

How AI-powered chatbots are unlocking business value

 By [Rudeon Snell](#)

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Since the term "AI" was first coined by cognitive scientist Richard McCarthy and his team in preparation for the 1956 Dartmouth AI Conference, machines that can demonstrate human-like intelligence have been the holy grail of the artificial intelligence field.

AI has certainly endured some rough times; falling well short of the hype popularized by media in addition to the unrealistic expectations that were created and not met by the reality of AI's narrow capabilities. Along with the underestimation of AI project costs, this all contributed to busts and disappointments in the field.

Despite these past disappointments, the recent convergence of technology improvements in the fields of computing power, automation, hardware capabilities, cloud, big data and advanced analytics have brought AI starkly back to the forefront of research and business today.



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AI is being hailed as the new electricity, primarily due to the transformative influence it will likely exert on all facets of our lives. And, if AI is the new electricity, then data is, without doubt, the grid AI runs on.

AI's growth and influence on every facet of our lives, is accelerating at an exponential rate, with businesses especially grappling with how to maximise the value from this technology, while minimising the risks posed. Consumers have found it easier to adopt and are already interacting with AI infused solutions, often unknowingly.

Biometrics, voice response systems, ride-hailing apps with dynamic pricing, weather forecast apps, and product recommendation bots are all imbued with AI technologies that augment their capabilities and deliver improved value to users.

The universal language of chat

For most smartphone users, chat is the most used feature. Globally more than 23 billion text messages are sent daily, which pales in comparison to the 30 billion chat messages that WhatsApp alone handles every day. People love texting, texting is the new talking.

Research shows, more than 90% of messages are read in under 3 minutes, while a recent Pew Research Center study found that 33% of American adults preferred texts to all other forms of communication, with 78% wishing they could text a business instead of calling.

Online conversational services have also made us more receptive to non-human interactions with businesses: Gartner predicts that roughly 85% of customer interactions will be managed without human interference by 2020. This has opened the door to the rise and proliferation of AI-powered chatbots, which are viewed as any computer program that simulates a real conversation, usually through the internet or an internet-enabled device.



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In fact, Facebook alone – with 1.3 billion users for its Messenger service – has 300,000 active chatbots powering 8 billion interactions between consumers and businesses every month. Chatbots are commonly powered by technologies such as Machine Learning, Natural Language Processing, Generation and Understanding (NLU, NLG, NLP) which understand and interpret context and intent and continually improve by learning from Big Data.

Chatbots differ slightly from virtual assistants such as Siri by focusing on accomplishing very specific tasks instead of the more general assistance characterised in virtual assistants. But why should businesses care?

Customer service at the speed of thought

Today, we live in a world of instant gratification. Consumer free time is measured in seconds and no longer minutes. People simply don't want to wait 10 minutes in a call queue before their query is attended to. Customer service centres are being overwhelmed, unable to cope with the influx of queries and rising expectations of consumers to have their query or complaint resolved quickly and efficiently.

This is resulting in billions of dollars in lost revenue as customer churn, primarily due to poor customer experience, increased hold times, call resolution delays, dropped calls, and more takes its toll.

Enter chatbots. Chatbots are ideally placed to help streamline engagement between consumers and brands with the express purpose of improving the customer service experience in the context of problem resolution. Chatbots can understand a user's intent, take the appropriate action to resolve the user's problem, and perform a smart hand-off to a human agent if required. Chatbots are thus well-placed to deliver business value.



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To ensure uptake, chatbots also need to be highly visible to increase the chances that users interact with them, for example on the homepage of a website, or prominently displayed on social media channels. One of the key objectives should always be time savings: customers want a quick resolution to their queries, and businesses want their customer support or front desk agents to spend as little time as possible on low-key issues.

Chatbots are an ideal solution to augment companies' customer service capabilities: research shows that most customer service calls adhere to an 80/20 rule of thumb where 80% of the questions being asked are similar or the same. Automating this part of the process is where chatbots excel.

By triaging enquiries for the business and providing answers quickly and efficiently to customers, human agents can then take care of more complex customer queries. As a result, inbound calls are reduced, the number of emails that need to be read decreases dramatically, agents dealing with low-level queries is freed up, and calls are more effectively routed.

Best of all, chatbots are available 24/7, are not subject to mood swings or sick days, and they get smarter over time as they learn, enabling them to handle increasingly complex queries effectively. A recently concluded engagement with an SAP customer that deployed a bot, helped that customer increase their call centre productivity by 300%.

The same type of benefits rings true for chatbots that augment internal organisational helpdesks such as IT and HR. Chatbots can help answer routine questions quickly and effectively for employees often providing organisations with a service capability they might not have had before. This ultimately helps companies expand their presence and availability to both their staff and consumers around the clock, maintaining a virtual concierge presence ready to serve anytime, anywhere in any language.

A peek into the (chatbot-enabled) future

While the business case for chatbots is clear, it's important to understand the difference between designing, building and deploying a chatbot and getting people to use the chatbot, which demands a concerted effort by enterprises to foster adoption. Business outcomes-led initiatives are critical to driving the success of chatbots, especially for bigger enterprises such as telecom operators, financial institutions, utilities and consumer goods brands. The technology to optimise value delivery from customer services operations is already present, it just needs to be embraced, delivered, adopted and measured for value to be realised.



What is beyond doubt is that, as machine learning and natural language processing and understanding continue to improve exponentially, so will chatbots also improve. Consider 3D printing, which ten years ago was limited to five materials costing an average of \$40 000 per print; today you can print more than 350 material types including glass at an average cost of \$100 - a 400-fold improvement. The cost of chatbots will fall just as the cost of sensors, drones, robots, hardware and computing power has fallen and continues to fall.



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Bots will be the catalyst for driving the next level of collaboration and communication globally. Consider the value that can be realised when your CRM, ERP, Human Capital, Customer Services, Travel Management, and Expense systems are all integrated and leveraged by a single intelligent system. This is exactly the business value SAP Leonardo's AI-powered chatbots aim to drive. Think about the levels of customer service you will be able to provide 24/7 anywhere, anytime, on any channel.

One day you will have to explain to your children how you used to call customer service representatives – manually, on a mobile phone, no different to how today we tell our children about how we used to do washing clothes by hand.

ABOUT RUDEON SNELL

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