



T-Mobile Wholesale Ticketing Support

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PROBLEM

\$154,666,500:

cost of overdue tickets in 2022

- 14.7% of 16,467 tickets overdue
- Multiple ticketing systems
- Limited ticket tracking

ITERATION #1

How can we identify problematic tickets earlier in the ticketing process?

- Unsuccessful predictive statistical models
- Severe data limitations

ITERATION #2

Where are major causes of problematic tickets and how can they be mitigated?

- Identify areas of improvement
- Improved data collection/usage

RESULTS

\$750,000/year:

savings upon implementation of recommendations

Mean Time to Resolution vs Time (month)

- Causation tree
- Revamp data dashboard
- improved data collection strategy

Overdue Tickets Reassigns Major Incident Software/System Reopens Manpower Demand Reallocated System Missing/ Dashboard Misassigned Quality Quantity Engineering Partners failure incorrect info resources 8 High System Changing Incorrect Missing Bad Misuse priority alignment description team roles of data data prompts 1. Ratio of opened to closed errors tickets remains steady Not Not 3. Customer free response in Generic Free 1400 - Opened displaying collecting Incomplete ticket creation misleads info 11. Outside of fields engineers and impedes data necessary response responses project scope / already analysis 1100 info system is unstable collected 4. Reopens cannot be 8. Current dashboard inaccurately 6. Engineer's free response used in included in data analysis MTTR - TREND displays system status place of drop-downs, difficult to do Cause Descriptions % data analysis Other 7.17% 3,23% 5. Use of generic 9. Dashboard does not display responses is 2. 3+ Reassigns are major indicator important information that is 7. Widespread NULL values (75% of extremely high. This that a ticket will become overdue: already being collected tickets) make data analysis blocks future

impossible and withhold info from

future engineers

Recommendations:

All-teams % Overdue: 14.7%

- Assigned 3+: **52.9**%

- Assigned 1,2: 12.23%

- Increase tracking of reopened tickets: where they end up and for how long⁴
- Clear, comprehensive categorical options³
- Remove options, rephrase or add categories, standard training for ticket completion⁵

engineer's work and

data analysis

- Standardize free response, utilize #keywords⁶
- Important fields are required, autofill⁷
- Opened vs closed trend, display soon-to-be overdue, % overdue, time-to-pick-up vs time-to-work⁹

10. Data analysis cannot be done

without relevant data

• Remove MTTR over time, open tickets/month trend, aging buckets, mix of priority tickets⁸