Comprehensive Analysis of Ticket Data: Insights and Recommendations

1. Key Observations

Ticket Volume by ORDER_TYPE

- **Dominance of Quick Tickets**: Quick tickets account for the majority of ticket volume, significantly outnumbering tasks.
- **Business Implication**: The high volume of quick tickets suggests a need for streamlined processes, automation, and self-service solutions to reduce agent workload and improve response times.

Average Resolution Time by ORDER_TYPE

- **Resolution Times**:
  - Quick tickets: ~28 minutes.
  - Tasks: ~60 minutes (nearly double the time).
- **Business Implication**: While quick tickets are resolved faster, their high volume means small improvements in resolution time can have a significant impact. Tasks require attention to reduce complexity or streamline workflows.

Top Customers by Ticket Type

- **High Ticket Volume for Top Customers**: Each of the top three customers generates ~14 tickets, dominated by quick tickets.
- **Business Implication**: High-engagement customers may encounter recurring issues. Addressing root causes through proactive measures and personalized support can improve satisfaction and loyalty.

HDW Issue Resolution Distribution

- **Uniform Distribution**: All resolution methods (e.g., router restarts, firmware updates) represent ~8% of HDW tickets.
- **Business Implication**: No single resolution method dominates, indicating diverse hardware issues. Training technicians must not be oriented in one method. Training on all methods and automating repetitive resolutions can improve efficiency.

SOP Issue Resolution Distribution

- **Dominance of SIT12**: 50% of SOP tickets are resolved via SIT12, with TITAN-related outcomes (successful, aborted, rejected) equally distributed at 17% each.
- **Business Implication**: Investigate why SIT12 is so prevalent and whether it can be optimized or replaced. Improve TITAN success rates.

WLAN Issue Pie Chart

- **Dominance of WLAN Issues**: WLAN issues account for the largest share of tickets, followed by "Other" and smaller categories like billing and modem activation.
- **Business Implication**: WLAN issues are a critical pain point. Addressing root causes (e.g., connectivity problems, user errors) will significantly improve customer satisfaction and reduce ticket volume.

Team Performance

- **Ticket Distribution**:
  - HDW: 33.3%.
  - SOP: 14.3%.
  - Other categories: Smaller shares collectively totaling 52.4%.
- **Resolution Times**:
  - High-complexity actions (e.g., SIT12): ~60 minutes.
  - Low-complexity actions (e.g., Smartcard Replaced): ~15-20 minutes.
- **Business Implication**: Teams handling high-complexity actions (e.g., KAV, GIGA) require additional resources and training. Best practices from teams handling low-complexity actions can inform process improvements.

Ticket Volume by Day of Week

- **Peak Days**: Tuesday and Wednesday see the highest ticket volumes (~8 tickets/day).
- **Weekend**: Saturday and Sunday have significantly lower volumes (~3-5 tickets/day).
- **Business Implication**: Optimize staffing levels during peak days and consider reduced schedules on weekends to manage costs effectively.

Ticket Volume by Hour of Day

- **Peak Hour**: 11 AM has the highest ticket volume (~9 tickets).
- **Decline Afternoon**: Ticket volume decreases after 11 AM, with the lowest activity at 2 PM (~2 tickets).
- **Business Implication**: Allocate more resources during morning hours (8 AM–11 AM) and explore automation/self-service options to handle spikes efficiently.

Error and Escalation Trends

- **Unknown Tickets**: ~22 tickets lack proper categorization.
- **Success Rate**: ~11 tickets successfully resolved.
- **Errors and Escalations**: ~4 tickets each fall into error or technician escalation categories.
- **Business Implication**: Address data quality issues to reduce unknown tickets. Analyze errors and escalations to identify gaps in initial troubleshooting and resource allocation.

2. Actionable Recommendations

Operational Efficiency

1. **Automate Quick Tickets**:
   - Implement chatbots, FAQs, and automated workflows to handle routine quick tickets, reducing agent workload and resolution times.
2. **Streamline Task Handling**:
   - Break down tasks into manageable steps and assign specialized teams or tools to handle them efficiently.

Resource Allocation

3. **Optimize Staffing**:
   - Increase staffing during peak periods (Tuesdays, Wednesdays, and mornings) and reduce resources during low-volume periods (weekends, afternoons).
4. **Enhance Technician Training**:
   - Train technicians on all resolution methods and provide advanced training for high-complexity actions like SIT12.

Customer Satisfaction

5. **Proactive Issue Resolution**:
   - Use predictive analytics to identify and address recurring WLAN issues before they impact customers.
6. **Personalized Support for Top Customers**:
   - Assign dedicated account managers or specialists to high-ticket customers to ensure timely and effective issue resolution.

Data Quality and Process Improvement

7. **Reduce Unknown Tickets**:
   - Enforce strict categorization guidelines and implement automated tools to ensure accurate tracking of ticket outcomes.
8. **Analyze Errors and Escalations**:
   - Investigate root causes of errors and escalations to refine initial troubleshooting processes and reduce the need for escalation.