

Project Design Phase
Solution Architecture

Date	1 NOVEMBER 2025
Team ID	NM2025TMID01046
Project Name	Laptop request catalog
Maximum Marks	4 Marks

Solution Architecture: ServiceNow Laptop Request Catalog

Elements of the Architecture

- Employee and Manager Self-Service Portal in ServiceNow
- Automated approval and fulfillment workflows
- Real-time tracking and notification system
- Integration with asset and procurement databases
- Reporting and analytics dashboard
- Security and role-based access control

Goal of the Architecture

- Improve visibility of laptop requests and approvals
- Reduce manual follow-ups and communication delays
- Enhance coordination between employees, managers, and IT teams
- Deliver a transparent and efficient service experience

Key Components

- ServiceNow portal for request submission and tracking
- Workflow automation for approvals and fulfillment
- Notification engine for real-time updates
- Tracking dashboard for live request status
- Integration with asset and inventory systems
- Analytics and reporting for performance monitoring

Development Phases

- Planning and requirement gathering
- Designing workflows and dashboards
- Building and configuring in ServiceNow
- Testing, deployment, and user training

Final Solution Description

The solution establishes a transparent and efficient laptop request system within ServiceNow. Employees can easily view their request status, managers can process approvals quickly, and IT teams can manage fulfillment with real-time updates. The automated workflows and dashboards minimize delays, increase accountability, and create a smooth, data-driven experience for all users.

Example - Solution Architecture Diagram:

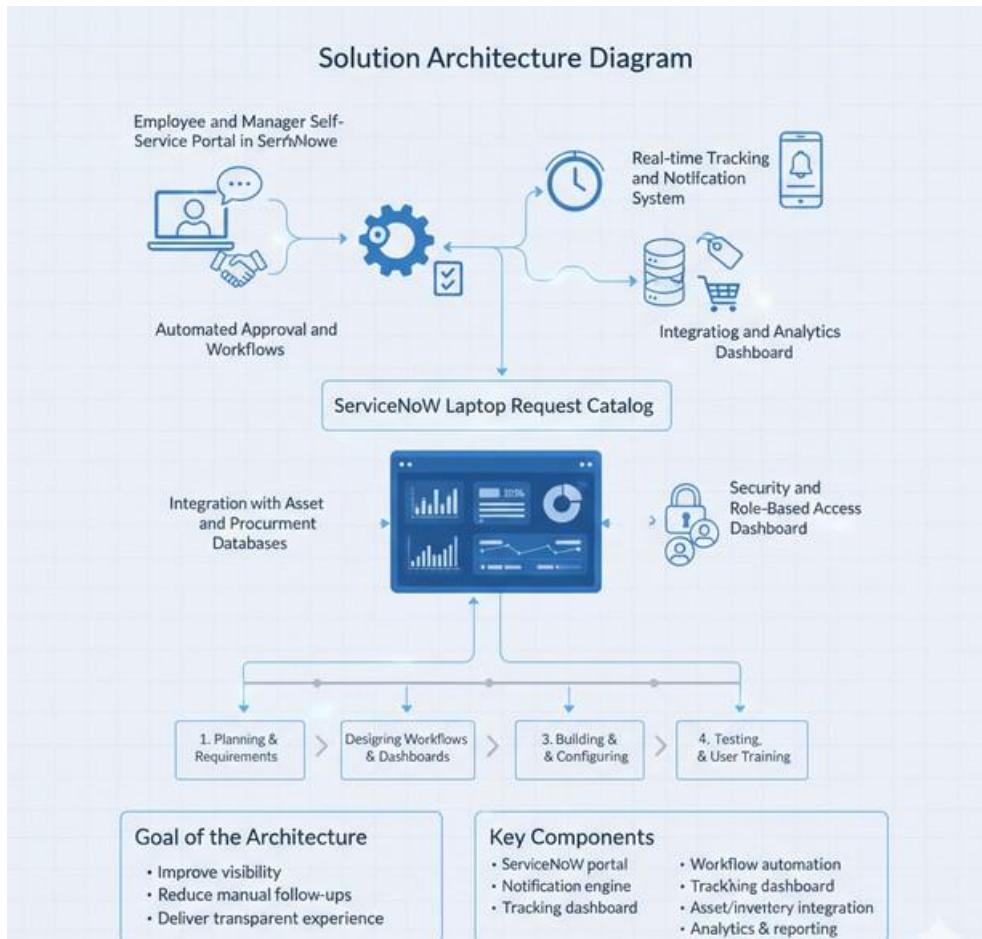


Figure 1: Architecture and data flow of the voice patient diary sample application

Reference: <https://aws.amazon.com/blogs/industries/voice-applications-in-clinical-research-powered-by-ai-on-aws-part-1-architecture-and-design-considerations/>