

Customer_service - Questions

Q1. A ticket is marked as resolved, but the customer contacts support again within 24 hours. Which KPI most directly captures this failure mode?

- A. Mean Resolution Time ($\text{mean}(\text{Resolution_Minutes})$)
- B. First Contact Resolution Rate ($\text{mean}(\text{First_Contact_Resolution_Flag})$)
- C. Complaint Recurrence Probability ($\text{mean}(\text{Repeat_Contact_Flag})$)
- D. Average Response Time ($\text{mean}(\text{Response_Minutes})$)

Correct answer: C. Complaint Recurrence Probability ($\text{mean}(\text{Repeat_Contact_Flag})$)

Q2. Average Response Time improves significantly, but First Contact Resolution Rate does not change. What is the most accurate interpretation?

- A. Customers are acknowledged faster, but first-time closure correctness has not improved.
- B. Mean Resolution Time must decrease automatically because response is faster.
- C. Customer Effort Score must decrease automatically because response is faster.
- D. Repeat Contact Probability must fall automatically because customers received a first response quickly.

Correct answer: A. Customers are acknowledged faster, but first-time closure correctness has not improved.

Q3. Two channels have similar Mean Resolution Time, but Channel A has a much higher Customer Effort Score. What is the most plausible cause?

- A. Channel A is closing tickets too quickly, so effort rises by definition.
- B. Channel A likely causes more follow-ups, handoffs, or repeated explanations during handling.
- C. Channel A must have higher sentiment scores, which directly increases effort.
- D. Customer Effort Score is redundant if Mean Resolution Time is the same.

Correct answer: B. Channel A likely causes more follow-ups, handoffs, or repeated explanations during handling.

Q4. Predictive analytics here uses system logic, not ML. If ticket arrivals increase by 15 percent while response and escalation rules remain unchanged, what is the most likely outcome?

- A. KPIs remain stable because policies did not change.
- B. Response and/or resolution delays increase, which increases effort and repeat contacts.
- C. First Contact Resolution Rate increases because agents see more tickets.
- D. Customer Effort Score decreases because customers become more tolerant over time.

Correct answer: B. Response and/or resolution delays increase, which increases effort and repeat contacts.

Q5. You propose a policy trigger: escalate if Priority is High/Critical AND sentiment is negative AND Response_Minutes is above the 75th percentile. Why use a percentile threshold instead of a fixed number of minutes?

- A. It adapts to the current performance distribution and consistently targets the slow tail.
- B. It guarantees that exactly 75 percent of tickets will be escalated.
- C. It removes the need to compute Response_Minutes and simplifies the dataset.
- D. It ensures escalation is based only on sentiment, not speed.

Correct answer: A. It adapts to the current performance distribution and consistently targets the slow tail.