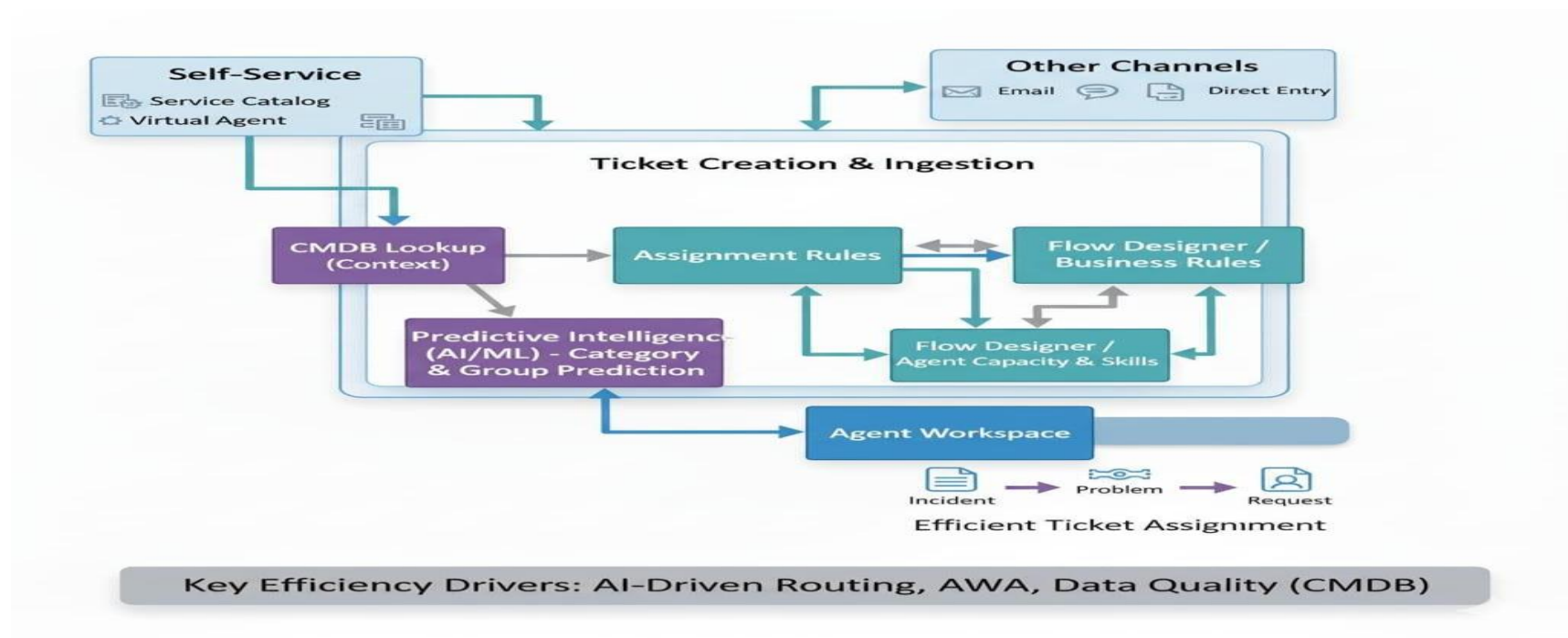


# Requirement Analysis

## Technology Stack (Architecture & Stack)

Date	07 November 2025
Team ID	NM2025TMID09092
Project Name	Streamlining Ticket Assignment for Efficient Support Operations
Maximum Marks	4 Marks

### Technical Architecture:



**Table-1 : Components & Technologies:**

S.No	Component	Description	Technology
1.	User Interface	End-user submits a ticket via a <b>ServiceNow form</b> . Support agents view tickets in <b>lists/queues</b> .	ServiceNow Web UI (Forms, Lists)
2.	Application Logic-1	<b>Triggers</b> when a record is created/updated on the Operations related table and <b>checks the 'Issue' field</b> .	ServiceNow <b>Flow Designer</b> (Trigger)
3.	Application Logic-2	<b>Updates the 'Assigned to group' field</b> on the record based on the 'Issue' (e.g., to 'Certificates' or 'Platform').	ServiceNow <b>Flow Designer</b> (Action: Update Record)
4.	Application Logic-3	(Optional) Sends a notification to the assigned group that a new ticket is in their queue.	ServiceNow Notifications
5.	Database	Stores the <b>new tickets</b> , the <b>support groups</b> , and user data.	ServiceNow Custom Table (u_operations_related), Group Table (sys_user_group)
6.	Cloud Database	Managed by ServiceNow cloud backend, hosts the custom table and flow definitions.	ServiceNow Cloud Database
7.	File Storage	Minimal use; stores execution logs for the flows and audit history for the tickets.	ServiceNow system logs, Flow execution details
8.	Machine Learning Model	Not applicable. (Future scope could use ML for predictive assignment).	-
9.	Infrastructure (Server / Cloud)	Hosted and managed on the ServiceNow SaaS platform.	ServiceNow Cloud (SaaS)

**Table-2: Application Characteristics:**

S.No	Characteristics	Description	Technology
1.	<b>Open-Source Frameworks</b>	Not applicable (ServiceNow is proprietary).	-
2.	<b>Security Implementations</b>	<b>Role-based access control</b> (Platform_role, Certificate_role) and <b>ACLs</b> restrict read/write access to the Operations related table.	<b>ACLs (Access Controls)</b> , System Security (Roles)
3.	<b>Scalable Architecture</b>	The solution is highly scalable; new routing rules or groups can be added via <b>Flow Designer</b> with no code.	ServiceNow Cloud Architecture, <b>Flow Designer</b>
4.	<b>Availability</b>	Highly available with ServiceNow cloud hosting and redundant instances.	Load-balanced ServiceNow Instances
5.	<b>Performance</b>	Optimized via efficient, modern <b>Flow Designer</b> logic (rather than older scripts) and indexed tables.	<b>Flow Designer</b> , Indexed Tables