

## Proposed Solution: Streamlining Ticket Assignment

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| Date          | 01 NOVEMBER 2025   |
| Team ID       | NM2025TMID01728  |
| Topic Name    | Streamlining Ticket Assignment for efficient support operation |
| Maximum Marks | 4 Marks  |

| S.No. | Parameter                                       | Description   |
|-------|---|---|
| 1.    | <b>Problem Statement (Problem to be solved)</b> | In <b>Support Operations</b> , tickets are manually assigned based on a triage agent's capacity and judgment, leading to <b>slow first assignment times (TFAT)</b> , frequent <b>misassignment</b> , and <b>high agent stress</b> . This results in delayed resolution and reduced customer satisfaction.   |
| 2.    | <b>Idea / Solution Description</b>              | A business rule is implemented on the <b>ticketing platform</b> (e.g., <b>ServiceNow, Zendesk</b> ) to deploy an <b>AI-driven routing engine</b> . This engine will automatically tag, prioritize, and assign new tickets to the most appropriate agent based on <b>ticket keywords (NLP)</b> , <b>agent skill set</b> , and <b>real-time capacity (load balancing)</b> . |
| 3.    | <b>Novelty / Uniqueness</b>                     | It addresses a critical real-world ITSM issue in a single, integrated workflow by leveraging <b>AI/ML capabilities</b> for smarter, instant routing, requiring <b>minimal manual intervention</b> (no external plugins needed for core logic).  |
| 4.    | <b>Social Impact / Customer Satisfaction</b>    | It ensures better accountability and reliability for customers by preventing delays caused by manual errors and inconsistent assignment, leading to a <b>faster First Response Time (FRT)</b> .   |
| 5.    | <b>Business Model (Revenue Model)</b>           | Not applicable directly, but can <b>save time, reduce operational costs</b> by minimizing reassignment/escalation errors, and improving <b>agent efficiency</b> —leading to cost-effective service delivery for the organization.   |
| 6.    | <b>Scalability of the Solution</b>              | The solution can be extended to include other modules like <b>Omnichannel routing</b> (e.g., chat, email) to assign tickets. It can also be adapted for <b>role-based and territory restrictions</b> in large, globally distributed support teams.  |

## Conclusion

The project "**Streamlined Ticket Assignment for Efficient Support**" addresses a crucial gap in support operations by ensuring every ticket is **instantly and accurately routed** to the correct specialist. By deploying an intelligent assignment engine, we significantly improve **Ticket First Assignment Time (TFAT)**, **reduce the Ticket Reassignment Rate (TRR)**, and improve **agent morale**. With the successful implementation of an **AI-driven, skill-based, and capacity-aware routing logic** in platforms like ServiceNow, this solution not only safeguards efficient incident resolution workflows but also supports better workload management. This project sets a foundation for building **faster, more reliable, and less stressful** administrative systems in enterprise environments.

### Solution Description:

To prevent the inefficiencies of manual triage in support operations, a customized business rule is deployed on the ITSM platform (e.g., ServiceNow) to automate the assignment process. This rule leverages **Natural Language Processing (NLP)** to analyze ticket descriptions and applies a weighted scoring system based on **agent skills, certification, and real-time workload**. This full-stack, native ticketing platform solution makes it simple, plug-and-play, and easily adaptable. The solution dramatically increases assignment accuracy and speed in ITSM operations, and helps avoid breakdowns in incident resolution workflows.