

Prominent Healthcare Provider: Harnessing Modernization to Enhance Care Delivery

At a glance

When the pandemic happened, this prominent healthcare provider from the Tri-State area couldn't rely on their painfully slow and inflexible systems to create meaningful customer experiences. They partnered with TVS Next to **rapidly modernize their systems** and increase their appointment booking capability by 2000%, winning the hearts of the community they served.

Services

Digital Engineering
Application Modernization
Microservices Implementation
Cloud Native Development

Data and AI
Data and BI Modernization

Digital Consulting
Digital Experience
Product Design
Development

Industry
Healthcare

Problem

Undoubtedly, this healthcare provider's staff are some of the most talented and experienced professionals in the Tri-State area. Where they struggled, however, was in providing consistent patient care experiences. Patients had to wait in long lines pre and post-visit to submit or collect records at the front desk, leaving them dissatisfied.

The systems used in the hospital were so slow that they couldn't accommodate more than 200 appointments a day. Despite using the system, their staff still had manual paperwork and relied on calls to transfer patient information, leading to low employee morale.

The inflexible system also led to an inability to get required features, and third party apps had to support these requirements. Poor data quality led to data inconsistency and inaccurate reporting. Essentially, the legacy application and database were actively preventing this healthcare provider from achieving their business goals.

When they decided that the legacy application had to go, they faced the challenge of replacing the complex system with a massive data volume. They looked for a futuristic partner and engaged TVS Next to **swiftly build an agile, centralized, and user-friendly application** for their entire patient care ecosystem

Strategy

TVS Next put together a cross-functional team of experts and conducted **Accelerated Discovery Workshops** with the healthcare provider's C-suite. We interviewed all the stakeholders to understand their vision and mapped these to their business KPIs. The

healthcare provider desired to build a proprietary system that needed to be flexible to keep up with market changes

Transformation Journey

After extensive research, TVS Next developed a roadmap to build an omnichannel patient care experience platform with plug-and-play capabilities that met all the business KPIs.

One of the main goals TVS Next worked towards was to make the new system as self-sufficient as possible by limiting third-party dependencies. Since TVS Next understood the workflows of different departments, we built a microservices based system with a human-centered design to accommodate the hospital's requirements. We migrated all their data to a modern data platform.

We built an automated CI/CD pipeline with parallel processing to eliminate data mishaps. Building with innate digital experience has reduced data discrepancies, increased system flexibility to introduce new features, accelerated advanced data analytics capabilities, and improved overall service quality.

Empathizing with the struggles of the staff and the healthcare professionals enabled us to build separate modules that automated and streamlined multiple processes and departmental tasks. Some modules we built on request include:

- HR application
- Mobile application to bridge senior citizens with doctors
- Specialist referral program
- Outpatient management program
- Vaccine appointment booking module
- Housekeeping alerts program, and
- Health census application

Business Outcomes

As the digital transformation partner, TVS Next facilitated this healthcare provider's complete modernization journey. From building an entire **COVID test application in two days** to building predictive senses reports to stay prepared for patient inflow, TVS Next has been a reliable business partner by being resilient, adaptive, committed, and delivering **assured outcomes**.

Business Impact

2000% Increase
In-patient appointment capabilities

80% Reduction
In computing costs

35%
Batch processing of analytics and reports

Completely Streamlined

The flow of jobs and information between departments

HIPAA Compliance

Guaranteed adherence to industry regulations

Community Impact

Ground-breaking Impact
Conducting large-scale vaccination drives without any hassles

Media Appreciation

For immediately scaling operations and serving the community in a time of need

Patient Impact

↑ Patient Satisfaction
Due to setting expectations right about insurance coverage

↓ Wait Times

Patients can now submit and receive documents online

Automated Reminders

Before and on the day of the appointment

Healthcare Staff Impact

90% Reduction
In paper processes

Automated Processes

Have reduced repetitive tasks and improved employee productivity

Predictive Reports

Help the staff stay prepared for incoming patient flow

Positive Impact

The staff requested an extension of the system in every department