

Project Design Phase

Solution Architecture

Date	2 November 2025
Team ID	NM2025TMID00329
Project Name	Streamlining Ticket Assignment for Efficient Support Operations
Maximum Mark	4 Marks

Goals of the Architecture:

- Provide an automated and centralized platform for managing ticket creation, routing, and resolution using ServiceNow.
- Ensure accuracy and efficiency in ticket handling through dynamic workflows and rule-based automation.
- Maintain data integrity and security by implementing strict role-based access control.
- Reduce manual effort in ticket assignment and improve the speed of customer issue resolution.
- Deliver real-time updates and ensure complete visibility into ticket ownership and progress across teams.

Key Components:

- **User Table (sys_user):** Maintains user profiles, including support agents, administrators, and end users.
- **Operations Related Table:** Stores support tickets, issue categories, and assignment details.

- **Groups and Roles:** Defines distinct access permissions and work scopes for Platform and Certificate teams.
- **Flow Designer:** Automates ticket routing based on conditions such as issue type or category.
- **Access Control List (ACL):** Ensures that only authorized users can view, modify, or assign tickets.
- **Notification Engine:** Sends alerts to users or groups when a new ticket is created, updated, or assigned.
- **Security Administration:** Enforces permissions through elevated roles to protect sensitive operational data.

Development Phases

1. User and Role Setup:

Create test users, roles, and groups such as *Platform* and *Certificates* for ticket ownership and management.

2. Table and Form Design:

Develop the *Operations Related* table with necessary fields like *Issue*, *Description*, *Assigned Group*, and *Status*.

3. Flow Automation:

Configure Flow Designer to trigger ticket assignment automatically when a record is created or updated.

4. Access and Role Integration:

Apply ACLs and required roles to ensure only authorized users can modify or view ticket details.

5. Testing and Validation:

Verify the ticket routing accuracy, workflow execution, and group-based assignment through performance testing.

Solution Architecture Description

The Solution Architecture of *Streamlining Ticket Assignment for Efficient Support Operations* focuses on integrating automation and access control to enhance IT service delivery within ABC Corporation.

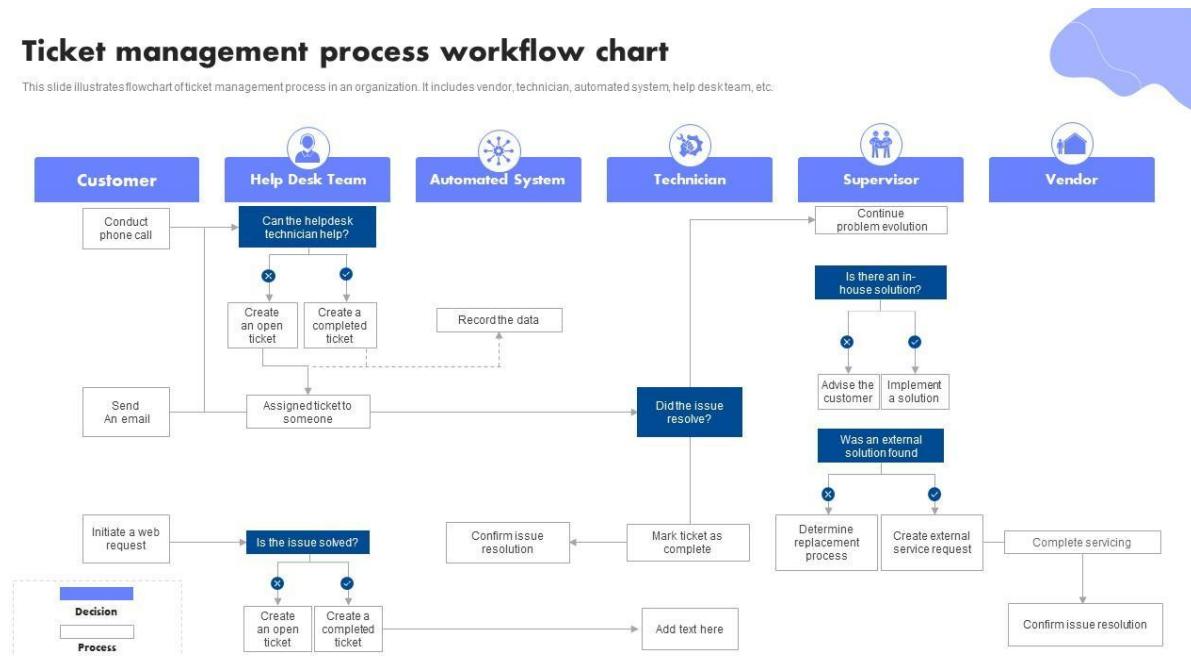
The architecture centralizes the entire ticket management process on the ServiceNow platform, connecting users, groups, and workflows into a cohesive automation system. When a ticket is created under the *Operations Related* table, the Flow Designer automatically identifies the issue type and routes it to the appropriate team, such as *Platform* or *Certificates*.

Each ticket action—creation, update, or closure—is governed by defined Access Control Lists (ACLs) and role-based permissions, ensuring both security and accountability. The Notification Engine complements the workflow by alerting team members instantly upon ticket assignment or resolution.

This solution ensures reliability, scalability, and transparency across support operations. It minimizes manual workload, speeds up resolution time, and establishes a consistent, automated workflow that aligns with the organization's digital transformation goals.

Ticket management process workflow chart

This slide illustrates flowchart of ticket management process in an organization. It includes vendor, technician, automated system, help desk team, etc.



This slide is 100% editable. Adapt it to your needs and capture your audience's attention.