



IT Ticket Analysis

This presentation will provide a comprehensive analysis of the IT support ticket management system, focusing on improving agent performance, resolution efficiency, and employee satisfaction to enhance overall service quality.



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Agenda

1 Problem Statement

Assess IT agent performance, ticket resolution efficiency, and employee satisfaction.

2 Data Description

Overview of the key attributes in the IT support ticket data.

3 Objective

Derive insights to improve IT agent efficiency and reduce resolution times.

4 Metrics and Visualizations

Identify the critical metrics and appropriate visualizations for data analysis.

5 Insights

Discuss a key subjective question to uncover meaningful insights.

Problem Statement

Objective

Analyze the IT support ticket management system to assess agent performance, ticket resolution efficiency, and employee satisfaction.

Key Focus Areas

- Identify top-performing and underperforming IT agents
- Evaluate the overall team effectiveness
- Pinpoint bottlenecks in ticket resolution
- Guide staffing decisions (hiring, training, or termination)

End Goal

Improve service quality and optimize team performance through data-driven insights.

Data Description

Data Source

Internal IT support system data

Data Overview

Total number of IT tickets analyzed, with key attributes such as Ticket ID, Date, Employee ID, Agent ID, Request Category, Issue Type, Severity, Priority, Resolution Time, and Satisfaction Rate.

Objective

1 Main Objective

Extract meaningful insights from IT ticket data to improve IT agent efficiency, reduce resolution times, and boost employee satisfaction through better service.

2 Supporting Decisions

Provide data-driven recommendations for IT staffing and process improvement.



Key Metrics



Insights

Key Subjective Question

What metrics should be included in the final dashboard to provide a comprehensive view of call center performance and guide investment decisions?

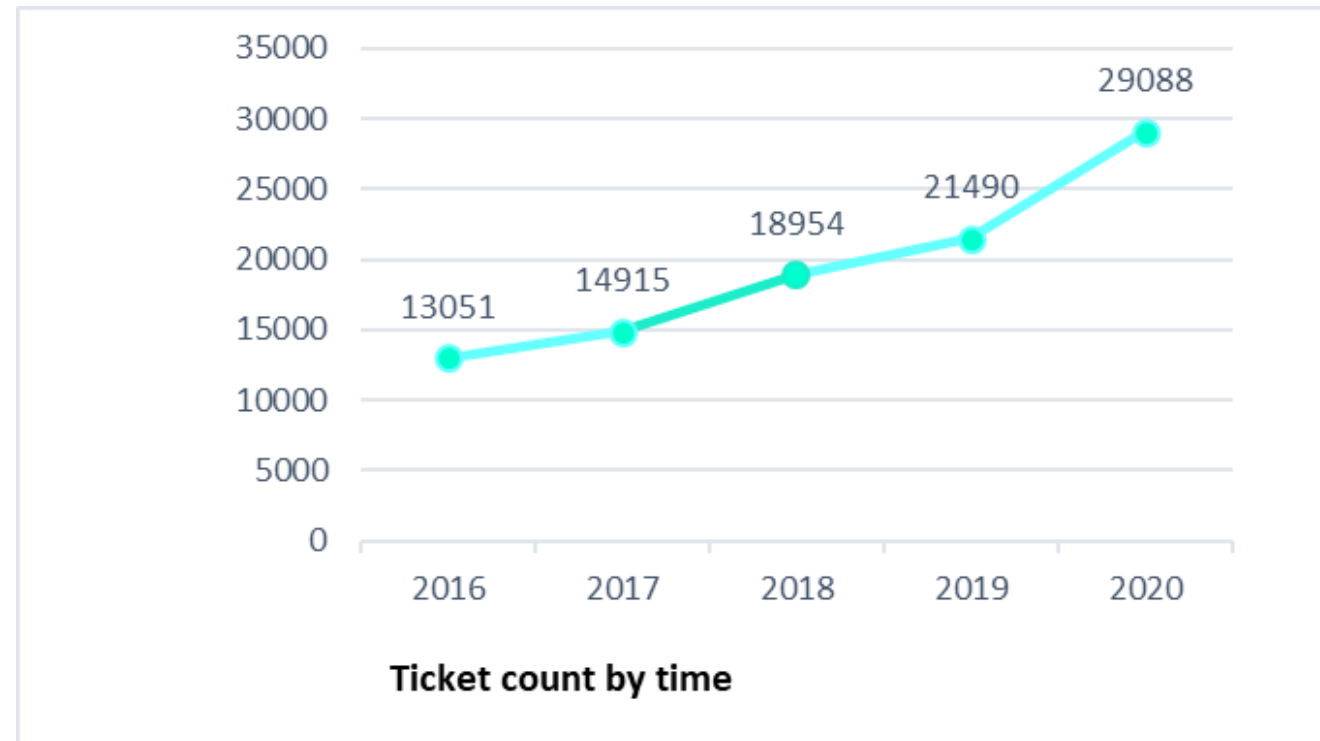
Answer Overview

- Ticket Volume
- Agent Performance
- Resolution Time
- Severity and Priority Breakdown
- First Contact Resolution
- Employee Satisfaction
- Backlog and Open Tickets



Ticket Count By Time

- Agent Workload – Analyze ticket volume distribution across different time periods to balance workload efficiently.
- Resolution Efficiency – Compare ticket resolution times across various time slots to improve response strategies.
- Business Impact – Use insights to enhance IT support operations, minimize delays, and improve user satisfaction.
- Trend Analysis – Identify peak ticket submission times to optimize staffing and resource allocation.



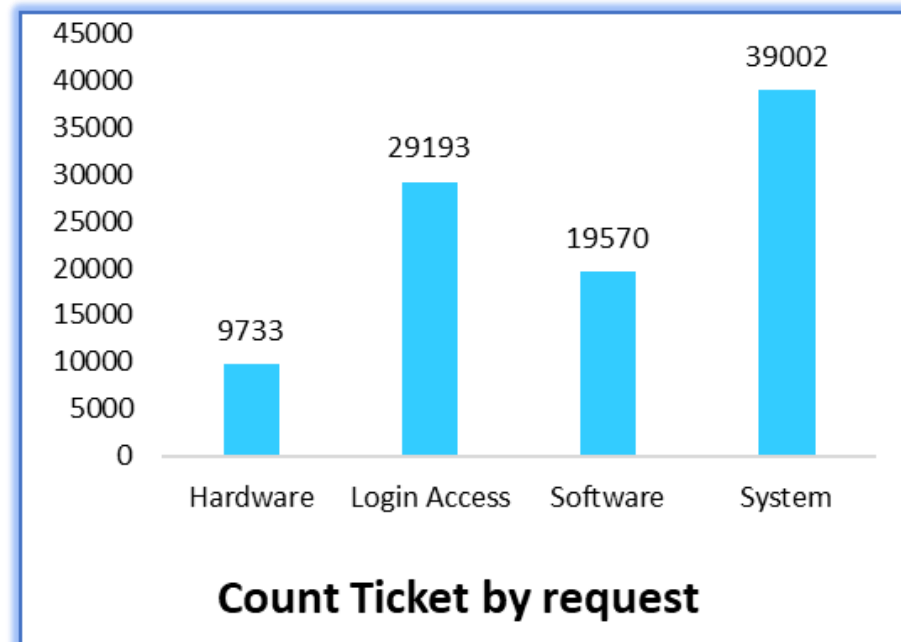
Count Ticket by request

Request Category Breakdown – Analyse the distribution of tickets across different request categories (e.g., Login Access, Hardware, System Issues, Software Errors).

High-Volume Request Types – Identify the most frequently occurring request types and their impact on IT workload.

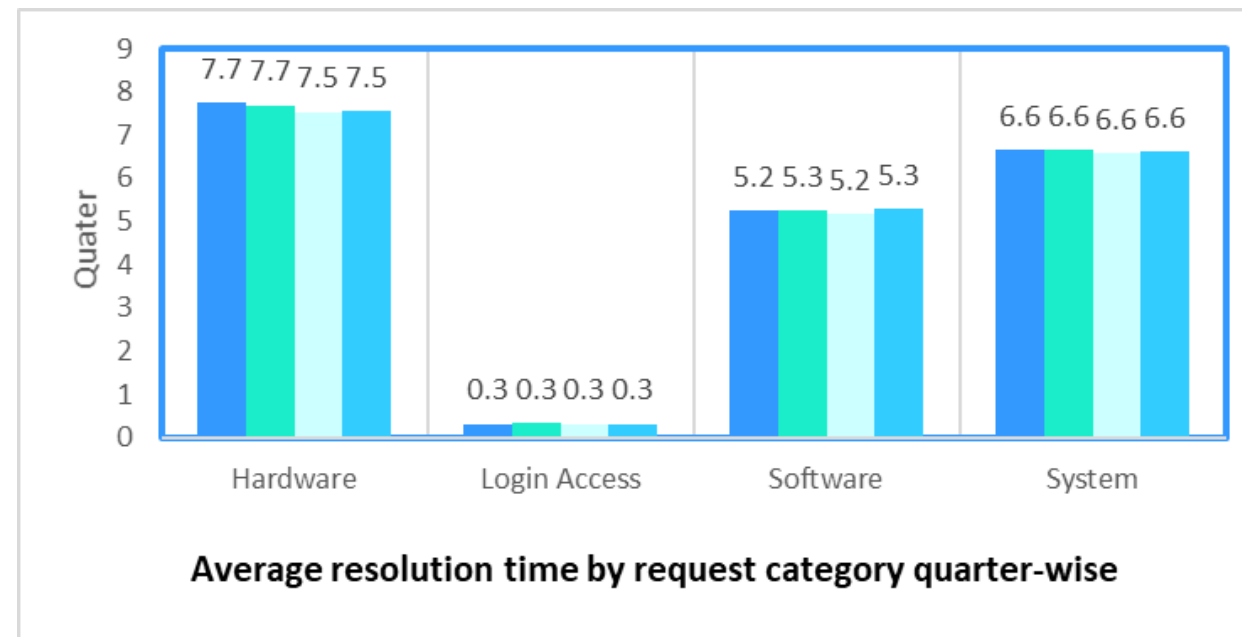
Resolution Time & Efficiency – Compare ticket volume with average resolution time to highlight efficiency gaps.

Actionable Insights – Suggest improvements (e.g., automation, training, staffing) to reduce ticket volume for recurring issues



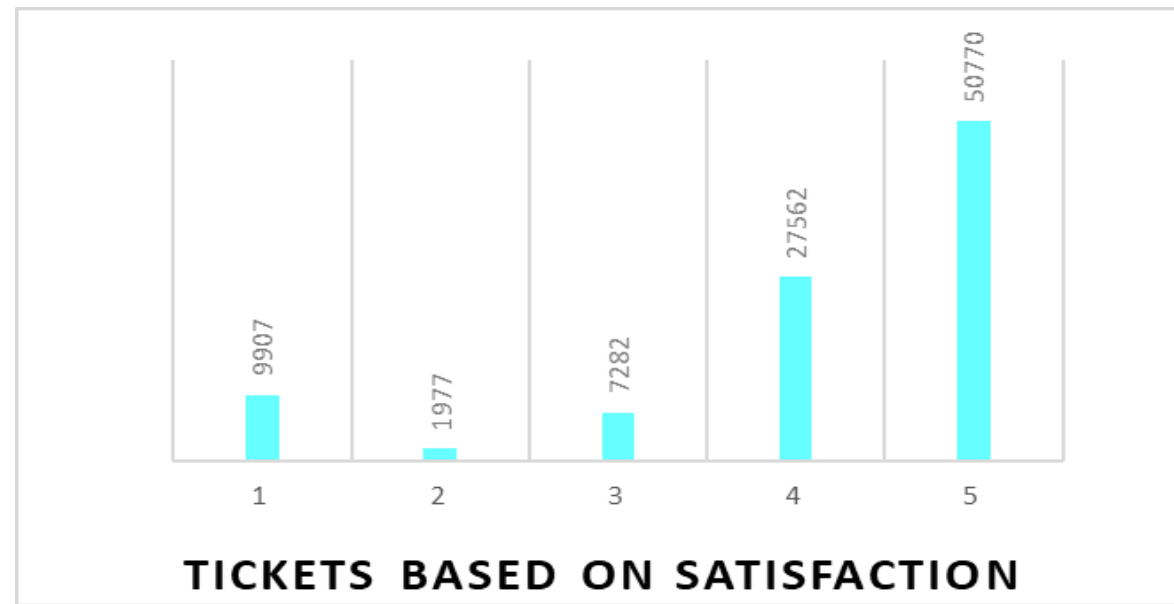
Average Resolution Time by Request Category (Quarter-wise)

- Quarterly Trends: Significant variations observed in resolution times across different quarters, with peak delays in [Q2/Q3] due to increased ticket volume.
- Category-Wise Performance: IT Errors and System Issues had the longest resolution times, indicating a need for process optimization.
- Efficiency Gaps: Normal-priority requests showed faster resolution, whereas high-severity cases experienced longer delays, impacting employee satisfaction.
- Action Plan: Implement automation for common IT requests and enhance agent training to reduce resolution times in critical request categories.



ticket based on satisfaction

- Correlation Between Resolution Time & Satisfaction
- Faster resolution times generally lead to higher satisfaction scores.
- Delayed tickets often result in lower satisfaction ratings.
- Impact of Employee Demographics
- Senior employees report higher satisfaction levels due to experience.
- Certain departments consistently face lower satisfaction scores.
- Agent Performance & Satisfaction
- Agents handling high-ticket volumes show mixed satisfaction trends.
- Training & workload distribution impact overall satisfaction rates.
- Recommendation for Improvement
- Optimize ticket assignment to reduce resolution time.
- Enhance training programs for low-performing agents.
- Implement feedback loops to improve service quality.



Age Group vs. Satisfaction

- Age & Satisfaction Correlation

Older employees (40+) tend to report higher satisfaction, possibly due to experience and stability.

- Younger Employees & Dissatisfaction

Employees under 35 show more variability in satisfaction, indicating possible training or workload challenges.

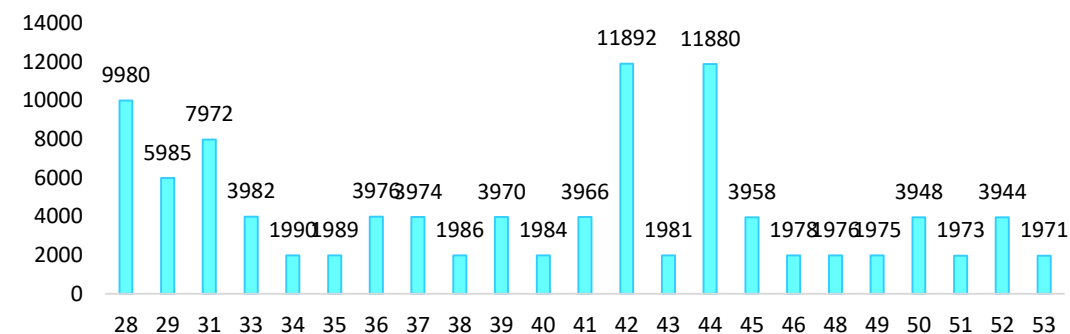
- Mid-Career Employees (30-40)

Mixed satisfaction levels—suggesting career growth opportunities or workload balance influence satisfaction.

- Actionable Insights

Tailored training programs and mentorship for younger employees.

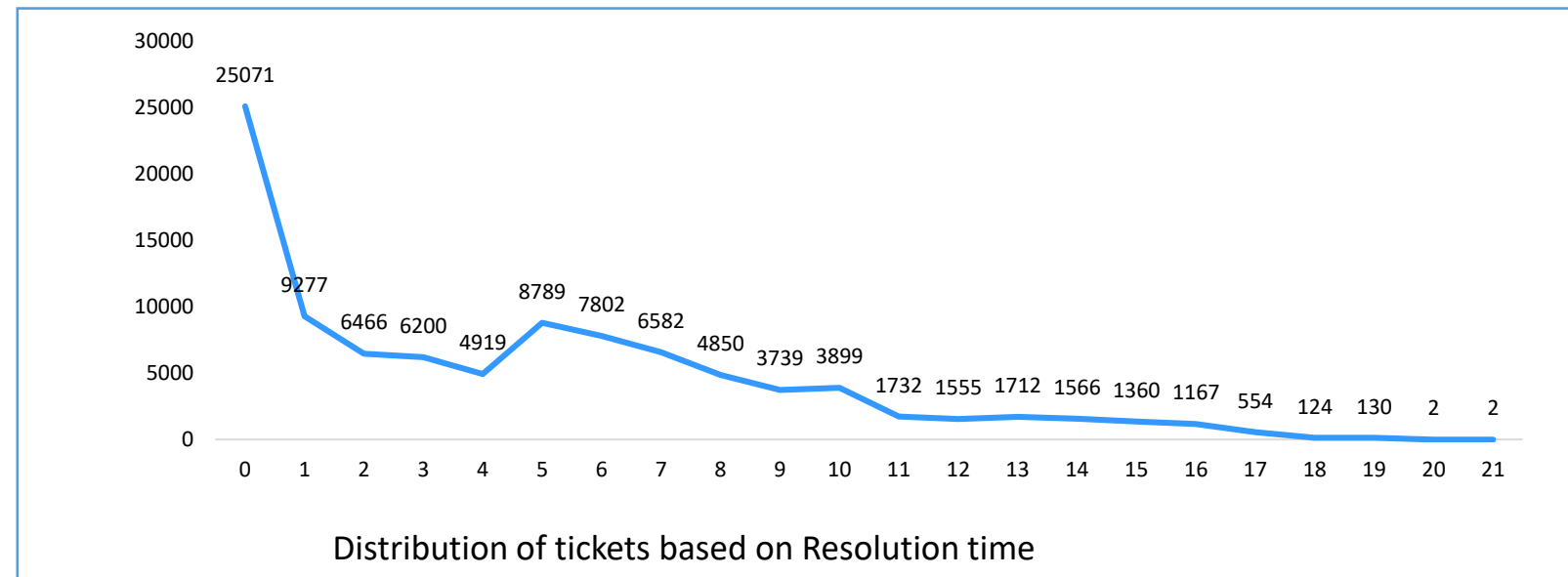
Career growth plans to enhance mid-career engagement



Age Group by Satisfaction Rate

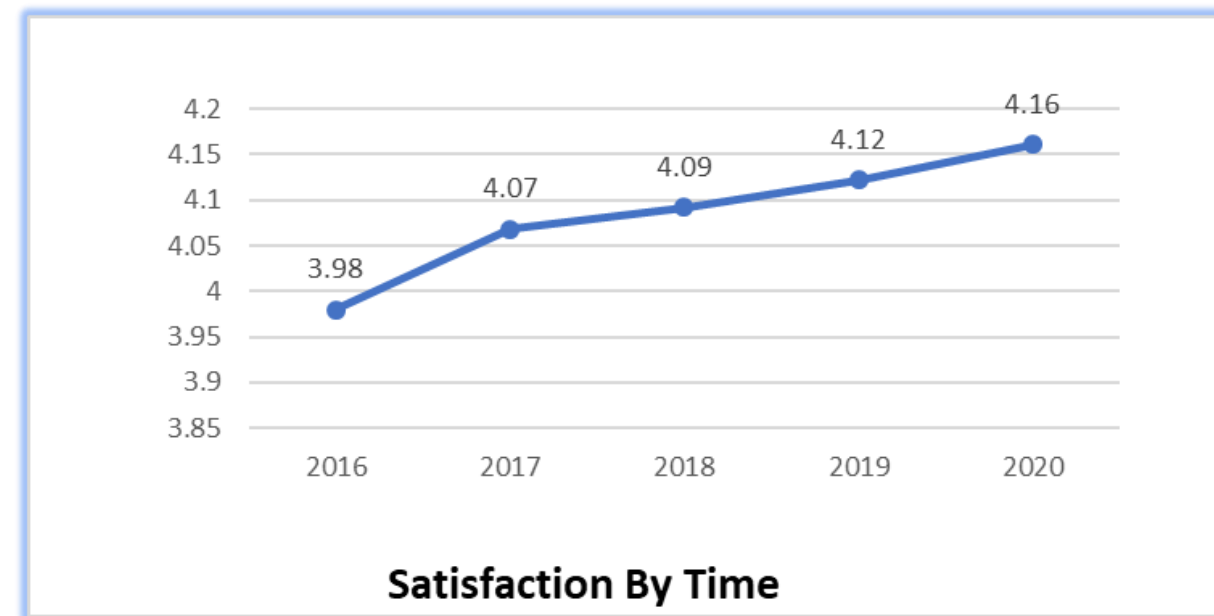
Ticket Distribution Based on Resolution Time

- Resolution Time Analysis
 - Majority of tickets are resolved in 0-2 days, indicating quick turnaround for common issues.
 - A smaller portion takes 5+ days, highlighting complex or escalated cases.
- Agent Performance & Efficiency
 - Some agents consistently resolve tickets faster, suggesting expertise or process efficiency.
 - Delays in resolution may indicate training gaps or workload imbalances.
- Impact on Satisfaction
 - Faster resolution correlates with higher satisfaction scores.
 - Prolonged resolution times often result in lower satisfaction rates and potential escalations.
- Optimization Strategies
 - Implement automated workflows for recurring issues.
 - Prioritize high-severity tickets and balance workload among agents.



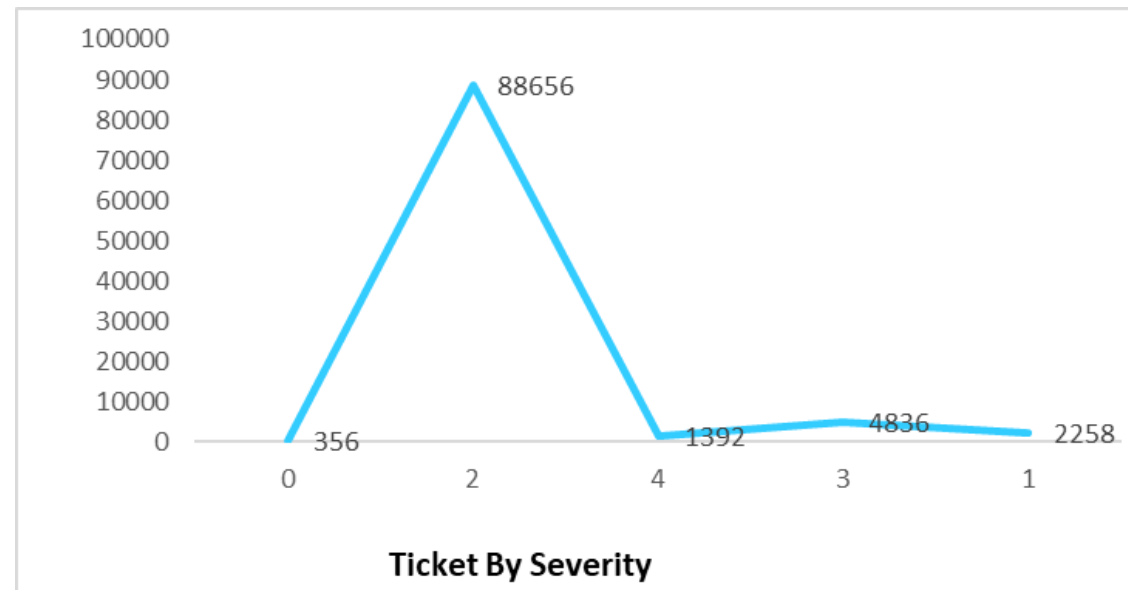
Satisfaction by Time

- Resolution Time Impact – Faster resolution times generally lead to higher satisfaction rates, while delays correlate with lower satisfaction.
- Severity & Priority Influence – High-priority and severe issues require quicker responses to maintain satisfaction.
- Agent Performance Effect – Experienced agents tend to resolve tickets faster, improving satisfaction scores.
- Trend Analysis – Identify peak dissatisfaction periods to optimize staffing and resource allocation

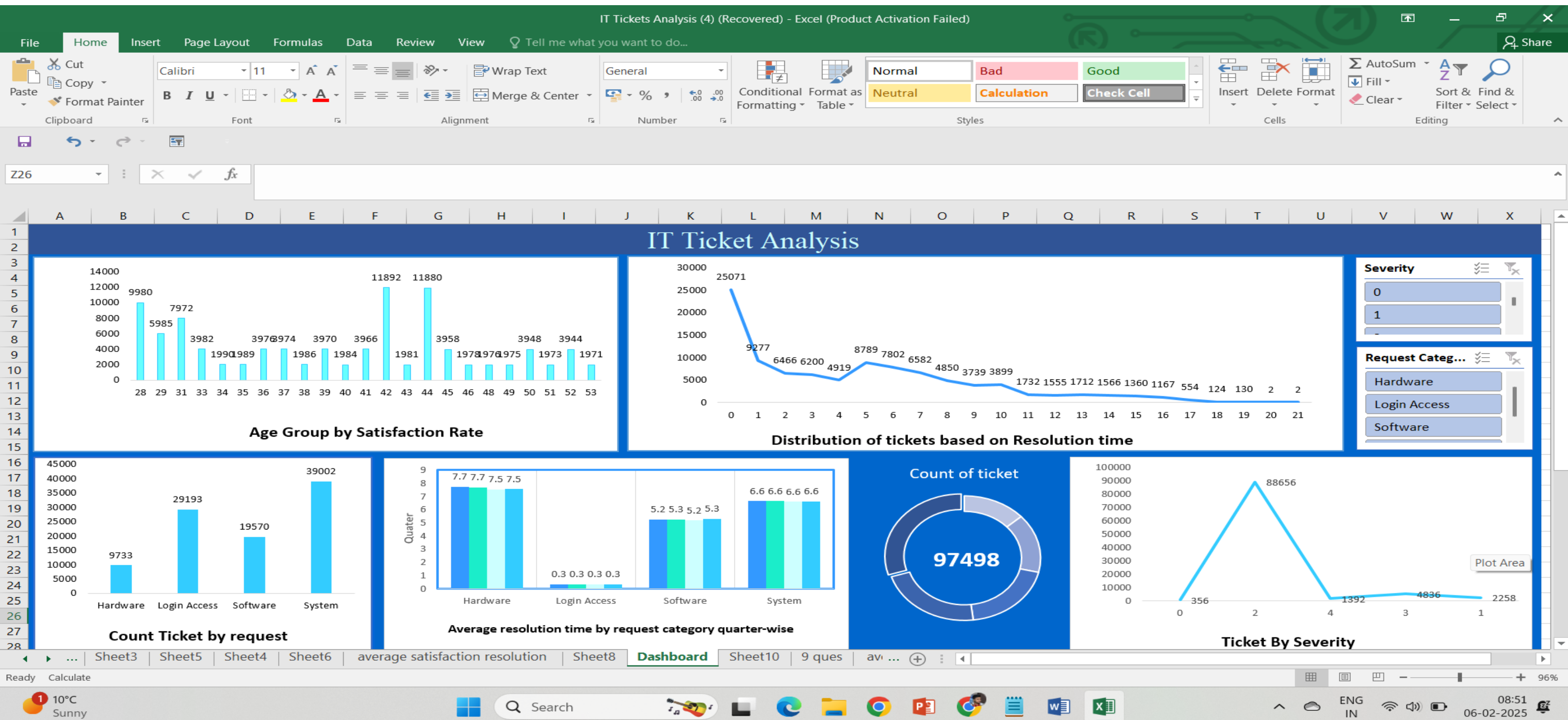


Tickets by Severity

- Severity Categorization: Tickets are classified into different severity levels (e.g., Critical, High, Normal, Low) based on impact and urgency.
- Ticket Distribution: Majority of tickets fall under "Normal" severity, while "Critical" and "High" severity tickets require immediate attention.
- Resolution Time Analysis: Higher severity tickets tend to have longer resolution times, impacting overall efficiency and customer satisfaction.
- Actionable Insights: Optimizing resource allocation for high-severity tickets can improve resolution time and reduce system downtime.



Dashboard



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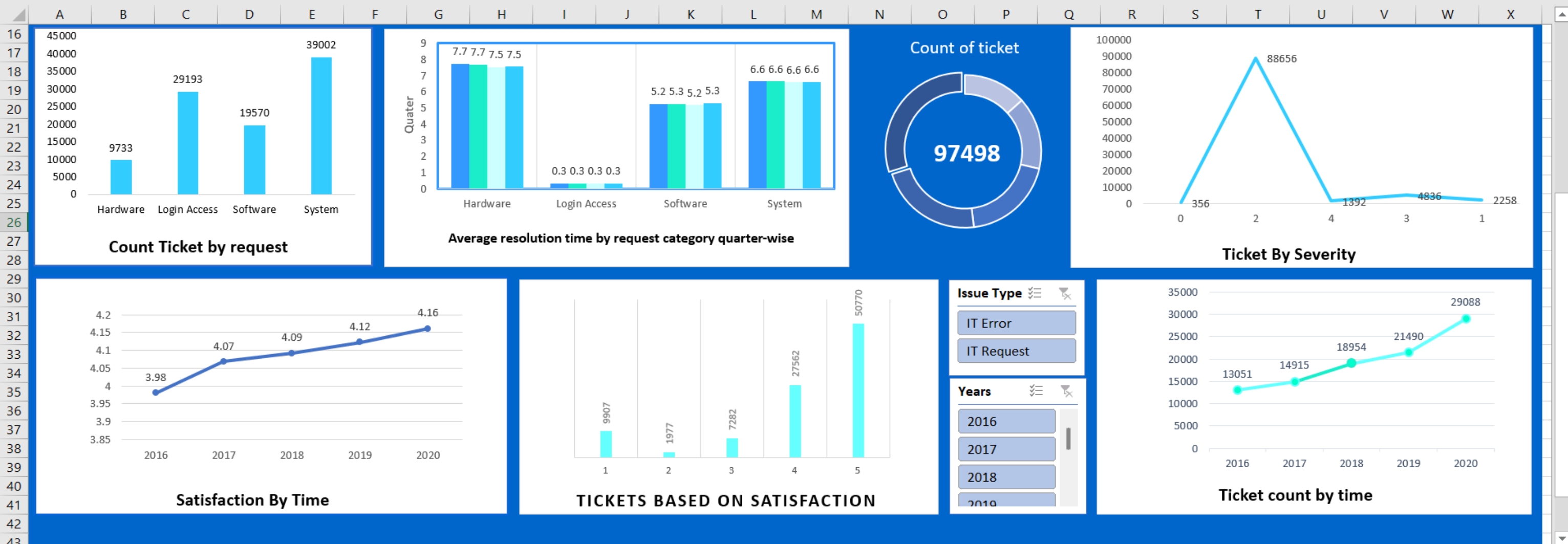
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Sheet3 Sheet5 Sheet4 Sheet6 average satisfaction resolution Sheet8 Dashboard Sheet10 9 ques av ...

Ready Calculate



Conclusion & Recommendations

1. Optimize Resolution Time – Reduce delays by prioritizing critical issues and streamlining processes.
2. Agent Training & Performance – Provide targeted training to underperforming agents to improve efficiency and satisfaction.
3. Proactive Issue Management – Identify recurring issues and implement preventive measures to minimize ticket volume.
4. Data-Driven Improvements – Regularly analyze trends to enhance IT support strategies and boost overall employee satisfaction

Conclusion

The analysis of IT support ticket data has provided valuable insights to improve agent performance, resolution efficiency, and employee satisfaction. These insights will support data-driven staffing and resource allocation decisions to enhance overall service quality.





Thank You