appian

Delivering 5G Technology to More Than 10 Million Subscribers with Appian

The complexity of deploying and scaling 5G infrastructure—and staying digitally connected through the pandemic—led Vancouver-based telecommunications company TELUS to prioritize low-code as a critical component of their 5G rollout.

While no one could have predicted the pandemic, TELUS was well prepared because of its culture of innovation. Amid all the uncertainty, TELUS team members were already well equipped to work from anywhere and leverage technology to support society's communication needs. For example, in addition to supporting emergency services during the lockdowns, the TELUS network helped keep Canadians connected to what matters most, including loved ones, remote work, virtual education and virtual health services.

With more than 17 million telecommunications customers, including 9.3 million wireless subscribers, it's no exaggeration to say millions of people were counting on TELUS to deliver a reliable network experience.

As the pandemic caused a dramatic evolution in how we use technology and reinforced the essential role of networks, TELUS seized the opportunity to put their customers first and grow their business by accelerating deployment of its 5G network. And in doing so, they joined a global push among telecommunications companies to support 5G, the newest standard for broadband cellular networks.

TELUS 5G offers faster data speeds, ultra-low latency, expanded capacity, better reliability, and a more consistent user experience, with the potential to support advanced Internet of Things (IoT) networks and innovations in areas such as virtual reality and artificial intelligence.

The challenge.

To support the 5G rollout and its ambitious growth plans, TELUS needed to bring flexibility, scalability, and speed to its internal operations.

Specifically, the 5G launch increased billing, credit management, order management, and customer support activities tenfold. Their 11 legacy and external systems that supported these activities could not accommodate such rapid growth.

They needed a replacement solution that was flexible, with the ability to promptly respond to peaks in demand, prioritize critical processes, resolve business exceptions, and make decisions in real time. This required a solution

TELUS

Industry:
Telecommunications

Headquarters:
Vancouver, Canada

Website:
telus.com

Number of employees:
107,000

that is scalable, that can support current and future capabilities across its growing subscriber base. From a business perspective, the solution needed to stand up rapidly and deliver 10 times the efficiency in terms of resources, time spent, and financial investment compared to its previous system.

The approach.

Organizations in this situation often choose between two options: adapt their current infrastructure through custom coding or "rip and replace" legacy systems with a commercial off-the-shelf solution—and both are time-consuming and costly.

Appian presented TELUS with a third path forward: complete automation through a low-code platform. The platform serves as a "layer" between old and new by integrating legacy systems and data with new technologies, enabling capabilities like robotic process automation and AI from day one.

Low-code orchestrates people, processes, bots, and data to help TELUS realize more efficiency and faster processing times without sacrificing stability. Moreover, this approach presents several bottom-line benefits, including reducing the amount of time spent on administrative processes and allowing the TELUS team to instead focus on strategy and deployment.

The solution.

In just 12 weeks, TELUS and Appian created Maestro, an end-to-end business process management and workflow tool for activities surrounding the 5G network.

Accessible from any device and in the cloud, Maestro utilizes AI, APIs, and in some cases interfaces with legacy platforms using robotic process automation to improve efficiency. Maestro is the centralized platform that manages everything from plans to cellular tower locations and serves as a tracking tool for delivery milestones.

For overall TELUS operations, Maestro simplifies the digital landscape, collapsing homegrown legacy applications into one cohesive platform and integrating with external systems for complete automation, administration, and governance.

Moreover, Maestro's low-code technology gives TELUS the capability to create applications and tools 10 times faster than with traditional methods, so the company can scale its customer support workflows with future growth and new products.

> We have used Appian to get the business to think about process alignment. When your processes are aligned, you can then begin working on the integrations between systems and applications. You can leverage automation to shift toward exception-based work—automating what you can and focusing on what requires human intervention.

Michael D'Itri, Manager,
Wireless DevOps Data and Tools

> To be able to deliver upgrades to the network, you need a modern tool that allows you to push projects quickly and do them at scale. Maestro provides connectivity to other tools and teams for better synchronization.

Michael D'Itri, Manager,
Wireless DevOps Data and Tools

The results.

Today, around 10,000 business activities flow through Maestro. The complete automation solution has enabled TELUS to do the following:

- Streamline processes for improved operational efficiency.

- Create a unified view of wireless operations and IT systems.

- Integrate 11 legacy and external systems.

- Rapidly develop tools 10 times faster than with traditional methods.

- Deliver faster and higher-quality service to enhance customer service.

TELUS leveraged Maestro to enhance its 5G deployment, which let them meet their customers' expectations and demands, connect people faster and with fewer disruptions, and maintain network reliability. This has never been more important than during—and after—the pandemic, as TELUS works to support communities with reliable internet service that is critical to connecting people and resources.

The Appian platform is not a tool, it's a platform in which you can create applications and tools. The fact that the development piece is simplified to such a degree, it frees us up to do more and to be more creative about what we can do in the future.

Moutie Wali, Director of Technology Strategy