CUSTOMER SERVICE INDUSTRY- DEALING WITH MACHINE AGE (AI)

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1. CAN ARTIFICIAL INTELLEGENCE REPLACE HUMANS?

1.1 AI Is Not Good at Reading Sarcasm or Emotion- Our experience shows that automation leaves contact centre advisors to deal with more complicated issues. AI is not good at dealing with complaints, sarcasm or emotions. It lacks human empathy and the emotional skills required to deal with complex issues like complaints. Even a simple statement such as "fantastic service" can have the opposite meaning depending on how it's said. Robots find this hard to understand.

You wouldn't allow an inexperienced agent on the phone without training and supervision. The same is true for robots, but even more so. Because of this, most AI applications have some kind of human in the loop to supervise and check the quality of the robot's work.

1.2 The Number of Advisors Will Grow with AI Technology- Contact centre reports show quite the opposite – the number of reps is actually growing, since the number of incoming calls is growing.

So, the reality is that technology has yet to make people redundant. It fact, it is used to help the human reps – to make them more efficient and productive, and to improve their work experience, thus improving their job satisfaction.

- 1.3 Robots and Automation Will Only Help Where Human Skills Are Not Required- Robots can either automate unattended end-to-end processes on a back-end server, without any human intervention, or they can reside on the agent's desktop and automate bits and pieces of a process and essentially help that person focus on handling the customer issue and not the process. Either way, automation helps where human skills are not required. But, for the foreseeable future, the human touch will still be extremely valuable and needed in the more complex cases, where out-of-the-box and creative thinking will dictate the customer experience and brand awareness.
- 1.4 A Blended Approach Between Robots and Humans is Likely to Be Successful- Humans will always be critical to providing what customers want from stepping in when bots can no longer handle the query to providing a human voice or friendly face to customers. It's for this reason that a blended approach to AI in the contact centre is best. We can design a robot that can handle 80% of all inbound customer queries, but there's still that 20% you can't plan for and that's where a combined approach succeeds.

2 WORKPLACE PRACTICES ADAPT TO THE CHANGES

2.1 Parallel work streams- Strike the right balance between implementing short-term automation fixes and opportunities, while seeking solutions to problems that will determine success in the long run. It takes time for clients and employees to adapt to monumental change. Thus, it is as important to get long-term organizational change underway as it is to rapidly exploit near-term efficiency. To that end, managers should develop a list of 10 to 15 processes that bots can quickly improve. Test and learn, both in the application of the right bots to the right problem, and how to redesign processes end-to-end to maximize results. Simultaneously test and learn on the soft side of automation. Blueprint the broader impact on roles, skills, controls, leadership, workforce and talent management, and social contracts.

By doing so, managers can move critical employees and clients closer to their longer term automation ambitions—which can be funded at least in part with returns from the earlier automation of simpler tasks.

2.2 Mold the organization- As more processes are digitized in every part of an organization, executives must think at a macro level about the entire enterprise, even as the organization is changing. How do you hire today for a diminished workforce 10 years out? When more and more of your people are replaced by bots, how do you lead, enforce quality control, and audit? The key to navigating through the coming automation age will be identifying and retaining (retraining) the employees who can make one transition after another.

Companies will experience huge changes as physical infrastructure disappears, offshore capabilities are repatriated, more services become self-service and virtual, and customers begin to interact more with robots. Automation will transform not just production, but operating models. Start early to shift the leadership mindset.

2.3 Virtual Advisors Will Eventually Handle Complex Interactions- A "first wave" of virtual agent applications is already available today. The likes of Facebook, Apple, Microsoft and Google are offering virtual assistants and chatbots that are poised to funnel consumer interactions though common, AI-enabled gateways, and remake what we think of as the contact centre.

These solutions aren't perfect yet, but they offer a glimpse of the rapidly approaching future of customer engagement.

2.4 Familiar Processes Will Become Increasingly Automated- Familiar processes like forecasting and skill-based routing will become increasingly automated, and will require fewer, if any, humans in the loop of predicting and responding to demand.

Workforce optimisation (WFO), already having seen dramatic efficiency boosts from interaction analytics, will increasingly become an automated feedback loop between agents and an intelligent machine-driven scoring system.

3 EMPLOYEES NEED TO LEARN

3.1 Robot Will Change Jobs, Not Replace Them- Jobs will change, as they often do with the emergence of disruptive technologies, but probably for the better. Very few things can be fully automated, and those that can, are and will be often need a guiding hand as a fail-safe.

AI will help remove more and more of the monotonous tasks we'd rather not do and free up more creative and innovative positions.

3.2 Education- Teaching and learning has been the centerpiece of the human society's evolution. Education in this day and age has to reflect the upheavals overcoming the socio-economic landscape. This means we need more focus on computer science in schools and academic institutions. This will help prepare future generations to fill tech vacancies.

Governments and the private sector must also play a more active role in helping the workforce acquire tech skills. This includes people currently who are filling job roles that will likely become subject to automation in coming years.

3.3 Assisting humans in tech jobs- One of the main hurdles for entrance into tech jobs is the sophisticated level of skills, experiment and knowhow required. The same goes for other fields where talent and expertise is in high demand, such as medicine.

For instance, the cyber-security industry is currently struggling with a shortage of one million skilled workers. Meanwhile the amount of time and effort required to train a security analyst is overwhelming.

Fortunately, AI-powered security tools can downsize the effort required by security experts in maintaining the integrity of IT systems. By learning to analyze and flag network events or process behavior, tools such as MIT's AI2 and IBM's Watson for Security enable security analysts to become more productive and efficient in fighting cyber attacks.

3.4 Filling skills gaps elsewhere- Tech is not the only domain that can benefit from AI in creating jobs. Other industries are already making use of this growing trend to find and train talent. Thanks to machine learning and big data, physicians are becoming more efficient in diagnosis and treatment of diseases. These tools will help less-skilled professionals perform tasks that usually require extensive experience. This can help fill vacant posts at a faster rate and put professionals at work where their expertise is required.

4 HUMAN-MACHINE COLLABORATION

The Adaptive MT model is interesting to me for its potential to positively influence the translation industry and help normalize the use of MT. I expect that as translators directly experience personal productivity improvements through MT, they'll want more of it, and this will create a pull effect on MT demand.

But more than that, to me it's also an example of the massive importance of human - technology interaction design. It shows that the difference between an experience that feels

grueling versus one that feels empowering can be based on nuanced differences in the user interaction model. Of course that's no revelation; the fields of human-computer interaction and usability engineering live in this space. Yet there seem to be a lot of poorly-designed human - technology interactions out there. How much do those cost us? Not only in lost efficiency, but it is harder-to-measure cost of demoralization and resistance to technology adoption? It makes us think about what other language technologies could be more widely applied, and made more universally useful through rethinking the interaction model.

For example, what if we take those QA technologies that are typically invoked only during late-in-process LQA steps, and surface them dynamically, upstream, to the folks who are doing the translation? Or, what if we take the process and translation performance data that we're generating today and try to convert it into useful actionable intelligence for the translator? Wouldn't it be useful to know, for example, that the translation you're currently creating is similar to a translation that was heavily edited last time? Or to have visibility into how your translation "performed" out in the real world?

A final thought. As a pro-technologist, interactive translation innovations make me optimistic that technologies can go from being perceived as competitive threats to being empowering assets for translators. I like the idea that not only can it happen, but it can be made to happen through willful innovation and conscientious design.