# Future Firsts: Technology forces shaping the future workforce 2011 2017 2019 2021 2023 2025 2027 2029 2030

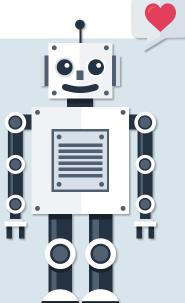
#### **EMOTIONAL AI**

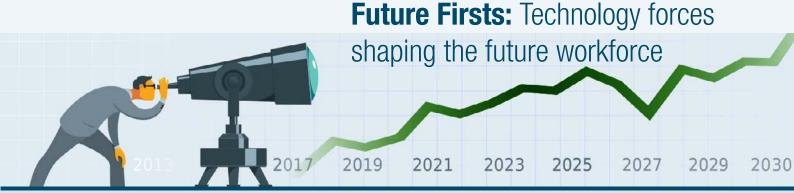
Empathy as a consumer expectation and as a brand attribute is a skill to be perfected. However this trait is no longer the preserve of humans alone.

In the never-ending story of consumer empowerment, a new chapter opens. With the proliferation of Al we anticipate a future in which emotional intelligence becomes a core commercial expectation as well as a key personal skill to master in an emotion-sensitive world and workplace.

Promised here is an ever more clinical understanding of the customer's real-time emotional state (including her emotional associations with particular brands) and the arrival of empathetic services that, powered by cold hard data, deliver warmer, more human interactions, at scale and on-demand. Wherever the customer finds herself - in-store, in-app or browsing sites at home - empathetic engagement will surface, from context- and mood- sensitive greetings to recommendations based on a customer's core underlying motivational code. Commercial interactions that do not reflect a little of ourselves back will soon seem underpowered by comparison.

These empathetic interactions between brands and consumers may help customer service agents with many of the more formulaic aspects of their jobs. Chatbots and Al helpers may be able to handle many of the initial questions on a customer service representative's behalf, freeing them up for other tasks. However, if natural language processing and Al reach levels of engagement that are indistinguishable from humans, they might replace the other parts of a representative's job as well.

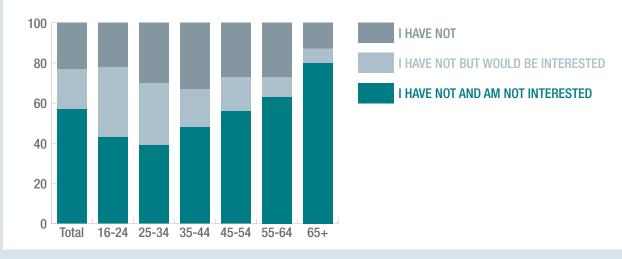




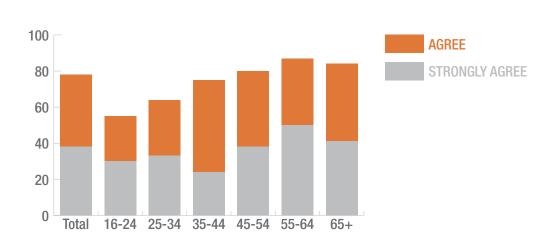
The vast majority of consumers prefer to make complaints to a human being. These consumers want their concerns listened to and action taken, not simply filed away. A quarter of the total GB population has already interacted with a customer service chatbot, with or without knowing it. That figure is set to rise with 50% of the entire population expected to have used a chatbot service by the year 2020.

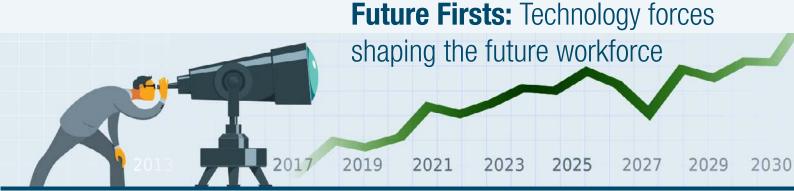
With this growing use of chatbots, the line between talking to a human and machine is becoming blurred, brands are increasingly using human services for more complicated enquiries, leaving the simpler tasks to the Al.

### " I have used a customer service chatbot service that popped up on my screen when I was researching purchases online "



#### " When making a complaint about a product or service I prefer to speak to a human being "





#### **INNOVATORS IN ARTIFICIAL INTELLIGENCE**

#### A tailored approach

In April 2017, researchers in China claimed to have developed a chatbot which is capable of mimicking a selection of personality types. It was dubbed the 'emotional chatting machine' or ECM and could provide a glimpse into the future of this technology. Machines are able to tailor specific personalities for specific situations. While people in client facing roles may struggle to engage emotionally with every single customer, machines are able to change tone and attitude to suit every situation.

#### Al assistants as the first point of call

The ability of machines to mimic interpersonal conversations and empathy is improving. A virtual assistant designed by Gatebox was made available for pre-order in 2016 and uses technology to make the assistant into a tangible character rather than a simple disembodied voice. The assistant takes the form of a holographic woman. Personalised and empathetic Al assistants such as this could be the first line of engagement for many customers, before being redirected to a customer service agent for more specific enquiries.

#### **Data processors**

One clear advantage of machine learning over humans is the sheer amount of data that a machine can process. While humans will be able to tailor their tone to a customer based on their past experiences, a machine can potentially deliver a much more specific and engaging service, based on a vastly bigger pool of available data.

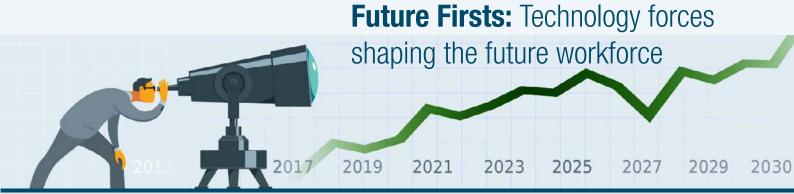
Created in early 2017, Mate is the result of an attempt to create an Al assistant that is warmer

than previous iterations. It utilises machines learning to analyse not only preferences but emotions as well.

#### Virtual Therapists

'Woebot', utilised via
Facebook Messenger, is a
virtual self-help tool trained
in cognitive-behavioural therapy

(CBT) and is capable of tracking the user's mood and offering practical advice on improving mental-state. The app uses brief daily conversations with the user and employs language analysis to analyse how they are feeling and based on this offers tailored advice and video content.



#### **KEY IMPLICATIONS FOR THE FUTURE WORKFORCE**

## Al assistants and Chatbots will also help client facing office workers - rather than steal their jobs

While emotionally engaged chat bots and Al assistants are becoming more popular, they will help human workers free up more time as opposed to stealing their jobs. Many consumers will still want to interact with human beings at some point in their interactions with a brand. Chatbots will assist customers with queries and minor questions, but for more complex situations a human touch will be necessary.

#### **Entry level roles may be under threat**

Individuals in entry level client facing roles may face the danger of displacement. Many entry level client facing roles require answering basic questions, and providing a customer with basic information. These are the types of roles that an emotional Al could answer, leaving many questions about how individuals will be trained to move into the roles where they need experience and ingenuity to answer more complex questions.

#### Chatbots and humans will work side by side

Emotional Als and chatbots will be used concurrently with human staff, and it will be necessary for human staff to know how these tools work in order to use them to their best effect. Knowledge about the ways a chatbot or Al assistant work could be a useful skill to many in customer service roles.

