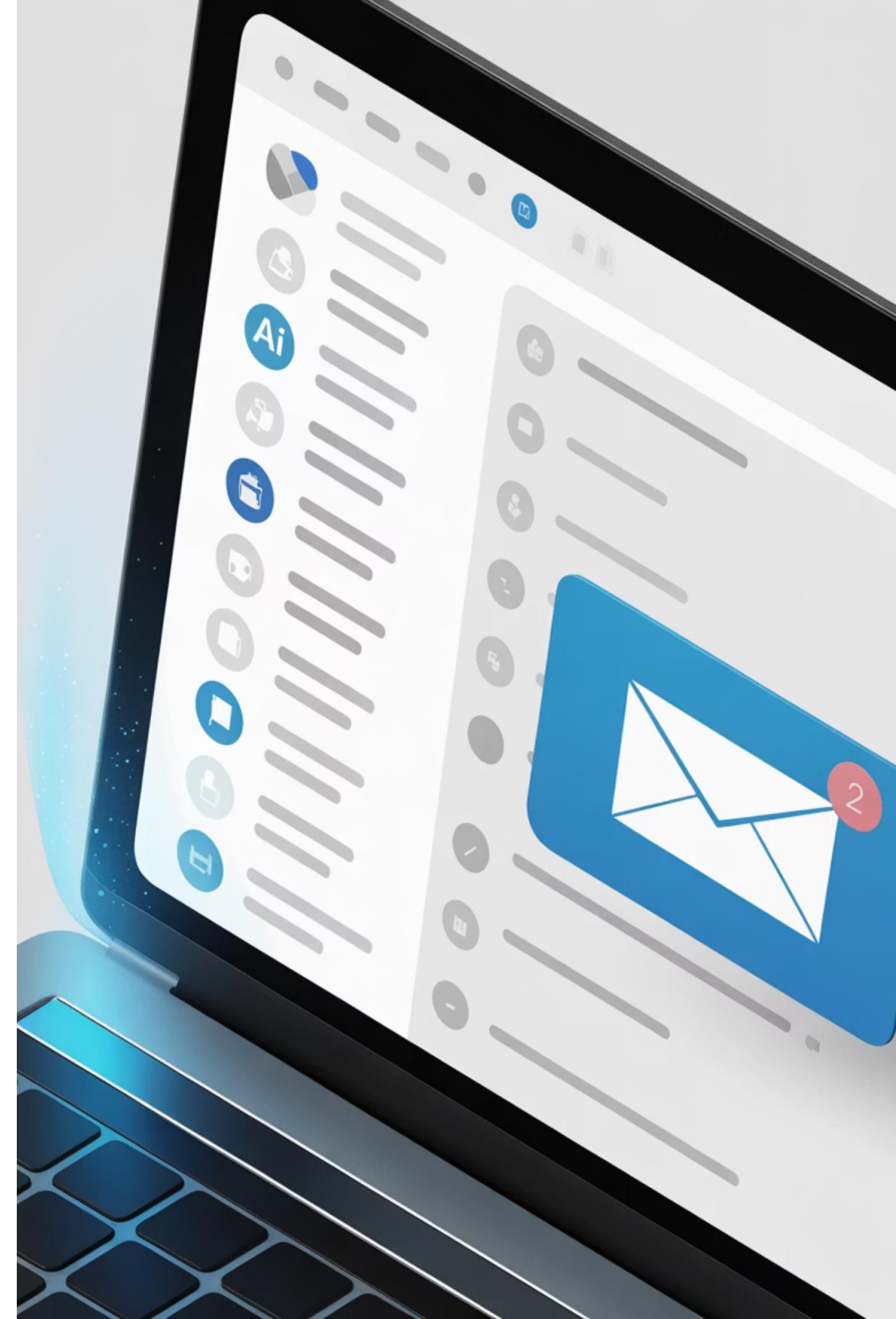# Email Triage Agent

Generative AI based Email Classification & Response

Presented by **Sumit Mishra** — a concise overview for product managers and engineering teams evaluating an AI email triage solution.

Problem Statement

1

High volume of emails

Inboxes are flooded with requests, updates, and notifications that consume team time.

2
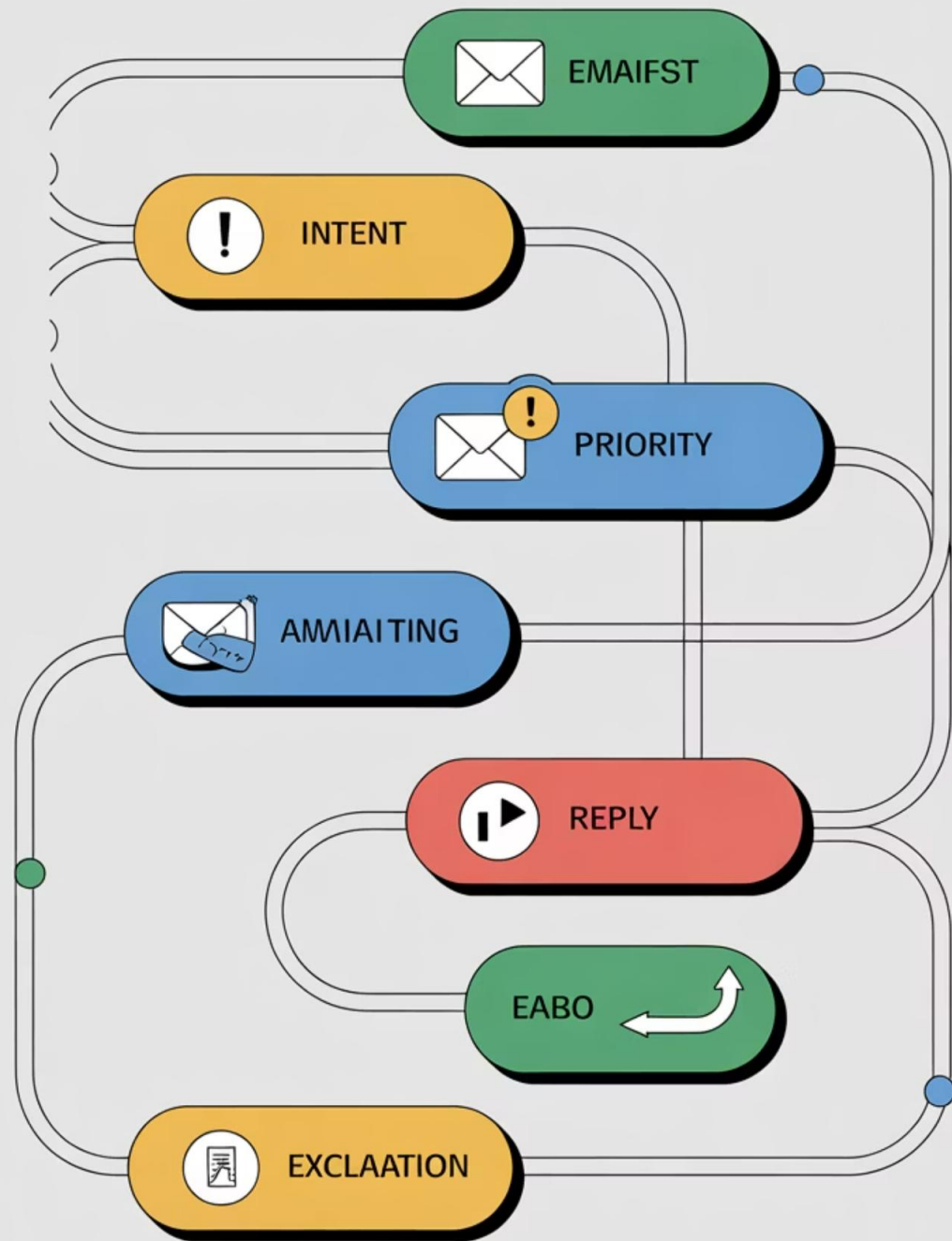
Manual processing is slow

Human review creates bottlenecks and inconsistent triage decisions across teams.

3

Important emails may be missed

Critical issues can slip through, increasing risk and degrading customer experience.

Proposed Solution

Intent Detection

Classify incoming messages by purpose (support, billing, feedback, security) using transformer-based models.

Priority Assignment

Score urgency and business impact to route messages into low / medium / high lanes.

Auto Reply Generation

Generate concise, context-aware replies with editable templates and confidence metadata for human review when needed.

Escalation

Automatically escalate critical or uncertain items to on-call engineers or product owners with conversation summary and suggested actions.

```
◼ EMAIL TRIAGE RESULT
---------------------
Intent   : Feedback
Priority : Low
Action   : Auto-reply

■ Generated Reply:

Dear Customer,

Thank you for taking the time to share your feedback with us. We are thrilled to hear that you have had a positive experience with our service and found it easy to use.

We appreciate your kind words and are glad that we could meet your expectations. Your satisfaction is our top priority, and we will continue to work hard to ensure that our service remains user-friendly and efficient.

Thank you again for your feedback. If you have any further comments or suggestions, please do not hesitate to contact us.

Best regards,
Sumit Mishra
```
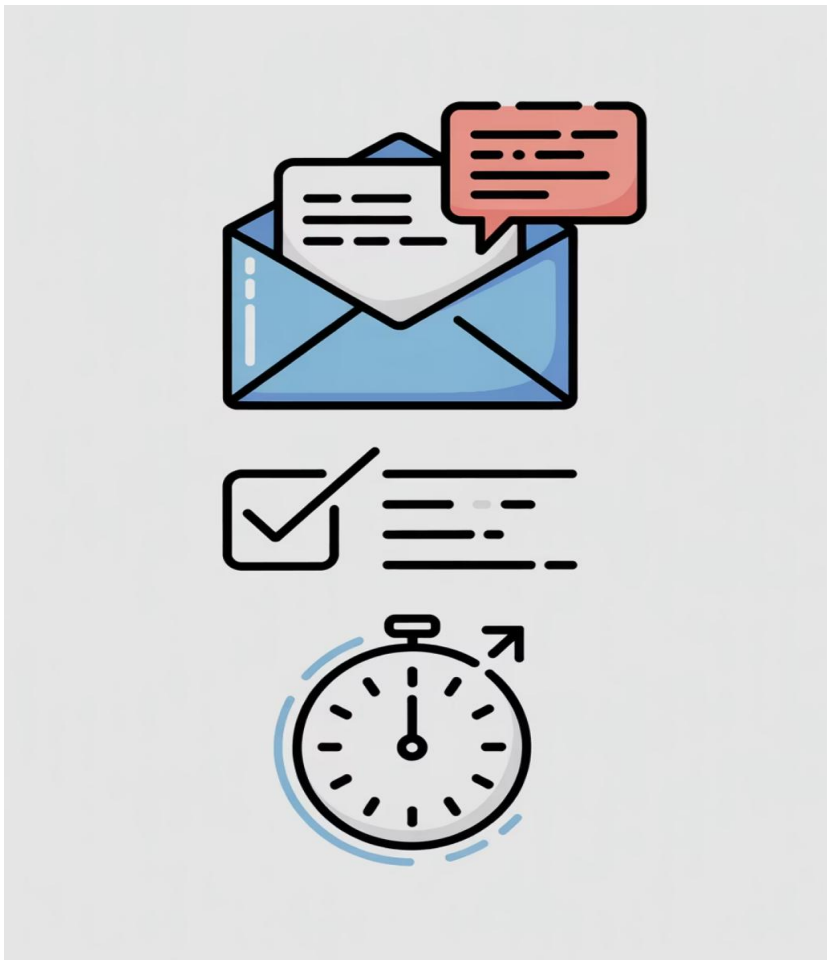
Low Priority — Auto Reply Workflow

Automatic handling for routine requests (FAQ, scheduling, acknowledgements). Workflow:

- Detect intent → match template
- Insert personalized fields (name, ticket ID)
- Send immediate auto-reply with next steps
- Archive or label for metrics and review

Design for transparency: include confidence score and edit option for each auto-generated reply.

```
💾 EMAIL TRIAGE RESULT
----------------------
Intent   : Complaint
Priority : High
Action   : Escalate to human support

⬛ Generated Reply:

Dear Customer,

Thank you for reaching out to us regarding your refund. We apologize for any inconvenience this has caused and appreciate your patience.

Refunds are typically processed within 2 to 4 working days. However, if your refund has not been received within this timeframe, please be assured that we are here to assist you.

If your refund is delayed beyond 5 working days, we kindly request that you contact our support team. They will be happy to look into the matter and provide you with an update on the status of your refund.

Our support team is available to assist you from Monday to Friday, between 10 AM and 5 PM. If your issue is of high priority, it will be escalated to our human support team for prompt attention.

Please feel free to reach out to us at your earliest convenience, and we will do our best to resolve the issue as soon as possible.

Thank you for your understanding and cooperation.

Best regards,
Sumit Mishra
```
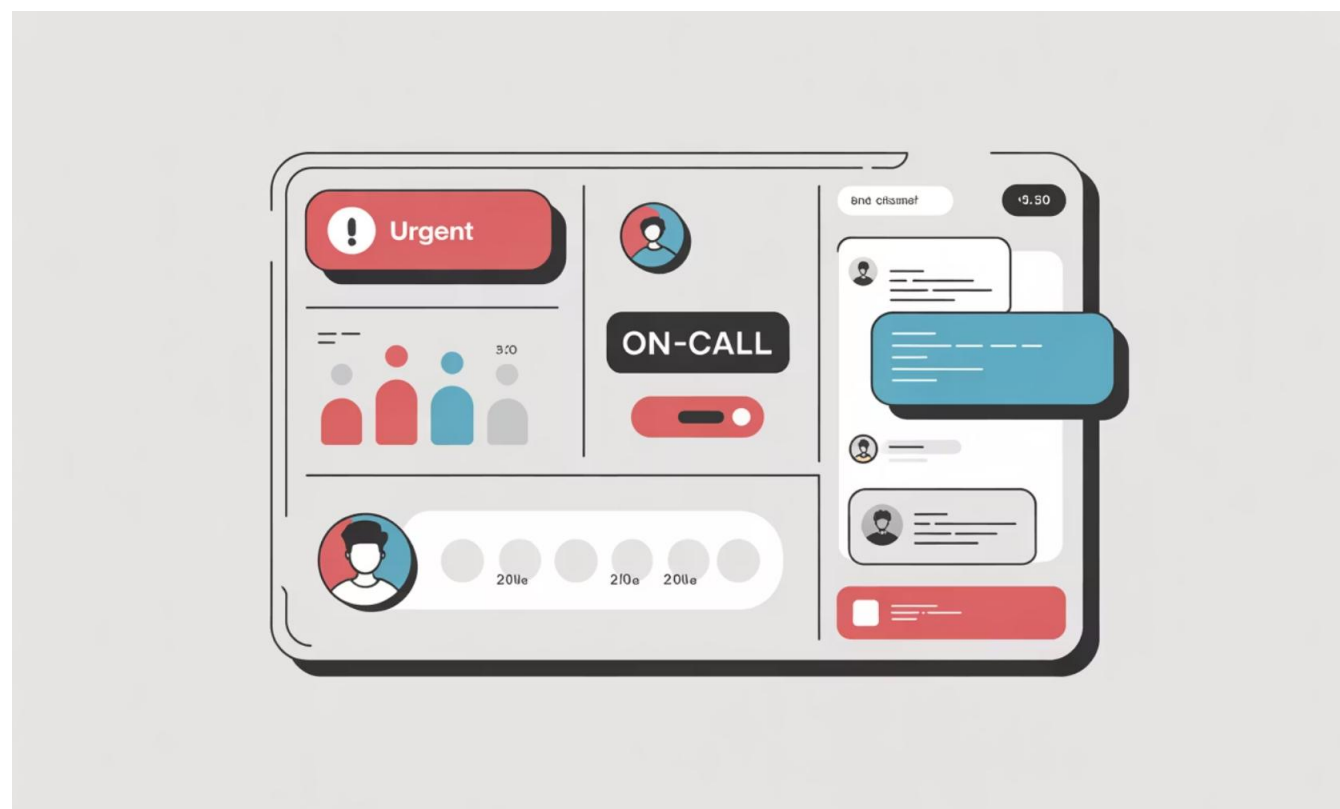
High Priority — Escalation Flow

Critical messages require immediate human attention. Escalation steps:

1. Auto-detect critical intent or low confidence
2. Generate compact summary + root-cause hints
3. Attach relevant context (attachments, previous threads)
4. Notify on-call via Slack/email with direct link

🗒 Prioritize safety: configurable rules and override paths ensure correct routing for security or legal incidents.

Conclusion & Next Steps

Automates email email handling

Reduces manual triage and repetitive responses by routing predictable traffic to automated flows.

Improves response speed

Immediate replies and prioritized escalation lower time-to-resolution for customers and internal teams.

Clear decision logic

Transparent confidence scores, audit trails, and rules make outcomes explainable and auditable.

Student-level & industry relevant

Architecture supports research-grade models while meeting production constraints for reliability and compliance.

Suggested next steps: pilot with a focused mailbox, collect metrics (precision, recall, MTTR), iterate templates and escalation rules, then scale.