



“With our ServiceNow virtual agent, we can offer a better customer experience and free up our service desk resources to tackle the really tough issues. It’s a win-win.”

— Stuart McFarlane, ITSM Team Lead, Information Services and Technology, University of Alberta



University of Alberta Accelerates IT Support Using Artificial Intelligence

AI Pioneer Combines the Power of ServiceNow and IBM Watson to Create Virtual Agent

Organization

University of Alberta

Highlights

Starting with a distributed model where individual faculties had their own IT teams, the University of Alberta’s ITSM team has now consolidated 70% of the university using the Now Platform™.

Business

Education and AI (artificial intelligence)

Headquarters

Edmonton, Alberta, Canada

Challenges

- A top research institution with 15,000 staff and 38,000 students from 143 countries, the University of Alberta depends on its IT services and infrastructure
- More than 50% of the requests IT gets are for common issues, such as helping to connect to the university Wi-Fi or purchasing software

The University of Alberta is a global leader in reinforcement learning, a subfield of artificial intelligence (AI). Its Department of Computing Science consistently ranks among the top in the world for machine learning and data mining research. Known for its work applying AI to games and puzzles, the university leverages this research to address real-world issues in areas such as medicine and cybersecurity.

Among its many AI milestones, the University of Alberta has solved games like checkers and heads-up no-limit Texas hold’em poker using artificial intelligence. DeepMind, the London-based artificial intelligence research division of Google, is setting up its first international AI research lab in Edmonton in order to maintain close ties with the university’s artificial intelligence team.

As a top research institution with 15,000 staff and 38,000 students from 143 countries, the University of Alberta depends on its IT services and infrastructure. That’s why it chose ServiceNow for IT service management (ITSM).

Starting with a distributed model where individual faculties had their own IT teams, it has now consolidated 70% of the university using the Now Platform™. According to Stuart McFarlane, the University of Alberta’s ITSM team lead, “With ServiceNow, we’ve been able to build consensus and consistency across our IT groups as they experience the benefits that ServiceNow delivers.”

Freeing service desk resources for high-value work

For the University of Alberta, powering its service desk with AI was the next logical step. Amy Ferguson, the University of Alberta’s service desk team lead, said, “More than 50% of the requests we get are for common issues, such as helping to connect to the university Wi-Fi or purchasing software. Using an intelligent chatbot to provide these services is a perfect application of AI. With a chatbot, we could divert mundane tasks from our service desk to focus on strategic work such as process improvement. It would also free up our time to fix the challenging issues, instead of just escalating to level two support.”

ServiceNow Solutions

- The Now Platform

Results

- Launched a virtual agent in just two months—agent that handles more than 30 commonly used services
- Freed up service desk resources for high-value work
- Looking to use ServiceNow's new intelligent pattern recognition capabilities, so they'll be able to predict future service issues and fix them before our users are affected
- Delivered a better customer experience—anytime and anywhere

Delivering a better customer experience – anytime and anywhere

McFarlane agrees, adding that “With an intelligent chatbot, we can also deliver a better customer experience. Chatbots work 24x7, and you don't have to wait for the next available agent. That's particularly important for our international student base when they're back at home—when you're located in China, you need out-of-hours support and don't want to pay for expensive international phone calls.”

Launching a virtual agent in just two months

Working with ServiceNow, the University of Alberta went live with their intelligent chatbot in just two months. By integrating ServiceNow with the IBM Watson Conversation service, the university created a virtual agent that handles more than 30 commonly used services. Users simply type what they want using ServiceNow Connect, engaging in an interactive chat with IBM Watson.

IBM Watson uses natural language processing and decision trees to determine what they need, and then retrieves the corresponding information from ServiceNow—whether that's a knowledge base article for setting up a VPN, or helping raise an incident.

Ferguson is excited about the results: “Within two weeks of launch, our virtual agent was able to correctly answer 30% of the requests it received. As we continue to evolve its capabilities, we're targeting 80%. We get thousands of these requests—and a huge peak at the start of each term—so the potential is enormous.”

Intelligent automation is the future of IT

Looking forward, the University of Alberta plans to expand its use of machine intelligence in IT and is enthusiastic about ServiceNow's intelligent automation capabilities. “We're looking forward to leveraging ServiceNow's virtual agent technology—we see that extending our capabilities even further. And, it's not just about ITSM, ITOM is in our crosshairs as well. In the future, we're looking to use ServiceNow's new intelligent pattern recognition capabilities, so we'll be able to predict future service issues and fix them before our users are affected. That's the power of artificial intelligence,” said McFarlane.