

Novant Health

Unlocking the limitless potential of people with low-code citizen development



Novant Health is an integrated healthcare network providing award-winning care across North and South Carolina and Georgia. More than 35,000 employees—including 2,300 physicians—are dedicated to the six million patients and families they look after every year.

Challenge

Respond to the booming demand for workflow automation and new applications to be delivered at pace and scale

Products

- ServiceNow® App Engine
- Now Platform®
- ServiceNow® Integration Hub

Solution

Introduced a citizen development program, utilizing ServiceNow App Engine’s low-code application development platform

Speed and agility are now mission-critical

In the fast-moving, dynamic world of healthcare, every second counts. Novant Health is constantly striving to maximize the time its frontline doctors, nurses, and other healthcare professionals spend caring for patients. IT, administration, and support staff all play a crucial role in ensuring that high-quality, streamlined services contribute to the organization’s core mission.

Novant Health’s digital transformation journey had already begun when COVID-19 struck. However, the need for emergency IT services to be launched within days, along with the adoption of new ways of delivering care, resulted in a major acceleration of its digital strategy.



Industry:
Healthcare



Location:
North and South Carolina, Georgia, United States



People:
35,000

Boom in demand sets fresh challenges

Novant Health’s fantastic, technology-enabled response to the pandemic set up a fresh challenge for its IT leaders. Digital transformation benefits for the organization, its people, and its patients, have produced an exponential growth in internal requests for workflow automation and application to be delivered at pace and scale.

This boom in demand reflects a global phenomenon. Market research business IDC predicts that, by 2023, more than 500 million new apps will be developed worldwide.

40%

increase in development capacity

22

day average to develop and launch new apps

84

new workflows built by citizen developers

For Novant Health, this created an urgent need for more development capacity; a demand that its stretched team of professional IT developers could not fulfill without incurring substantial and unwanted additional employment costs.

To solve this conundrum, Novant Health capitalized on a fruitful, decade-long partnership with ServiceNow and kicked off a citizen development program. This journey quickly enabled individuals with any level of coding experience to build apps fast with low-code tools. Non-professional developers—with some IT understanding—received training and support to carry out a wide range of more basic development tasks, freeing up Novant Health professional developers to work on more specialized projects.

The result is radically increased internal development capacity in a highly cost-effective, quality-controlled environment.

“Our history with ServiceNow, seeing the evolution and investment ServiceNow has consistently made in the Now Platform, and how powerful it has become, made embracing citizen development a straightforward decision,” explains Director of Service Delivery, Brian Nuernberg.

“Year-on-year we’ve seen enhancements made to the Now Platform that really encourage low and no-code development, which is exactly what we and our citizen developers need.”

“ Citizen development provides a blueprint that many organizations can adopt to accelerate their digital journeys, and it’s a highly scalable solution.

Brian Nuernberg
Director of Service Delivery
Novant Health

Governance and quality control

Within Novant Health’s IT service management operation, 16 team members joined the ServiceNow citizen development program. The program is powered by ServiceNow App Engine and supported by ServiceNow’s best practice documentation as well as the extensive Now Learning library of low-code development training resources.

Citizen development training includes core app development components like Flow Designer for codeless workflow automation, and Integration Hub to ensure that all new development securely resides in Novant Health’s IT-managed ecosystem. Daily Q&A sessions, run by Novant Health’s own professional IT developers, enable citizen developers to get advice and guidance from their professional mentors, as they begin their development journey and gradually acquire more skills and confidence.

A comprehensive application development governance and quality control process—run throughout the entire development lifecycle—ensures that apps and solutions built by citizen developers are fully reviewed by IT and that they’re a good fit for the organization. Strong guardrails in the process also ensure apps meet strict quality and security standards.

Laser focus on high-value projects

The result of proper application development governance is a proven citizen development app production system that can potentially be extended to other departments beyond the IT Service Delivery team such as HR, Cybersecurity Products and Services, Enterprise Information Management, and Supply Chain. This frees professional IT developers to focus on high-value, strategically important, enterprise-wide technology projects.

“Before citizen development we had professional developers spending lots of time doing important but very rudimentary tasks,” says Brian. “Now they have the time to devote to complex developments that really expands how we use the Now Platform. This adds tremendous value. Also, by reviewing other developments carried out in the past, we can ensure that we always have best practices in place.

“The quality of work produced by our citizen developers is constantly improving. ServiceNow training provides both great foundational knowledge and additional skills that enable citizen developers to progress and take on more sophisticated projects.”

By the start of 2022, Novant Health increased its application development capacity by 40%. Citizen developers are delivering new apps to the business in an average of just 22 days, often within a few days when necessary. They have built 84 new workflows and completed hundreds of enhancement projects.

Saving thousands of hours of nurses' time

A key citizen development achievement is the creation of Novant Health's Flu App, which manages the administration of flu vaccines and tracks proof of evidence for outside organizations.

“The Flu App has saved thousands of hours each flu season,” says Brian.

“It has replaced lots of very manual, time-consuming tasks, with nurses having to document each flu vaccination by hand. Now, this process is completely automated. Recovering these hours is priceless and mission-critical—enabling our frontline colleagues to deliver remarkable patient experiences.”

Citizen developers were also heavily involved in Novant Health's new Exemptions Application. This low-code built app is the approved way for Novant's 35,000 employees to register their medical and faith-based exemption from the otherwise mandatory COVID-19 vaccination.

“Multiple citizen developers, working closely with our professional developers, managed to get this fully functional app deployed within three weeks, including demos, peer reviews, and other quality control processes,” says Brian.

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The speed of the Exemptions App's development—passing multiple governance tests and checks along the way—played a vital role in ensuring that employee vaccination status was accurate and up to date. This enabled everyone with a legitimate exemption to continue working normally during the emergency, alleviating pressure on already stretched resources.

Brian explains, "Our citizen developers have really embraced the program. Obviously, it was a challenge, but we made sure we achieved some quick and easy wins to build confidence—now they love doing the development work in ServiceNow, and they can really appreciate the enormous value of the work they do."

Blueprint for digital acceleration

Brian reports extensive interest in Novant Health's citizen development program from across the healthcare sector. "Citizen development provides a blueprint that many organizations can adopt to accelerate their digital journeys, and it's a highly scalable solution.

"We've built and launched applications in just days during the pandemic. This has been possible because ServiceNow's low-code, no-code environment has enabled professional and citizen developers to come together in teams to accelerate development and meet emergency requirements.

"Citizen development is a great recruitment selling point for us. Professional developers have opportunities here at Novant Health that they probably won't have elsewhere, since so much more of their time is spent on high-value, strategic projects."

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work can work better.**

