Project: Automated Network Request Management in ServiceNow

Ideation Phase

Empathize & Discover

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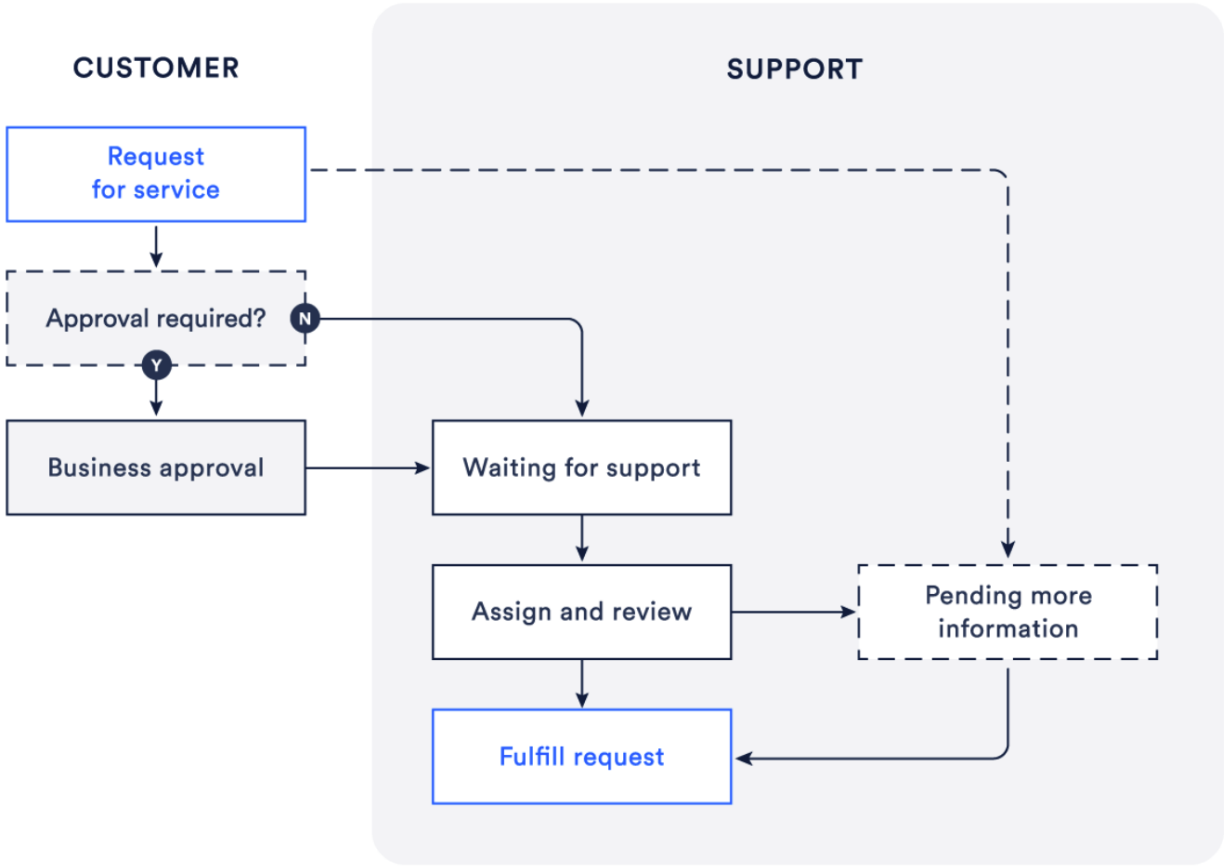
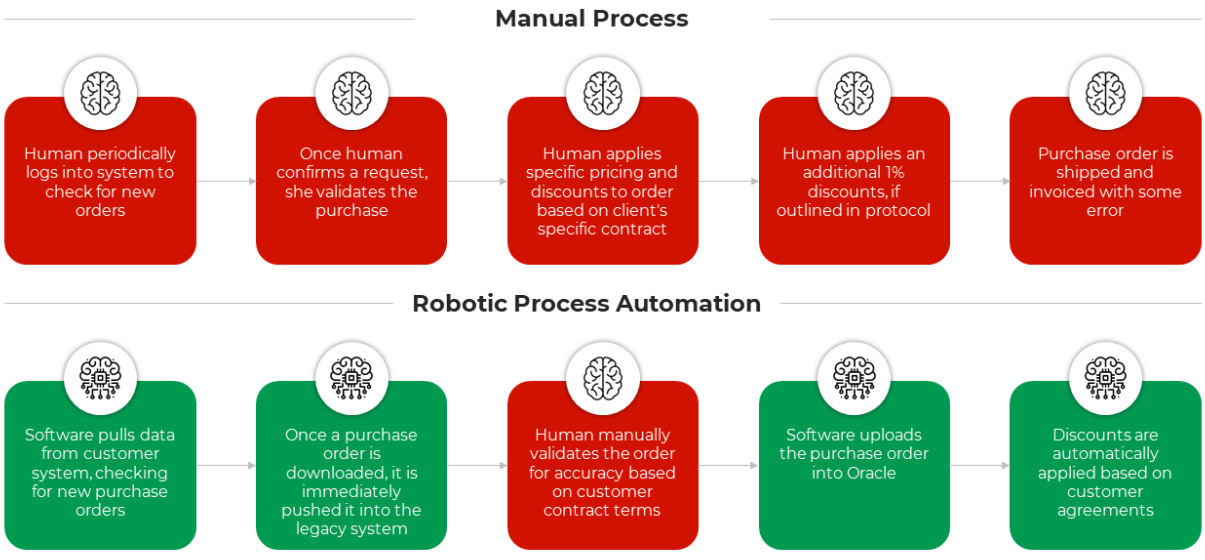
1. Introduction

Modern organizations handle numerous network-related requests such as VPN access, firewall rule changes, IP allocation, and LAN/WAN provisioning. Traditionally, these requests are processed manually through emails or basic ticketing systems, leading to delays, errors, and lack of visibility.

The **Automated Network Request Management in ServiceNow** project aims to automate the complete lifecycle of network requests using ServiceNow's Service Catalog, Flow Designer, approval workflows, notifications, and reporting mechanisms.



Manual Process Vs Robotic Process Automation



2. Problem Statement

Manual network request handling is:

- Time-consuming
- Error-prone
- Difficult to track
- Lacking SLA enforcement
- Dependent on emails and follow-ups

This results in reduced operational efficiency and poor user experience.

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3. Project Objectives

The main objectives of this project are:

- To automate end-to-end network service requests
- To reduce manual intervention and human errors
- To ensure SLA compliance
- To improve transparency and tracking
- To enhance communication between users, approvers, and network teams

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4. Scope of the Project

In Scope:

- Service Catalog-based network request forms
- Automated approval workflows
- SLA assignment and monitoring
- Email and in-app notifications

- Dashboards and reports

Out of Scope:

- Physical network device installation
- Third-party network monitoring tools
- Advanced AI-based decision-making (future enhancement)

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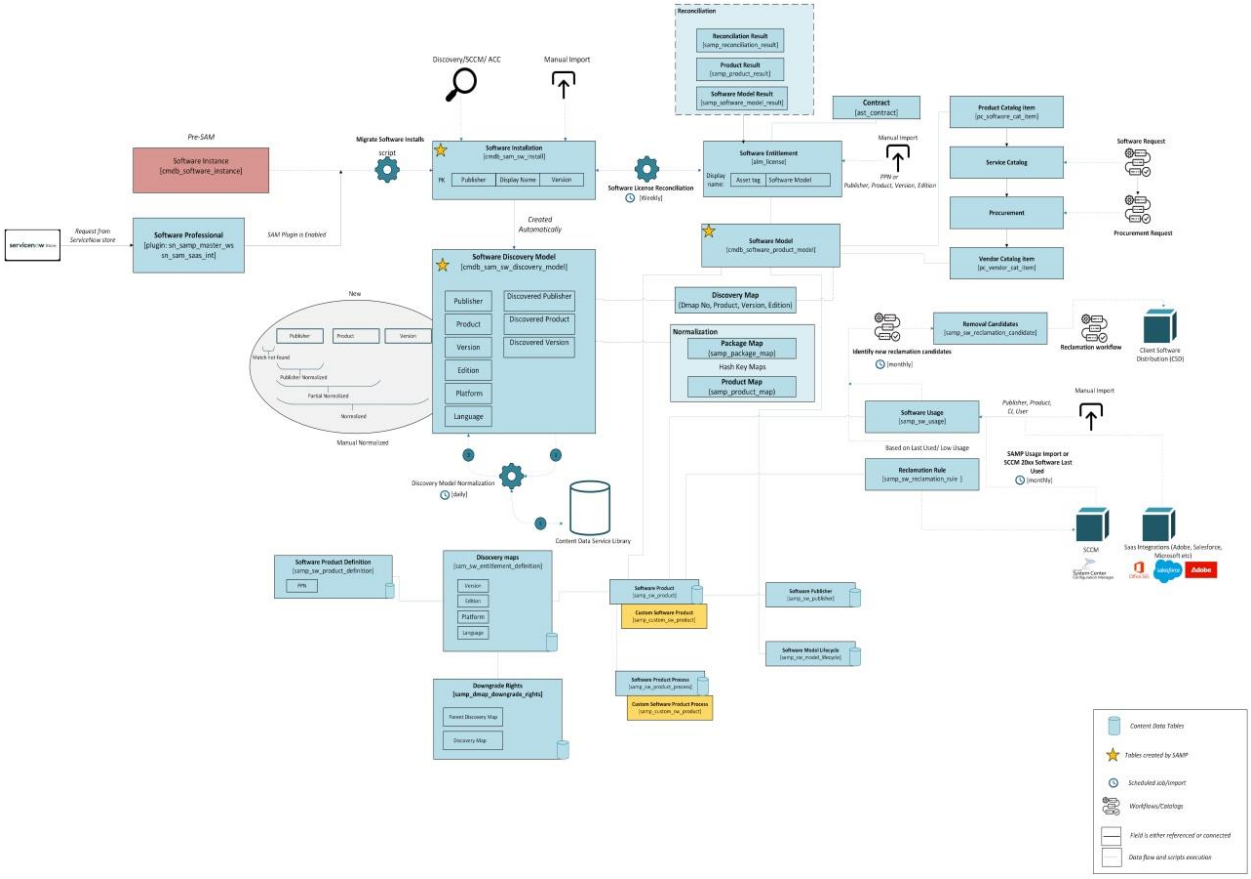
5. System Architecture

The system is built entirely on the ServiceNow platform and consists of:

- Service Catalog for request intake
- Flow Designer for automation
- Approval Engine for governance
- Notification Engine for communication
- Reporting & Dashboards for monitoring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SCCM
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Workflows/Catalogs
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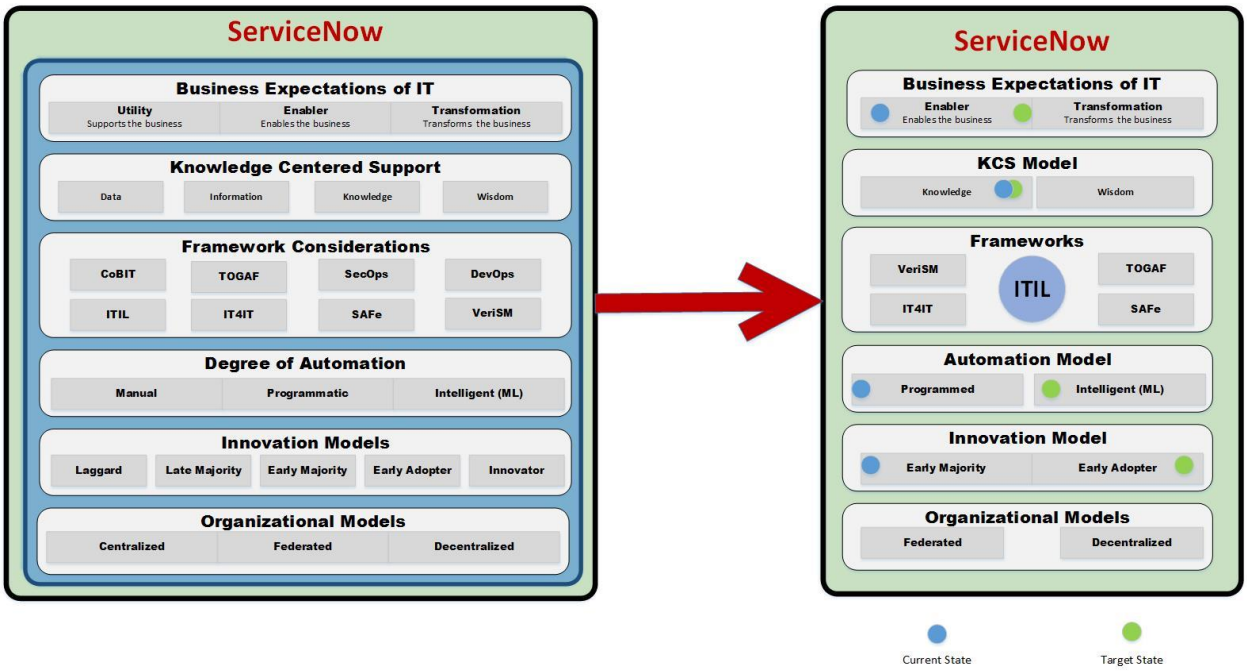
Data flow and scripts execution


ServiceNow
Business Expectations of IT
Utility
Supports the business
Enabler
Enables the business
Transformation
Transforms the business
Knowledge Centered Support
Data
Information
Knowledge
Wisdom
Framework Considerations
CoBIT
TOGAF
SecOps
DevOps
ITIL
IT4IT
SAFe
VeriSM
Degree of Automation
Manual
Programmatic
Intelligent (ML)
Innovation Models
Laggard
Late Majority
Early Majority
Early Adopter
Innovator
Organizational Models
Centralized
Federated
Decentralized
ServiceNow
Business Expectations of IT
Enabler
Enables the business
Transformation
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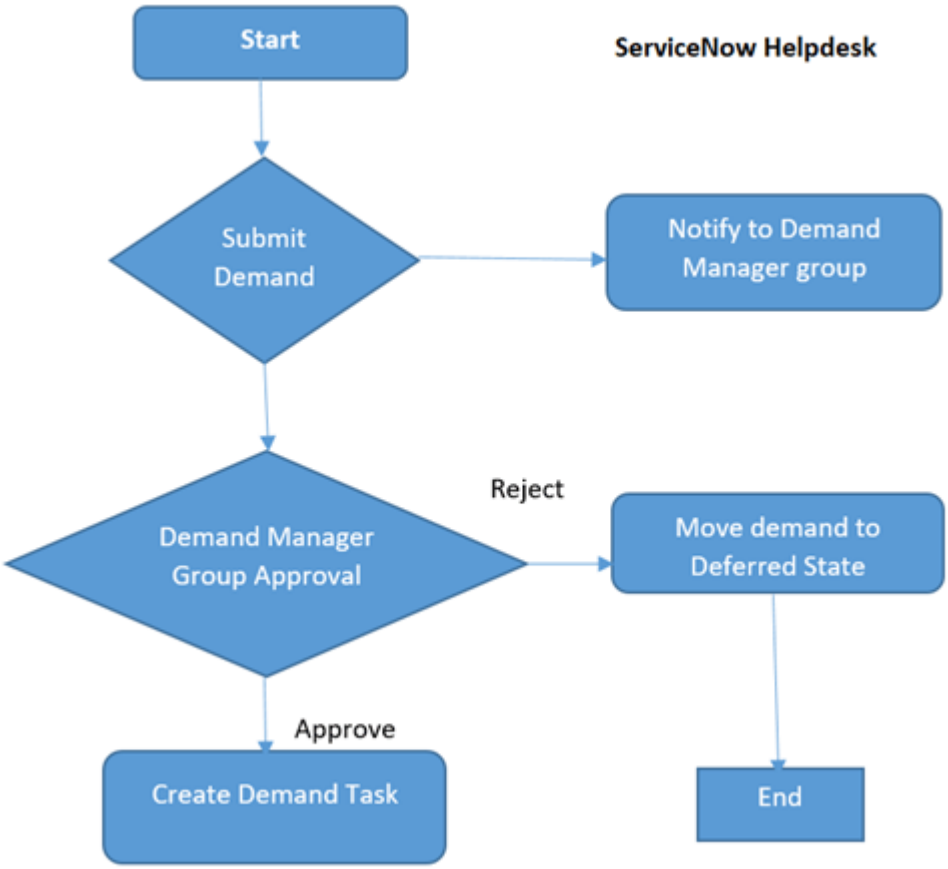
Current State
Target State



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6. Module Description

6.1 User Interface Module

- Service Catalog forms for network requests
- Dynamic fields using UI Policies
- Mandatory field validation

6.2 Automation Module

- Flow Designer workflows
- Automatic ticket creation
- SLA assignment based on request type

6.3 Approval Module

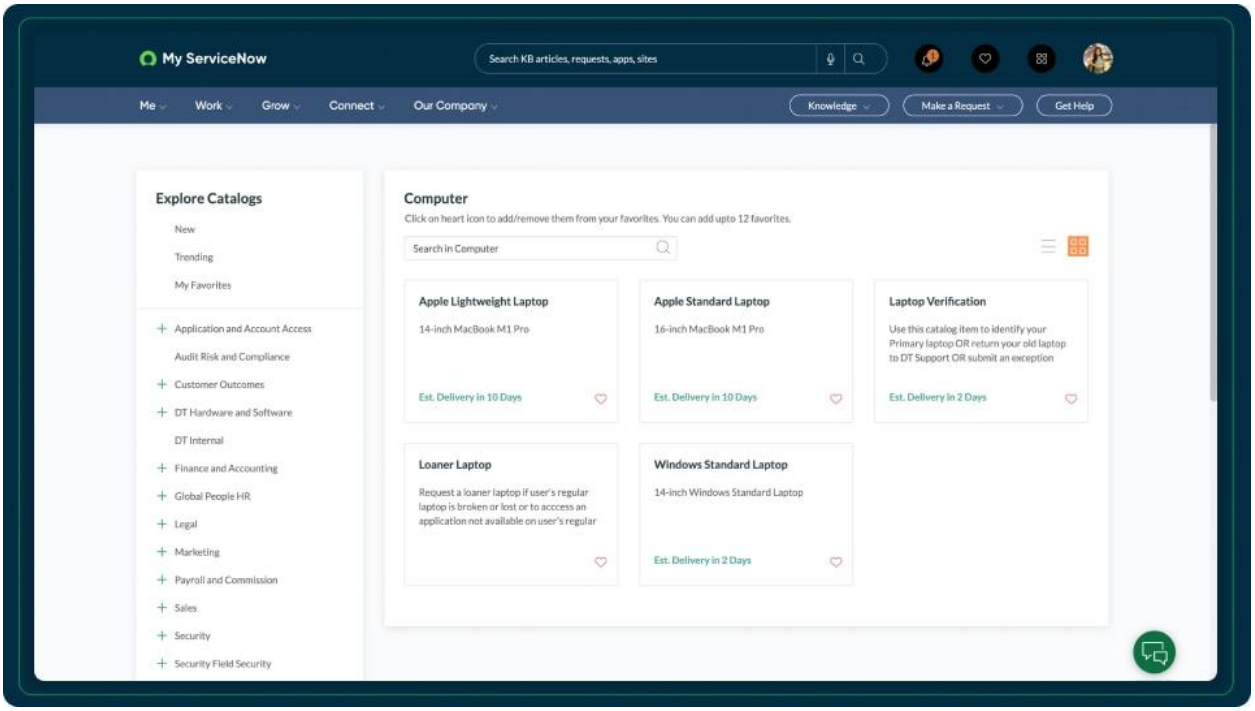
- Manager approval
- Network team approval
- Conditional approvals based on request category

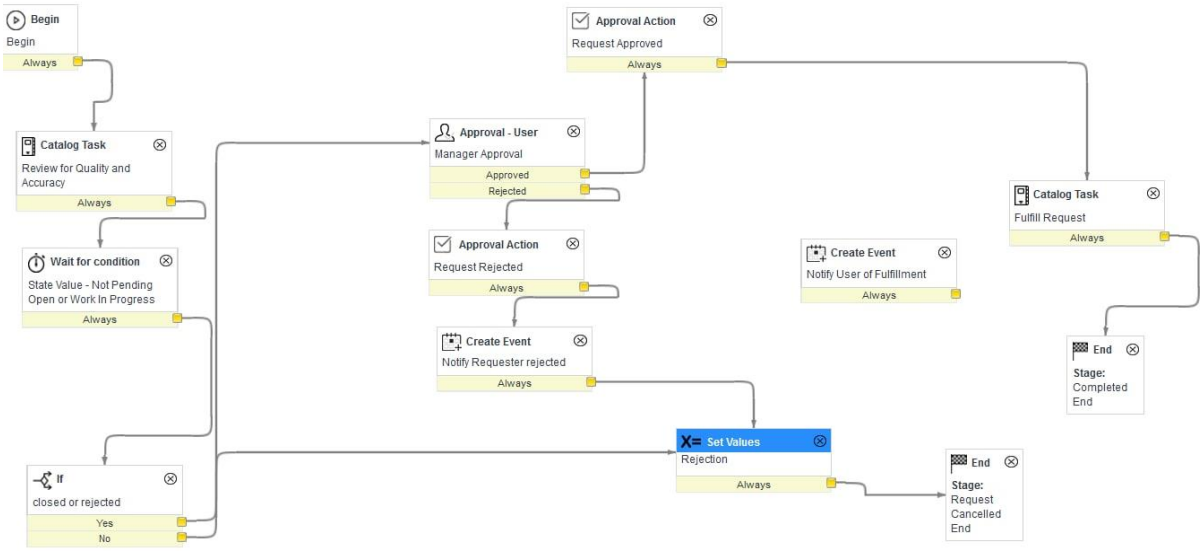
6.4 Notification Module

- Email notifications on submission
- Approval alerts and reminders
- Status update notifications

6.5 Reporting Module

- Request volume reports
- SLA compliance dashboards
- Approval time analysis

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If
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Approval - User
Manager Approval
Approved
Rejected
Approval Action
Request Rejected
Always
Create Event
Notify Requester rejected
Always
Approval Action
Request Approved
Always
Create Event
Notify User of Fulfillment
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Stage:
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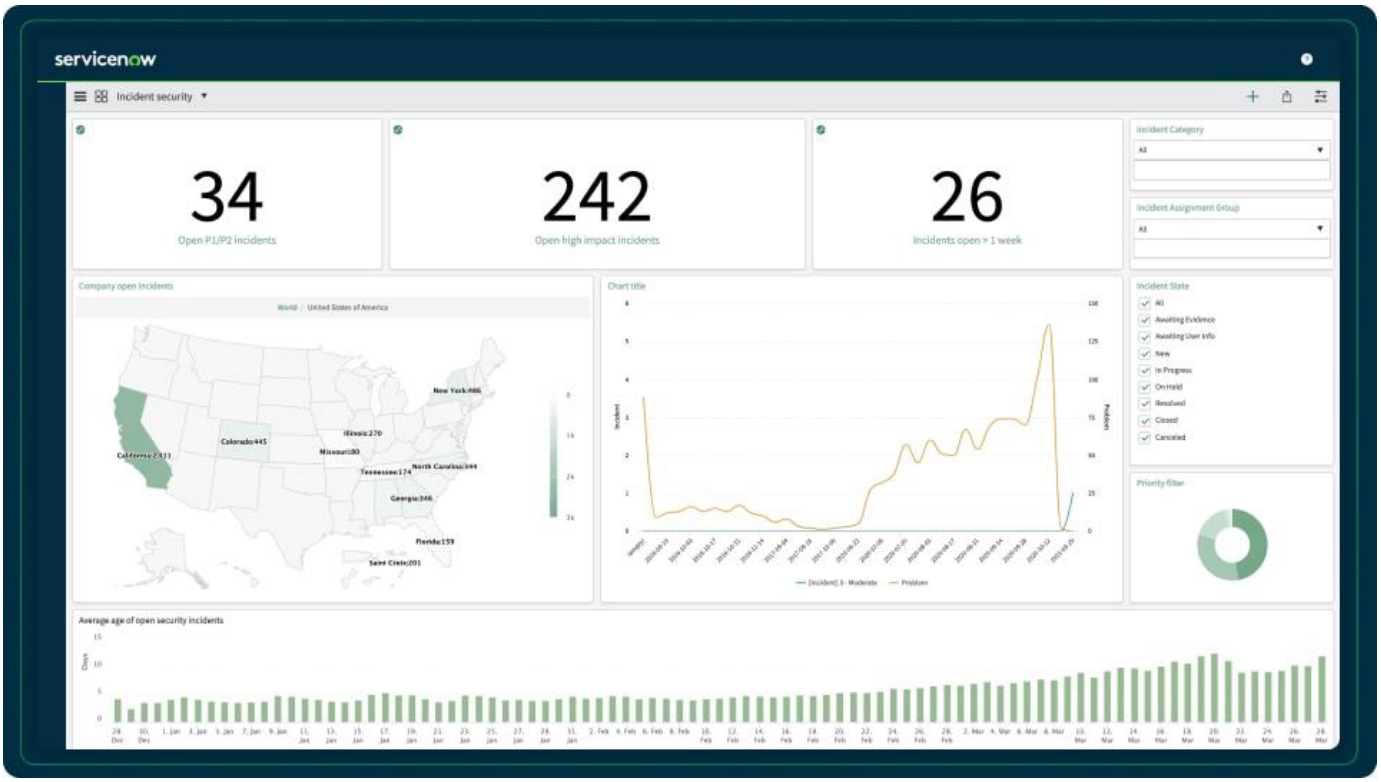
End
Set Values
Rejection
Always
End
Stage:
Request Cancelled
End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Open high impact incidents
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Incidents open > 1 week
Incident Category
Incident Assignment Group
Company open incidents
Chart title
Incident State
Priority filter
Average age of open security incidents

7. Empathy Map & User Understanding

An empathy map was created to understand the pain points and expectations of different stakeholders such as end users, network engineers, managers, and IT administrators.

Key Pain Points:

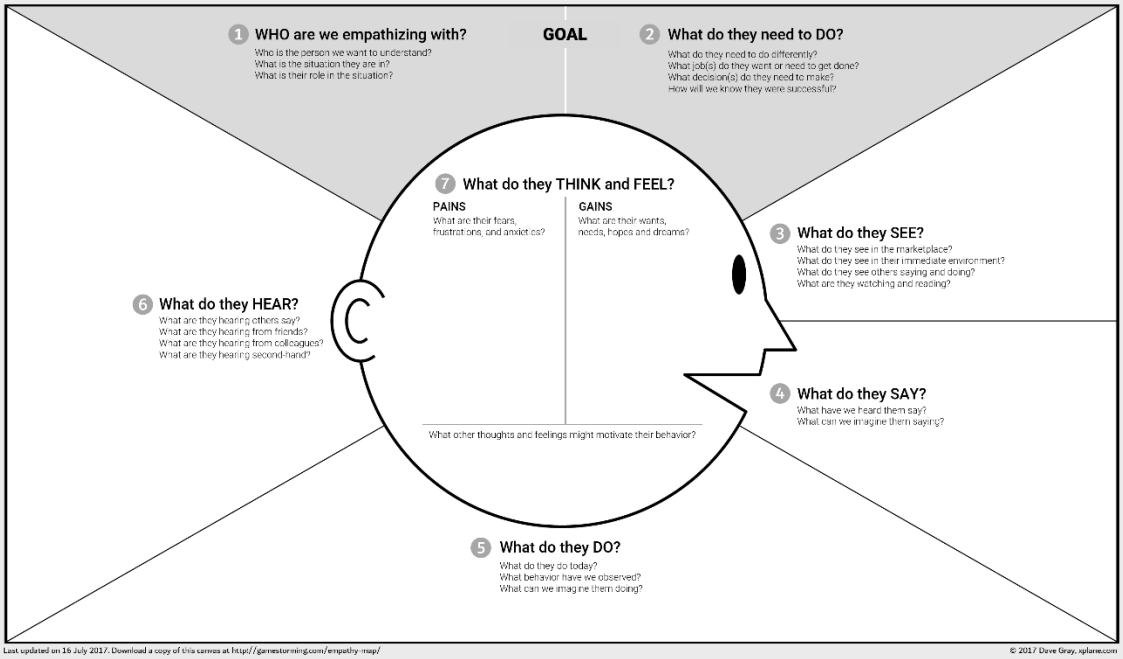
- Delayed approvals
- No request visibility
- Repeated follow-ups
- Manual errors

Key Gains:

- Faster request processing
- Real-time tracking
- Automated notifications
- Clear accountability

Empathy Map Canvas

Designed for:	Designed by:	Date:	Version:



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8. Use Case Scenarios

- VPN Access Request
- Firewall Change Request
- IP Allocation Request

- LAN/WAN Provisioning Request

Each use case follows a standardized flow: **Request Submission → Validation → Approval → Fulfillment → Closure**

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9. Benefits of the System

- Reduced turnaround time
- Improved SLA adherence
- Better audit and compliance
- Increased user satisfaction
- Reduced operational costs

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10. Future Enhancements

- AI-based request categorization
- Predictive SLA breach alerts
- Chatbot-based request submission
- Integration with network monitoring tools

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11. Conclusion

The **Automated Network Request Management in ServiceNow** project successfully addresses the challenges of manual network request handling by providing a centralized, automated, and transparent solution. The system improves efficiency, accountability, and overall service quality within IT operations.