

Traceability in Baggage Operations

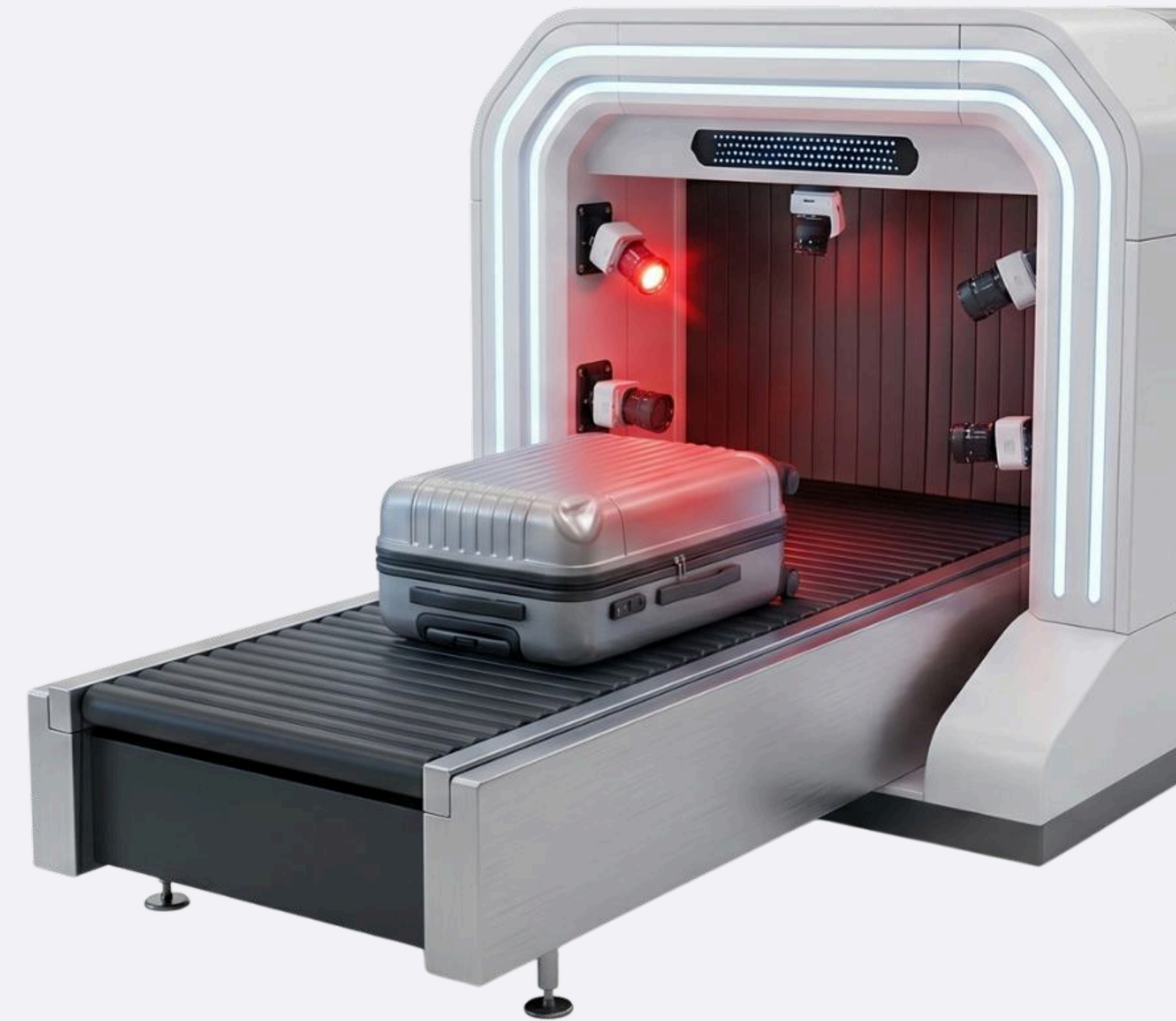


[Apply Now!](#)

OPERATIONAL CONTEXT

Baggage operations are managed through an end-to-end flow that starts with check-in and continues through loading, transfer, and arrival delivery stages. Throughout this flow, baggage passes through multiple processing, sorting, and transfer points.

Tracking baggage movement within the process plays a decisive role in operational visibility. In particular, during transfer operations, it is critical to route baggage to the correct flight and destination, while in damage cases, it is equally important to identify at which touch point the damage occurred.





How Are Baggage Operations Managed?

In baggage operations, the ability to monitor baggage location, status, and damage information together throughout the process is critical for operational visibility and root-cause identification. The process generally proceeds through the following stages:

- Baggage is accepted at check-in and incorporated into the operation.
- Based on flight information, baggage is directed to the relevant line or processing point.
- Throughout the process, baggage passes through multiple transport, sorting, and transfer points.
- Baggage with onward connections enters the transfer process and is routed to the corresponding next flight.
- Especially in transfer operations, ensuring that baggage is routed to the correct flight and destination makes the need for traceability even more pronounced.

How Might We Canvas

Who?

who are the stakeholders that get effected?

Passengers, Ground Handling Teams (baggage, transfer, and ramp), Station Managers, Customer Experience and Call Center Teams.

What?

what is the problem that needs to be solved?

When a passenger hands over their baggage, automatic damage detection cannot be performed and during operations the baggage's location and any damage, loss or delay status cannot be monitored in real time.

Why?

why is this problem worth solving?

Due to lack of systematic damage detection, fraud-related compensation claims arise; root-cause analysis cannot be performed for operational damage points; and misconnected baggage triggers costly offload-and-later-forwarding processes.

How?

how can this problem be eliminated?

By developing image-processing and sensor-based solutions that enable real-time baggage tracking throughout the entire process and early detection of damage conditions.

Challenge:

How might we develop innovative solutions that automatically and in real time track baggage damage, location, and status from check-in to arrival, identify damage points, and ensure bags are loaded onto flights on time?