

IT TICKET ANALYSIS

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Introduction & Objectives

Introduction:

This project analyzes IT ticket resolution to improve performance and satisfaction.

Objectives:

- Evaluate agent performance metrics.
- Analyze resolution times and employee satisfaction.
- Provide data-driven recommendations for improvement.



Data Overview

Content

Dataset Summary:

- Total Attributes: 16.
- No missing or inconsistent values.
- Timeframe: 2016–2020.

Key Metrics:

- Ticket volumes, resolution times, satisfaction rates.

Methodology

Content

Steps Taken:

- Data cleaning and preprocessing.
- Used pivot tables for insights.
- Key formulas: VLOOKUP, DATEDIF, AVERAGE.

Tools Used: Excel for dashboards, slicers, and visualizations.

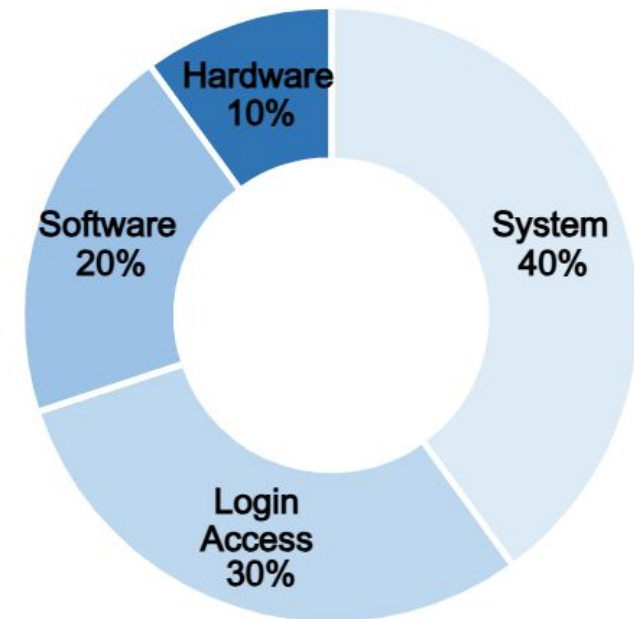
Ticket Volumes and Categories

Average daily ticket volume: 53.34.

Distribution:

- Hardware: 9,733 tickets.
- Login Access: 29,193 tickets.
- Software: 19,570 tickets.
- System: 39,002 tickets.

Category vs Ticket



Resolution Time and Satisfaction

Average Resolution Time: 4.55 days.

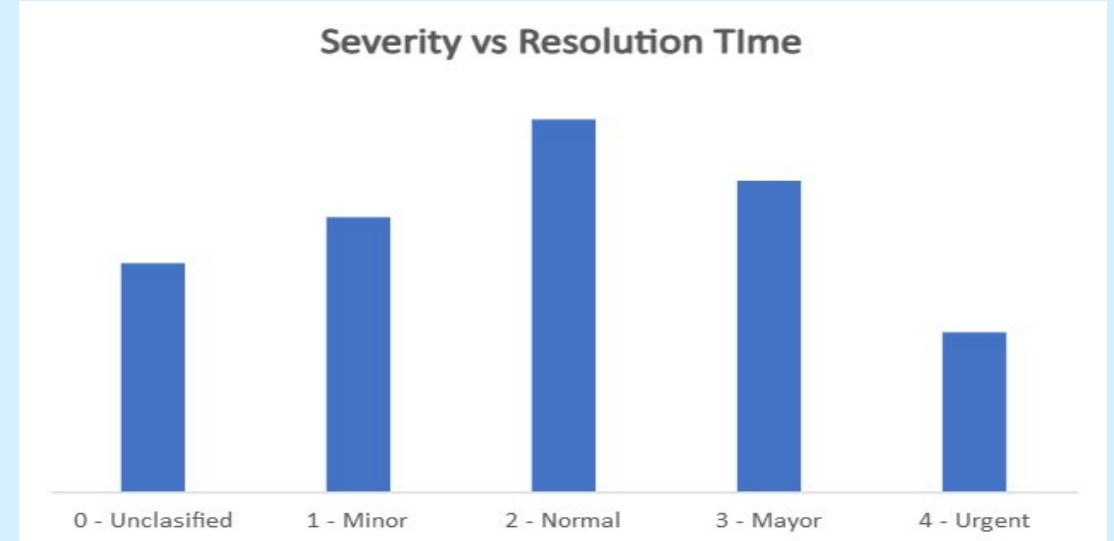
Avg Resolution Time
4.55 Days

Avg Tickets per Agent
1949.96

Avg Satisfaction Rating
4.10

Average Satisfaction Rate: 4.10 (out of 5).

Correlation: Higher severity = faster resolution (e.g., urgent: 2 days).



Agent Performance

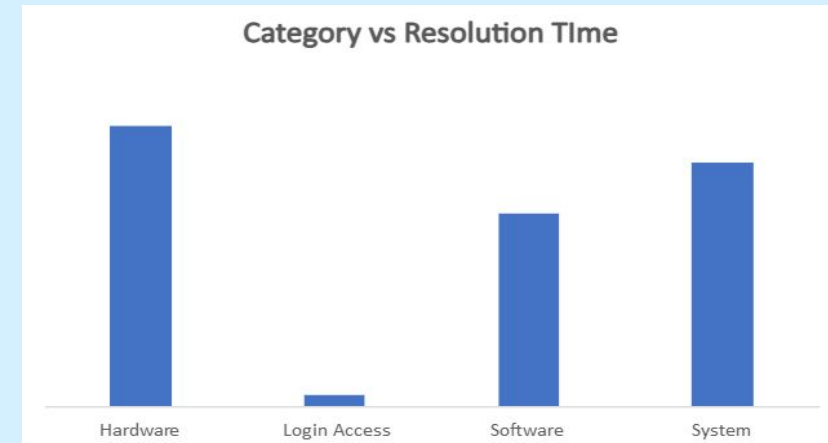
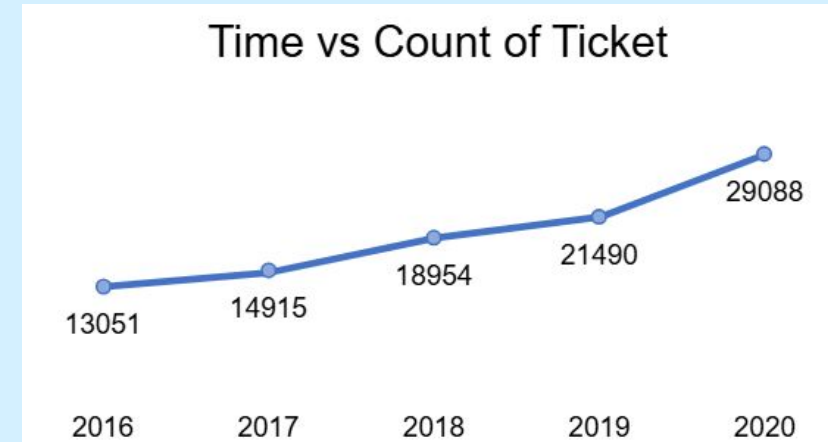
High performers: Resolved > 1949 with satisfaction > 4.

Low performers: Resolved < 1949 with satisfaction < 4.

Agent Name	Average of Satisfaction Rate	Count of Fecha	Status
Aurelio Tanori	4.41	2027	High Performers
Jesus Contreras	4.34	2026	High Performers
Elena Velez	3.62	2021	Low Performers
Melinda	4.40	2007	High Performers
Barbara Grijalva	4.44	2003	High Performers
Willyberto Gonzales	4.38	2000	High Performers
Galindo Guadalupe	4.47	1991	High Performers
Barraza Alberto	4.19	1988	High Performers
Guadalupe Torrico	4.36	1987	High Performers
Alfonso Barraza	3.04	1984	Low Performers
Alberto Casillas	4.42	1974	High Performers
Silvia Morales	4.12	1974	High Performers
Mata Lucero	4.34	1969	High Performers
JesusGrajeda	4.47	1968	High Performers
Isela Leyva	4.22	1968	High Performers
Lorena	3.63	1966	Low Performers
Aldo Carrillo	3.78	1966	Low Performers
Flores Sierra	3.99	1963	Low Performers
Parra Luna	3.85	1963	Low Performers
Leon Lourdes	4.34	1961	High Performers
Marisol Piedrahita	4.44	1960	High Performers
Guadalupe Villanueva	3.63	1958	Low Performers
Lopez Moran.	3.64	1956	Low Performers
Rosa Olguin	4.32	1950	High Performers
Ramon Macias	4.20	1949	Low Performers
Velasquez Jose	3.69	1949	Low Performers
A. Trejo	3.59	1949	Low Performers
Nurio Zepeda	3.61	1946	Low Performers
Darwin E.	4.36	1945	Low Performers
Eva Cardenas	4.41	1943	Low Performers
EstuardoTorres	4.09	1942	Low Performers
Enrique Montiel	4.44	1938	Low Performers
Estuardo Ocaño	3.98	1935	Low Performers
Yomaira Agudelo	4.17	1933	Low Performers
Segura Garcia	4.46	1931	Low Performers
Jesus Pacheco	3.66	1931	Low Performers
Luis Arguello	3.82	1929	Low Performers
Diana Rojo	4.60	1927	Low Performers
Orci Carlos	3.67	1926	Low Performers
Eduardo Luna	4.15	1920	Low Performers
Alfredo Barreras	3.67	1920	Low Performers
Guadalupe Hernandez	4.38	1915	Low Performers
Luis Torres	4.20	1913	Low Performers
Sandra Lujan	3.60	1906	Low Performers
Javier D.	4.49	1897	Low Performers
Reyna Santacruz	3.91	1897	Low Performers
Miller Gaviria	3.99	1892	Low Performers
Armando Sierra	4.36	1890	Low Performers
Alberto Gastelum	4.40	1889	Low Performers
Griselda Galindo	4.28	1856	Low Performers

Investment Decisions

- Ticket volumes doubled from 2016 to 2020.
- Hire agents to handle workload increases.
- Train agents to handle hardware/system tickets with longer resolution times.



Agent Training Needs

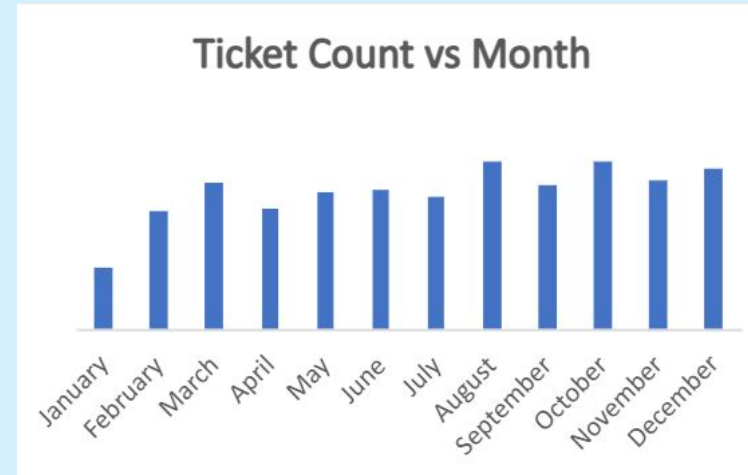
Focus on agents with:

- Resolution time > 4.55 days.
- Satisfaction < 4.

Agent Name	Average of Resolution Time (Days)	Average of Satisfaction Rate	Status
Alfonso Barraza	4.999495968	3.04233871	Needs Additional Training
A. Trejo	5.32067727	3.592611596	Needs Additional Training
Sandra Lujan	5.204616999	3.601259182	Needs Additional Training
Nurio Zepeda	5.409558068	3.612024666	Needs Additional Training
Elena Velez	5.381989114	3.615042058	Needs Additional Training
Lorena	5.511190234	3.628179044	Needs Additional Training
Guadalupe Villanueva	4.804392237	3.631256384	Needs Additional Training
Lopez Moran.	4.778118609	3.63803681	Needs Additional Training
Jesus Pacheco	4.595028483	3.660797514	Needs Additional Training
Orci Carlos	4.317757009	3.665109034	Performers
Alfredo Barreras	4.286979167	3.667708333	Performers
Velasquez Jose	4.523345305	3.690097486	Performers
Aldo Carrillo	4.554933876	3.783316378	Needs Additional Training
Luis Arguello	3.700362882	3.821150855	Performers
Parra Luna	4.867040245	3.847682119	Needs Additional Training
Reyna Santacruz	3.846072746	3.913020559	Performers
Estuardo Ocaño	5.524031008	3.97622739	Needs Additional Training
Flores Sierra	4.754457463	3.990830362	Needs Additional Training
Miller Gaviria	4.731501057	3.991014799	Needs Additional Training
Estuardo Torres	4.901132853	4.085478888	Performers
Silvia Morales	4.886524823	4.123100304	Performers
Eduardo Luna	4.4078125	4.147916667	Performers
Yomaira Agudelo	3.824624935	4.170201759	Performers
Barraza Alberto	5.243963783	4.187625755	Performers
Luis Torres	3.918452692	4.198118139	Performers
Ramon Macias	5.451513597	4.204720369	Performers
Isela Leyva	3.651422764	4.22052846	Performers
Griselda Galindo	5.322198276	4.282327586	Performers
Rosa Olguin	5.319487179	4.320512821	Performers
Mata Lucero	5.44591163	4.340274251	Performers
Leon Lourdes	3.705252422	4.341662417	Performers
Jesus Contreras	5.554787759	4.344521224	Performers
Armando Sierra	5.343915344	4.355026455	Performers
Darwin E.	4.058097686	4.361953728	Performers
Guadalupe Torrico	3.66935078	4.364368395	Performers
Willyberto Gonzales	4.259	4.376	Performers
Guadalupe Hernandez	4.55770235	4.377545692	Performers
Melinda	4.369207773	4.399103139	Performers
Alberto Gastelum	3.705664373	4.401270513	Performers
Aurelio Tanori	4.514553527	4.407992107	Performers
Eva Cardenas	4.720020587	4.411219763	Performers
Alberto Casillas	4.298378926	4.415906788	Performers
Marisol Piedrahita	3.834183673	4.436734694	Performers
Barbara Grijalva	4.227159261	4.441337993	Performers
Enrique Montiel	4.643446852	4.444272446	Performers
Segura Garcia	3.716727084	4.461418954	Performers
Galindo Guadalupe	3.655951783	4.4716223	Performers
JesusGrajeda	3.596544715	4.473577236	Performers
Javier D.	4.05640485	4.489720611	Performers
Diana Rojo	3.636222107	4.596782564	Performers

Performance Trends

- **Monthly Stability:** January (low ticket volume, high satisfaction).
- **Peak Ticket Months:** August, October.
- Performance steady despite workload increases.



Strategic Recommendations

Key Recommendations:

- Hire more agents to manage increased workload.
- Provide targeted training for hardware/system categories.
- Invest in tools to improve resolution times further.

Expected Impact:

- Reduced backlog.
- Improved employee satisfaction.

Dashboard and Visualizations

Key Metrics Displayed:

- Total Tickets
- Average Tickets per Day
- Average Resolution Time
- Average Tickets per Agent
- Average Satisfaction Rating

Interactive Filters:

- Year
- Priority
- Severity
- Request Category

Visualizations and Insights:

- Category vs. Resolution Time
- Priority vs. Average Resolution Time
- Time vs. Count of Tickets
- Severity vs. Ticket Count
- Issue Type vs. Tickets
- Resolution Time vs. Ticket Count
- Satisfaction Rate vs. Ticket Count
- Average Resolution Time vs. Years
- Age Group vs. Satisfaction

Dashboard for IT Ticket Analysis for FP20 Analytics

Total Tickets
97498

Avg Tickets
53.37

Avg Resolution Time
4.55 Days

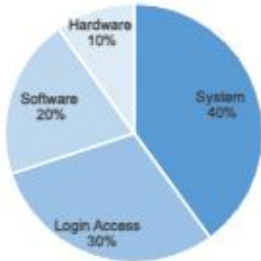
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1949.96

Avg Satisfaction Rating
4.10

Request Category vs Resolution Time



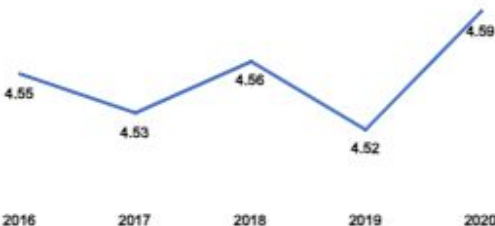
Request Category vs Ticket Count



Age Group vs Satisfaction



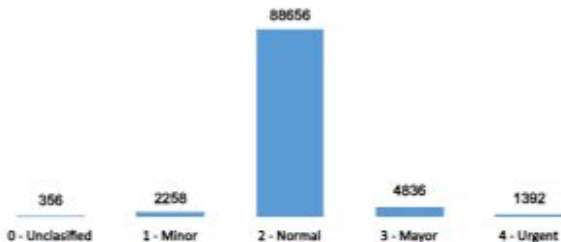
Year vs Avg Resolution Time



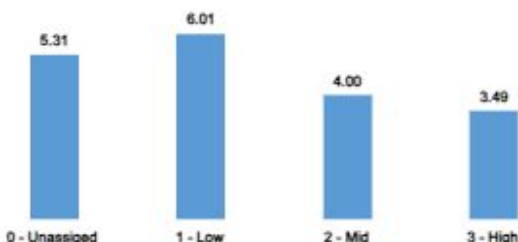
Issue Type vs Ticket



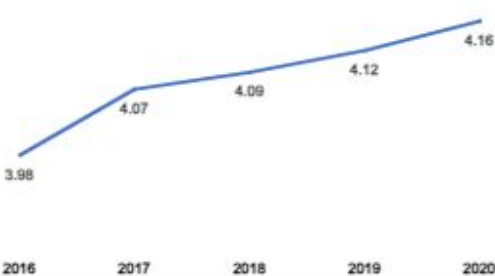
Severity vs Ticket Count



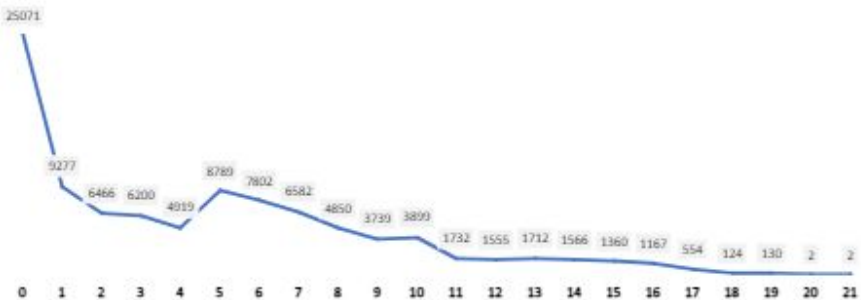
Priority vs Avg Resolution Time



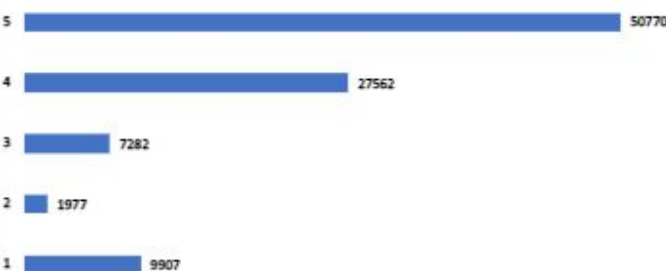
Year vs Avg Satisfaction Rating



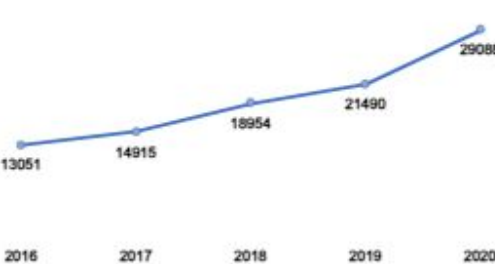
Resolution Time vs Ticket Count



Satisfaction Rate vs Ticket Count



Time vs Count of Ticket



Year

2016
2017
2018
2019
2020

Priority

0 - Unassigned
1 - Low
2 - Mid
3 - High

Severity

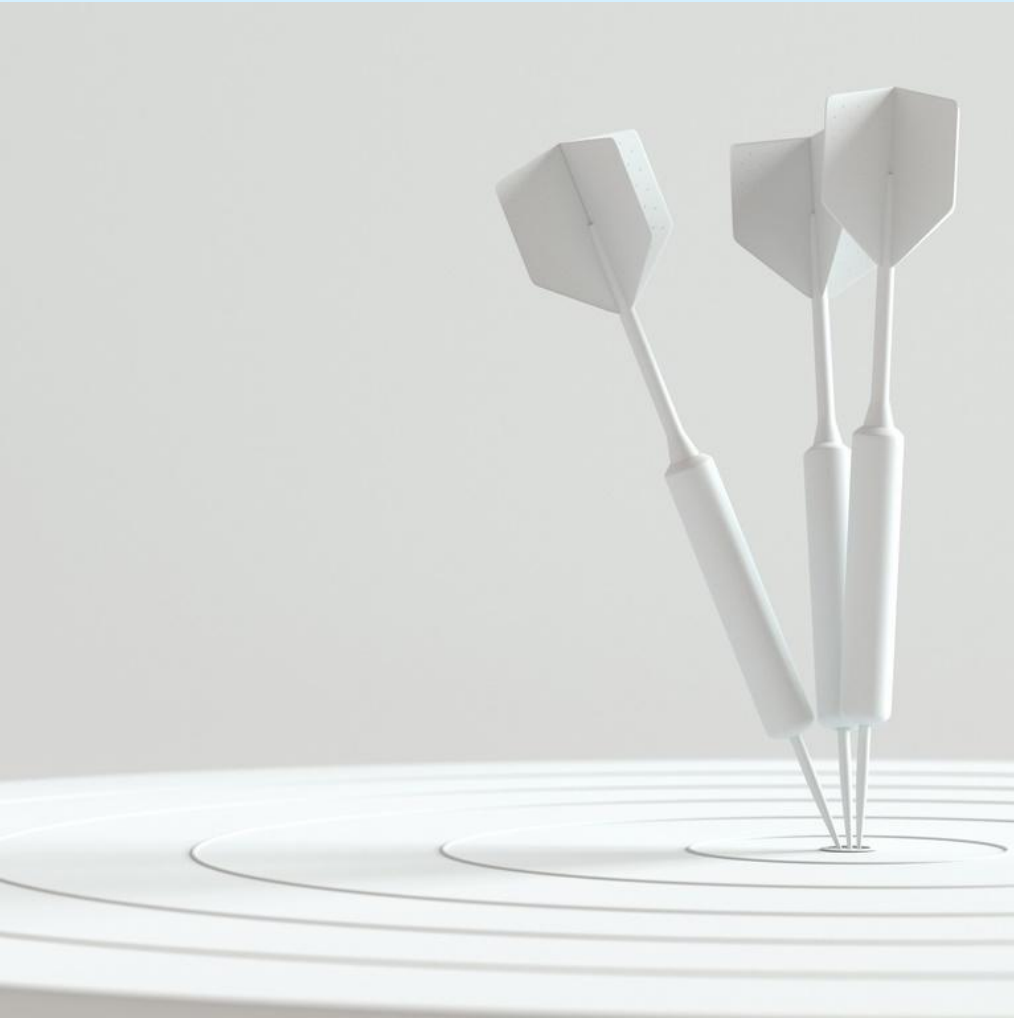
0 - Unclassified
1 - Minor
2 - Normal
3 - Major
4 - Urgent

Request Category

Hardware
Login Access
Software
System

Conclusion

- IT support performance improving despite workload growth.
- Focus areas: Hiring, training, and tech investments.
- Data-driven decisions will sustain improvements and optimize efficiency.



Thank you