Botman vs Superagent: The rise of a new customer experience

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Are robots going to eat all the jobs? What does the research tell us?

60%

of jobs could have 30 per cent of their activities automated in the next ten years²



of jobs are at risk of being automated in the next ten years¹

5%

of jobs will be fully automated within the next ten years²

14%

of jobs will be fully automated within the next ten years³



Why 'easy' things are often difficult: Moravec's Paradox

Easy to encode: conscious tasks

High level reasoning Playing games Interpreting the stock market Writing simple articles Mathematical and symbolic interpretation

Following processes

Pattern recognition

Hard to encode: unconscious tasks

Walking Manual dexterity Empathy / social skills Gut feeling Conversation Negotiation Collaboration Creativity / innovation

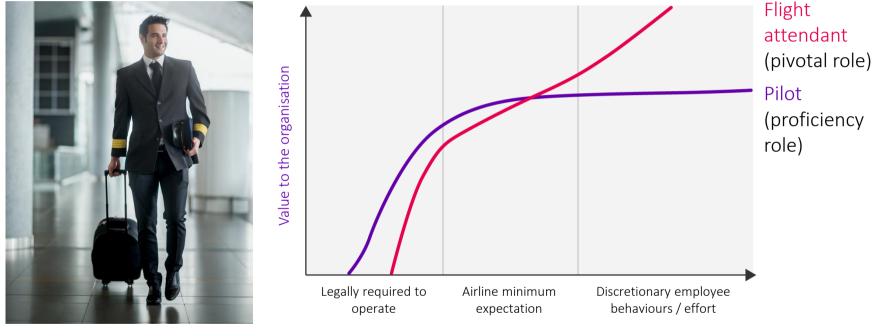
"It is comparatively easy to make computers exhibit adult level performance on intelligence tests or playing checkers, and difficult or impossible to give them the skills of a one-year-old when it comes to perception and mobility."

Hans Moravec, roboticist

Pivotal vs. proficiency roles: Variance in value *

Variance in the value of work

Where great talent makes a difference (pivotal role) and where good enough is sufficient (proficiency role)



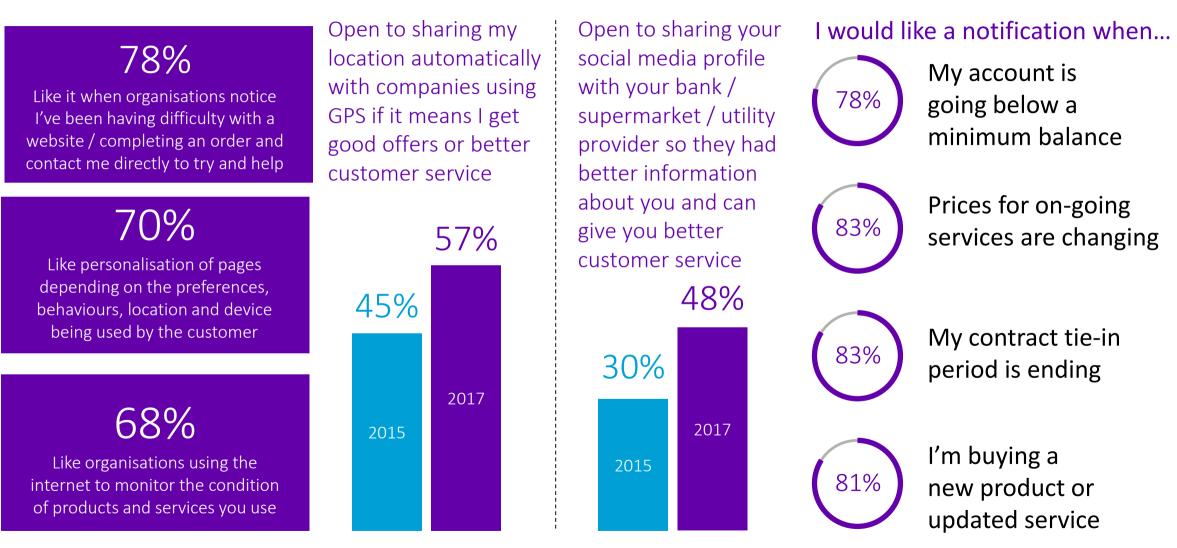
Performance of talent in the role

Proficiency role: High skill but, beyond a certain standard, higher performance doesn't deliver more value

Pivotal role: Higher performance yields more value, e.g. better customer service



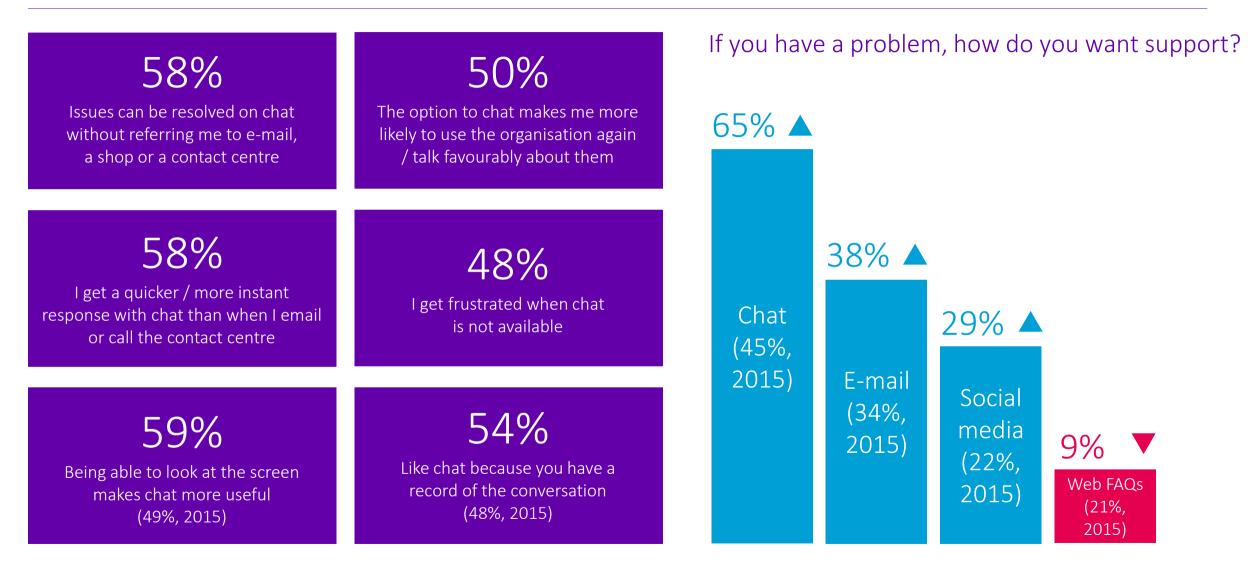
One step ahead: Consumers are impressed by proactive service



Source: Hickman, M. & Davies, J (2017), Chat, Tap, Talk, BT White Paper

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Chat is where it's at

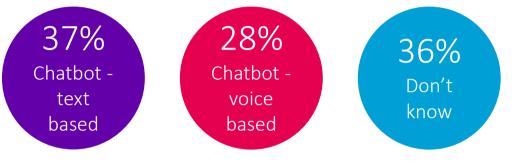


Source: Hickman, M. & Davies, J (2017), Chat, Tap, Talk, BT White Paper



Chatbots have appeal – but with 'checks and balances' from human agents

A Chatbot is a computer program which conducts a conversation via voice (e.g. Siri) or text methods (e.g. messenger) using artificial intelligence. Which do you think would be most effective?



2 in 3 The benefit of chatbots would be in getting an immediate response

73% Chatbots will help companies improve their customer service

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79% I am more loyal to organisations that are easy and simple to contact
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Human agents should check the more complicated responses of chatbots

How interested would you be in the following initiatives from organisations?

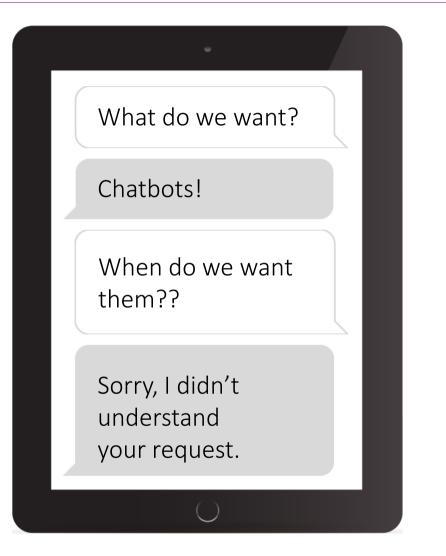
uick and simple queries (e.g. train times) 34% iving a meter reading to a utility	46%
	46%
iving a meter reading to a utility	
31%	43%
irline check-in	
30%	41%
ooking a restaurant	
28%	46%
ealth advice	
27%	40%
aying a small bill	
27%	39%
etting simple financial information and advice	
25%	43%
elling a retailer your preference for clothes	
23%	36%
rdering an Uber	
22%	33%

7 © British Telecommunications plc 2019

Source: Hickman, M. & Davies, J (2017), Chat, Tap, Talk, BT White Paper

Challenges:

- Works for simple queries effectively steering the customer through the "Known knowns", i.e. GIGO
- More difficult for complaints / complexity if we get angry, we tend to tell long, rambling stories which are hard to parse
- Sarcasm tends to throw algorithms: e.g. "Thanks, @TrainCo for my free sauna this morning"; "It was so good to see that your maintenance department hadn't spoiled things by making unnecessary repairs"; "I would have cheerfully strangled them"
- Limited ability to parse emotional context YET!





Intelligent routing is key

Advanced Call Routing (ACR)

Problem

- Routing complexity: with 800+ routes, >280 'agent skills' and 3.4m routing strategies we had the world's largest config.
- End of service life and unable to support large scale operational changes or multi-skilled environments
- Operational management: lack of understanding how call mix impacted performance, training or optimisation leading to poor CX, inefficiency and 'BT shunt'.

Solution

- Customer journeys: few journeys across <20 teams
- Performance-based routing to best available agents to reduce customer effort or manage customer revenue
- Agent investment increased by ACR management wait time with least tenured agents and providing 'skill pills'
- Dynamic agent targeting with agents being targeted on the actual work types they complete
- Customer effort reduced and operational KPIs improved.

Turning technology into success:

Help Team	Effort	VoC
#1 Camp A (UK)	61 mins	75.0%
#2 Camp B (UK)	69 mins	73.8%
#3 Camp C (UK)	70 mins	71.0%
#4 Camp D (Offshore)	54 mins	60.0%
Overflow	102 mins	low survey

Employee engagement:

- 1. Virtuous cycle of high performance: agents requiring support receive additional investment
- 2. Career path and freedoms: 'experts' are provided additional system and process freedoms while having access to career paths and development
- 3. Diversity of work: agents enjoy a variety of call types but only when they're trained
- 4. Dynamic targeting, bonus and incentives: based on actual work distribution the agent completes.



The networked experts of the future?





* H. James Wilson, Paul R. Daugherty, and Nicola Morini-Bianzino (2017), The Jobs That Artificial Intelligence Will Create, MIT Sloan Review



It's not Botman vs. SuperAgent...

"Computers are incredibly fast, accurate and stupid; humans are incredibly slow, inaccurate and brilliant. Together they are powerful beyond imagination"

Albert Einstein (allegedly)

... it's Botman and SuperAgent

