AIOps implementation (AI Assisted incident handling using Knowledge Fabric)

Vignesh G, Aishwarya B, Darshana C R, Tharun Eshwar S, Vijay Kumar M | SMEs : Swapna Kashalkar and Archana V Pawar

Group-4 Blue Vanguard

PROBLEM STATEMENT:

- Manual Incident Classification and Resolution

- NO Automated Knowledge Recommendations. Traditional knowledge bases are static

- Inconsistent user experience

- Slower Ticket Resolution Time

- Heavier workload for support team

OBJECTIVES:

- Implement an AIOps framework using Microsoft Fabric to detect, analyze, and recommend resolutions for IT incidents

- Empower IT teams with a self-service tool for actionable insights, reducing manual troubleshooting and accelerating resolution

- Enhance reliability by minimizing downtime, lowering MTTR, and enabling proactive incident handling

TECH STACK:

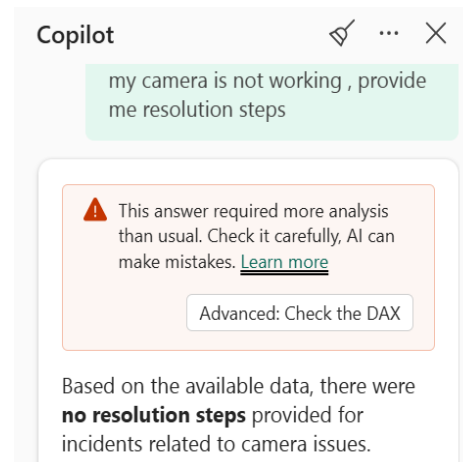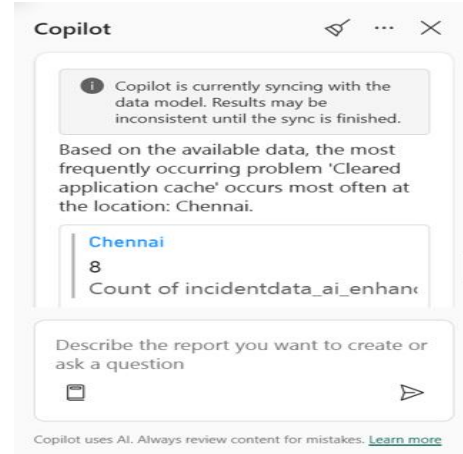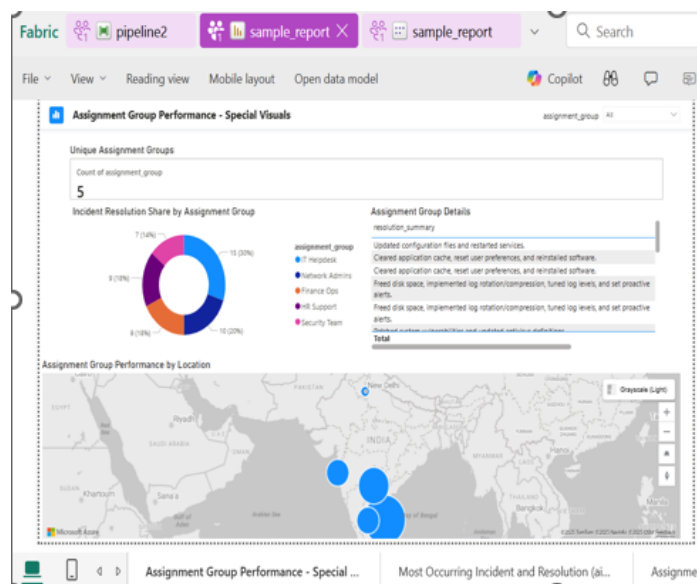- Microsoft Fabric
- Azure Fabric Capacity

BENEFITS:

- Intelligent Incident Handling: Automated pipelines ingest and process incident data with minimal manual effort
- Real-Time Insights: Power BI and Copilot deliver live analytics and intuitive natural language access
- Flexible Architecture: Microsoft Fabric ensures unified data management with adaptive learning for growth and customization

ARCHITECTURE DIAGRAM:
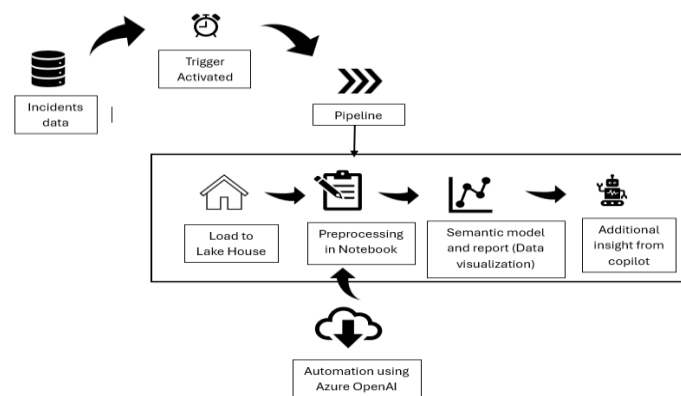
RESULTS:

FUTURE ENHANCEMENTS:

- Integrating ServiceNow with real-time intelligence in Microsoft Fabric to streamline IT operations through real-time monitoring
- Build a conversational troubleshooting agent in Azure AI Foundry with predictive analytics to prevent recurring incidents