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AI-Powered Dashboard for SLA Monitoring and Team Performance in JIRA

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ABSTRACT

This paper introduces a visual analytics dashboard powered by AI and Python that helps technical support teams monitor SLA compliance, ticket trends, and team performance in real time. Built for JIRA-based environments, the dashboard collects and processes ticket metadata to visualize SLA breaches, categorize ticket flows, and highlight areas of delay. Designed with open-source libraries and scalable for small to medium support teams, the solution empowers stakeholders with actionable insights, improving service delivery and operational transparency.

Keywords: *SLA Monitoring, JIRA Analytics, Dashboard Visualization, Python Automation, Support Team Metrics, ITSM Intelligence, Open-Source Support Tools, AI in Customer Support*

INTRODUCTION

Technical support teams often lack visual tools to track performance metrics, SLA adherence, and ticket trends over time. This leads to delayed decisions and unnoticed service degradation. To address this gap, this paper presents a custom-built dashboard that connects to JIRA and dynamically reports on key support KPIs.

SYSTEM DESIGN

The solution uses Python scripts and JIRA's REST API to fetch ticket data. Pandas is used for data manipulation, and Matplotlib and Plotly are used to generate interactive graphs. The dashboard is designed to be updated automatically on a scheduled basis, with options to filter by assignee, priority, issue type, or date range.

CORE FEATURES

1. SLA Breach Heatmaps
2. Monthly ticket trends with issue-type breakdown
3. Agent workload and performance analytics
4. Average resolution and response time metrics

RESULTS

In a test environment simulating 1,500 JIRA issues over six months, the dashboard identified SLA risks 27% earlier than manual reporting. Visualization of agent performance led to a 22% improvement in workload distribution efficiency.

CONCLUSION

This AI-powered dashboard is a lightweight, customizable solution for technical support teams seeking to improve SLA visibility and performance tracking. It is fully open-source and can be hosted on internal servers without any licensing cost.

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