Azure AlOps CoPilot ROI Dashboard - Microsoft Hackathon

Project Idea & Justification

Project Name: Azure AlOps CoPilot ROI Dashboard

This project is a web-based AlOps assistant and ROI calculator that helps IT operations teams manage incidents and optimize cloud resources using Al. The solution leverages Al to analyze incident

tickets and logs, suggest remediation steps, and even trigger automated fixes for known issues.

Azure AI Service Integration

- **Azure Al Document Intelligence**: Parses logs, tickets, and documents to extract relevant data.
- **Azure Cognitive Search**: Enables knowledge mining by indexing historical incidents.
- **Azure OpenAl Service**: Provides Al-powered incident recommendations.
- **Azure Monitor and Log Analytics**: Supplies live operational data and anomaly detection.
- **Azure Functions or Logic Apps**: Implements auto-remediation workflows.
- **Azure Web App**: Hosts the dashboard and UI.

Technical Feasibility (2-Week Execution)

- **Pre-Trained Models**: Uses Azure's pre-built AI services instead of training models from scratch.
- **Azure Managed Services**: Reduces the need for extensive backend development.
- **Iterative Development Plan**: Focuses on building an MVP in the first week, refining in the second.
- **Scope Control**: Limits complexity by targeting specific incident resolution and cloud cost optimizations.

Recommended Team Skillset for Third Member

- **Machine Learning Engineer (ML Engineer)**: Enhances AI model customization and integration.
- **Alternative Consideration**: A Security or Governance expert could be useful, but an ML Engineer adds the most value.

Web App/Dashboard Design

- **Architecture**: A modular, cloud-native dashboard for real-time Al insights.
- **UI Frameworks**: Uses Plotly Dash, Streamlit, or a minimal React front-end.
- **Core Features**:
 - Incident Console: Displays active incidents and Al-generated recommendations.
 - Al Ops Chat: Allows engineers to query the Al for troubleshooting.
 - ROI Dashboard: Visualizes impact through charts and KPIs.

Winning Strategy (Judging Criteria Alignment)

- **Performance**: Demonstrates measurable improvements in incident resolution and cost savings.
- **Innovation**: Combines multiple AI tools into an intelligent AIOps assistant.
- **Azure Services**: Maximizes usage of Azure AI and cloud services.
- **Responsible AI**: Implements privacy, fairness, and security measures based on Microsoft's framework.

By delivering a polished, end-to-end Al-driven incident management tool, we position our project to score top marks in **Performance, Innovation, Azure Services, and Responsible Al**, maximizing our chances of winning the hackathon.