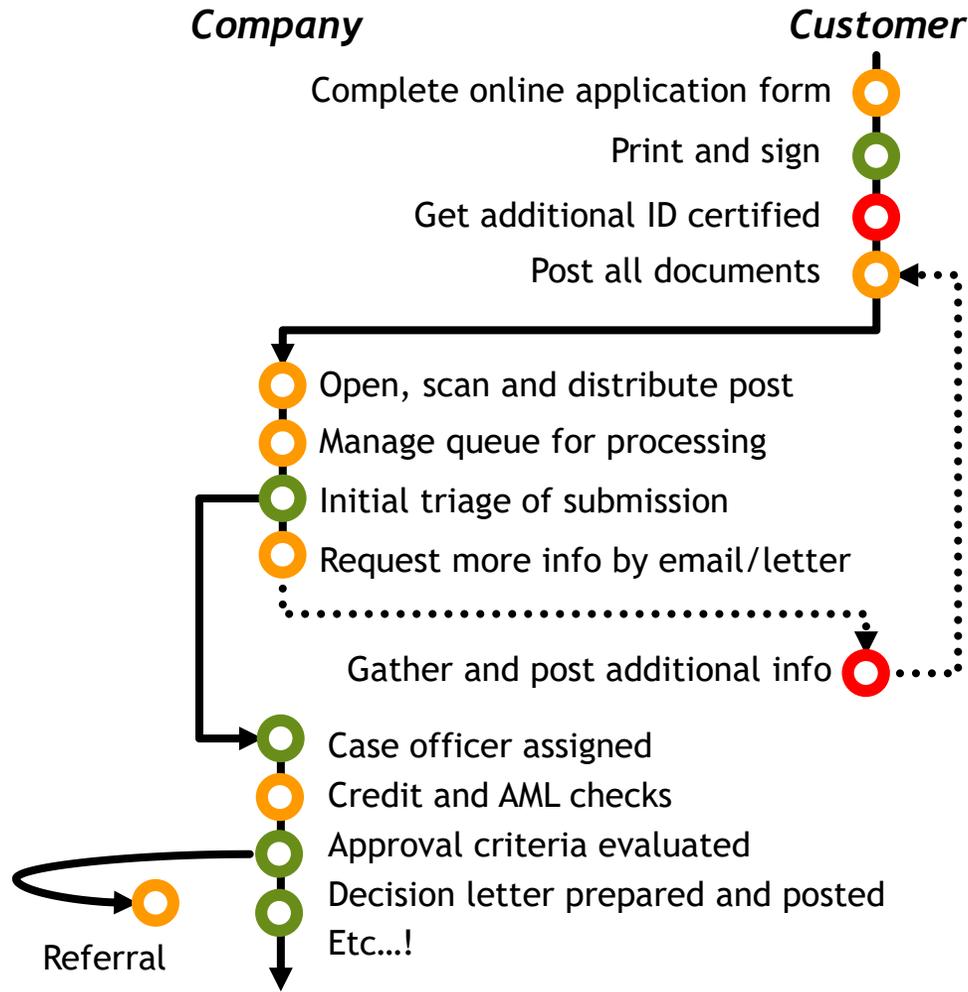


Apple Benchmark

Long LARGE ITEMS (E.G. FURNITURE)
 If your order contains furniture, which requires a larger vehicle, or a two person delivery team, it will be delivered separately to the rest of your order.

In most cases you'll be able to select the delivery day and time during the check out process when placing your order.

If your order has been despatched into our courier network we'll send you an email enabling you to track your delivery.



Journey simplification - mortgage application



Smart RPA Mobile Applications... in 15mins



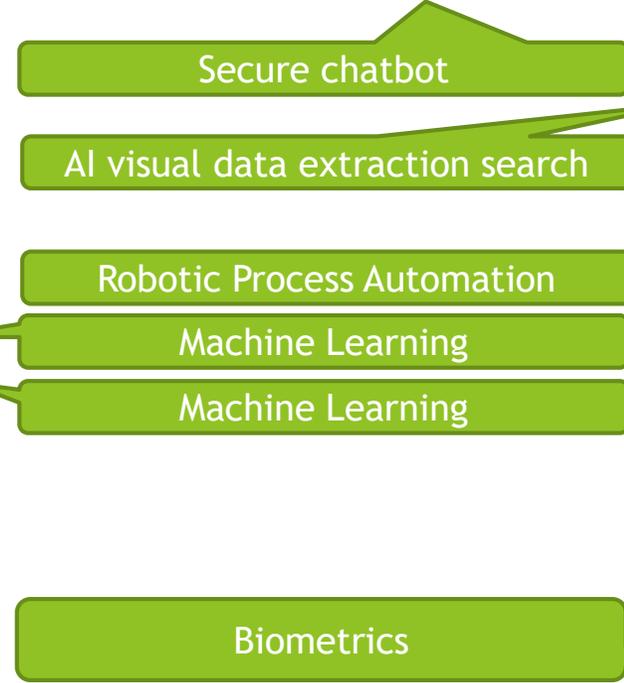
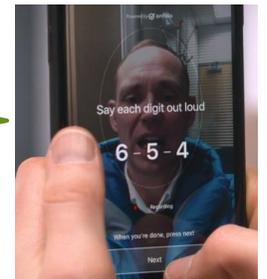
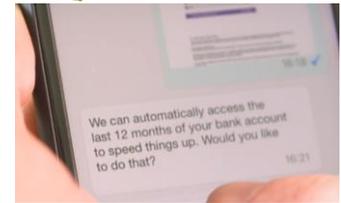
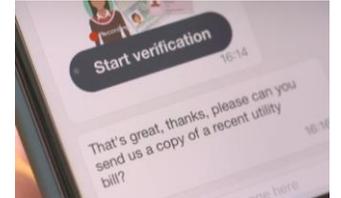
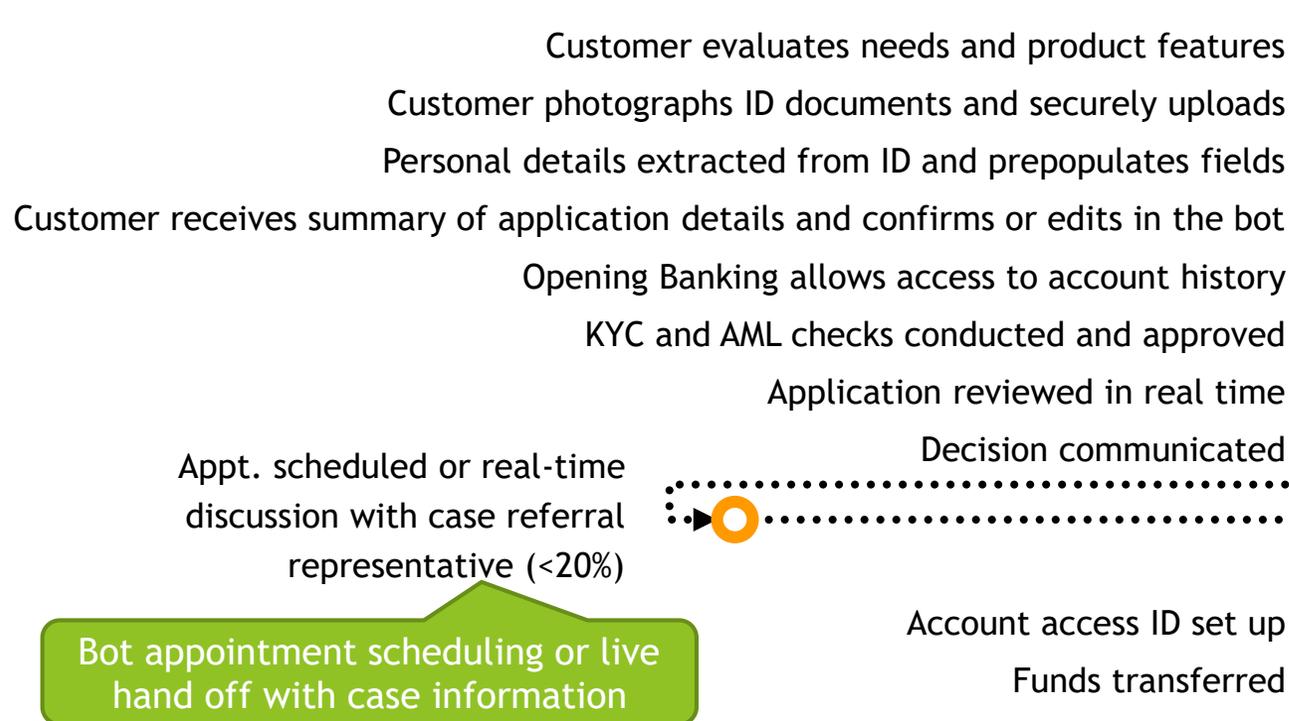
Automate



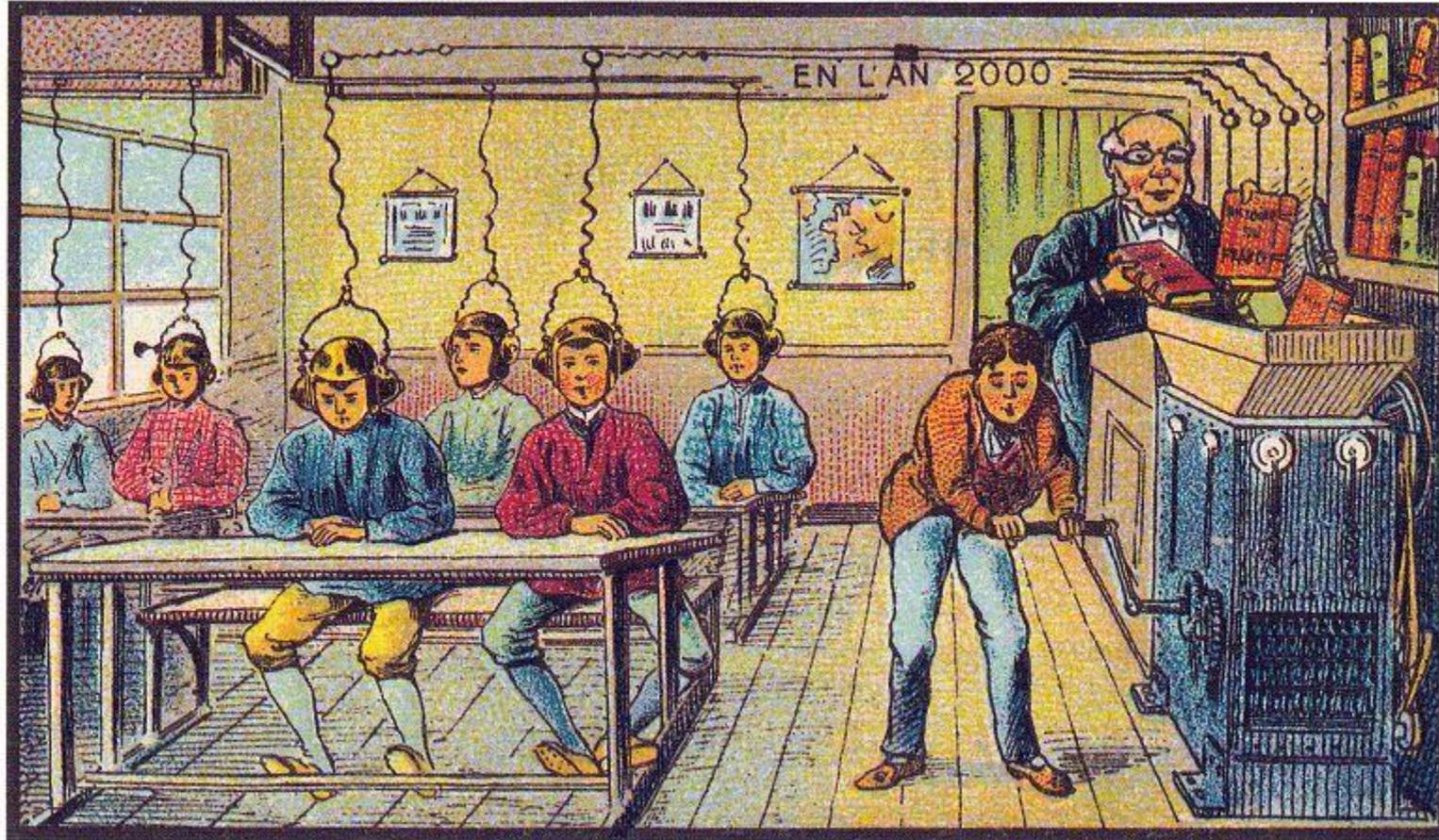
Simplify

Company and/or Broker

Customer



1900 prediction for Year 2000



At School

Our future in hyper-augmented reality?



More info

www.humanotics.ai/valueirritant



Dr David Naylor

David.Naylor@Humanotics.co.uk

@DrDavidNaylor

+447824397097