

## **IDEATION PHASE**

## **Problem Statement**

Support organisations are often faced with high volumes of tickets arriving through various channels (email, web-form, chat, phone). Many of these tickets are manually triaged, assigned and routed — which causes delays, mis-assignments, uneven workload, and missed service level agreements (SLAs). Without an efficient underlying mechanism for ticket assignment, teams expend excessive time on coordination and routing rather than resolution.

The end goal of this project is to develop a comprehensive ticket-assignment system (built on ServiceNow) that automates and optimises how tickets are allocated, ensuring faster resolution, fair workload distribution, correct expertise matching, and improved customer satisfaction..

## **Problem Definition**

In many modern support operations, tickets often funnel into generic queues and await manual assignment, which slows down the process and increases the chance of mis-routing. Without automated routing rules, tickets may reach agents lacking the required expertise, resulting in longer resolution times and unnecessary handoffs.

At the same time, some agents become overloaded while others are creating workload imbalances and reducing productivity. Because assignment is opaque and un-monitored, managers struggle to spot bottlenecks, aging tickets or SLA breaches in real time. These inefficiencies lead to slower responses, lower first-contact resolution rates and diminished user satisfaction.

A more streamlined system is needed—one that uses skills, priority and workload data to route tickets intelligently and provide management with visibility and control.

### **Abstract**

In today's fast-paced support environment, organisations often struggle with inefficient and manual ticket assignment processes—resulting in delays, uneven workloads, and reduced customer satisfaction. This project proposes an automated ticket assignment solution built on the ServiceNow platform, which intelligently routes tickets based on category, priority, agent skill and workload.

By implementing balanced workload distribution, skill-based matching and real-time dashboards, the system will help reduce assignment and resolution times, minimise re-assignments, improve SLA compliance and enhance overall support productivity and responsiveness.

### Empathy Map canvas

Section	Description
<b>Users</b>	Family members, parents, and individuals managing household budgets.
<b>Says</b>	“I need to know where my money goes every month.” “Tracking expenses manually takes too much time.”
<b>Thinks</b>	“If only I had an automated way to categorize and view my expenses.” “I want to save more efficiently.”
<b>Does</b>	Records expenses manually in spreadsheets or notebooks; sometimes forgets to log small expenses.
<b>Feels</b>	Overwhelmed by untracked spending, anxious about financial management, relieved when able to visualize spending clearly.

## **Introduction**

In today's fast-paced support environment, organisations face a growing volume of incoming tickets — from email, chat, phone, web-forms and more. These tickets often land in generic queues and rely on manual triage for categorisation, prioritisation and assignment. This manual approach introduces delays, increases the likelihood of mis-routing, and creates uneven workloads across agents.

Without automated routing rules or insight into agent skills, availability or workload, many tickets are assigned sub-optimally — leading to longer resolution times, escalations, and reduced first-contact resolution.

Moreover, when tickets are not distributed fairly or according to agent expertise, some team members become overloaded while others remain under-utilised, reducing team productivity and morale. Support managers often lack real-time visibility into ticket assignment status, queue backlogs, escalating SLA risks or bottlenecks, making it difficult to proactively manage the system.

To address these challenges, this project proposes the implementation of a streamlined, automated ticket-assignment system built on a scalable platform (such as ServiceNow). The solution will employ rule-based and skill-based routing, workload balancing, SLA-aware assignment logic and real-time monitoring.

By ensuring each ticket is routed to the most appropriate agent or team quickly and fairly, the process will reduce assignment delays, minimise re-assignments and hand-offs, improve agent utilisation and enhance overall support responsiveness.

Ultimately, the goal is to improve resolution times, increase customer satisfaction, and enable the support organisation to scale more efficiently and consistently.

## Objectives

### Main Objective

The main objective of the project is to develop a comprehensive and user-friendly platform on ServiceNow that enables support organisations to efficiently manage their ticket-assignment operations.

### Specific Objectives

**Automated Assignment Logic:** To configure a rule-based engine that automatically routes incoming support tickets to the appropriate team or agent based on category, priority, skill-set and availability.

**Workload Balancing:** To implement mechanisms that ensure ticket-load is distributed equitably among agents, preventing overload and under-utilisation.

**Skill-based Matching:** To enable assignment logic that considers agent skills and expertise so that tickets are matched with agents who are best positioned for resolution.

**Priority & SLA Integration:** To integrate priority and service-level agreement (SLA) criteria into the assignment workflow so that high-impact or urgent tickets receive expedited routing and handling.

**Real-time Visibility:** To provide support managers with real-time dashboards and reports on ticket-assignment status, agent workloads, aging tickets, re-assignments and SLA risk.

**User-Friendly Interface:** To design the assignment system so it is intuitive and accessible for support agents and managers — minimising training overhead and user friction.

**Data Security & Accuracy:** To ensure that ticket-assignment and routing data is securely stored, processed, logged and reported accurately using ServiceNow's robust architecture.

**Scalability & Customisation:** To develop the solution in such a way that it can scale with growing ticket volumes, evolving support teams and changing business rules — and can be customised for different organisational structures.

### Operational Efficiency & Quality:

To improve overall support-operation metrics — reducing assignment latency, decreasing re-assignment rates, improving first-contact resolution and strengthening customer satisfaction.

## Scope

The Ticket Assignment Optimization System aims to develop a comprehensive solution on the ServiceNow platform to streamline how support tickets are routed, assigned and managed. The system will allow incoming tickets to be automatically categorized, prioritized, and assigned to appropriate agents or teams based on skill, workload and SLA criteria. It will also feature real-time monitoring of queues, dashboards for agent workload, and customizable rules to meet the needs of different support organisations. Leveraging ServiceNow's capabilities, the system ensures a secure, scalable, and user-friendly experience.

The project focuses on improving ticket assignment efficiency, reducing hand-offs and mis-routing, and increasing support responsiveness. While the system will provide routing automation, workload balancing, and monitoring tools, it will **not** include features such as full chat-bot triage, external CRM integration beyond basic ticket channels, or automated resolution of tickets.

The primary scope is to empower the support organisation with a streamlined assignment engine, better visibility over ticket flows, and improved operational efficiency.

## In-Scope Activities

**Ticket Categorisation & Routing Logic:** Configure categories, sub-categories, tags and business rules so tickets are routed automatically based on defined criteria.

**Skill-Based Assignment Engine:** Develop agent profiles with skills, certifications and availability; match tickets to agents or teams accordingly.

**Workload Balancing Mechanism:** Implement logic to monitor agent loads and distribute tickets to avoid overload or under-utilization.

**SLA & Priority Handling:** Enable assignment and escalation workflows that respect ticket priority, impact, and SLA thresholds.

**Real-Time Monitoring & Dashboards:** Build dashboards and reporting views showing unassigned tickets, assignment time, agent workloads, SLA risks and ticket aging.

**User Interface Design:** Create an intuitive, accessible UI for support agents and managers to review assignments, queues, dashboards and alerts, with minimal training.

## Out of Scope

The following activities are **not** included in the scope of the Family Expense Management System project:

**Bank Account Integration** — The system will *not* connect directly with banks or financial institutions to automatically fetch transactions.

**Automated Bill Payments** — Scheduling or processing of payments for bills, loans or subscriptions is excluded.

**Investment and Asset Management** — Tracking investments, stocks, mutual funds or other financial assets is not part of this project.

**Credit/Debit Card Management** — The system will *not* handle card transactions, credit limits or repayments.

**Advanced Tax Calculations** — It will *not* provide tax calculations, tax-filing support or financial advisory services.

**Mobile Application Development** — The project will focus on the ServiceNow platform interface and will *not* include developing a separate mobile app.