

Capgemini: AI Baggage-Fraud Detection Analytics for Airlines

Real-time AI fraud detection platform for airline baggage operations, reducing fraudulent claims at production scale through computer vision and machine learning deployed across major airline workflows.

Award standing: **Finalist**

Capgemini emerged as a Finalist in the 2026 HFS SaS Awards, selected from more than 250 submissions across the awards program. The recognition centers on Capgemini's submission, "AI Baggage-Fraud Detection Analytics for Airlines", in the category of Best 'Services Eating Software'.

The challenge behind the Capgemini entry

Airlines have historically managed baggage fraud through manual investigation teams, sampling-based audits, and costly consultant-led reviews. This labor-intensive operating model was expensive, inconsistent, and structurally incapable of scaling. According to a [SITA report](#), airlines are losing 44% of their profits to fraud, with false baggage claims a significant and growing contributor. It's a problem that manual processes, however well-staffed, cannot solve at the scale and speed the challenge demands.

What they built

- Capgemini's analytics and AI capabilities, strengthened through the acquisition of WNS, has expertise in claims as a hands-on service including deploying domain experts, investigation protocols, and claims knowledge built over decades.
- The introduction of AI into that existing delivery model changed what was possible: AI driven sampling gave way to 100% claim coverage, periodic investigator reviews gave way to always-on adaptive detection, and bespoke engagements.
- What changed was the scale, speed, and consistency at which that expertise could be put to work.
- At its core is a real-time fraud detection engine that integrates Gen AI, machine learning, OCR, NLP, NER, anomaly detection, behavioral profiling, travel data enrichment, and case management into a unified AI and analytics delivery layer.
- Domain expertise that previously lived in specialist investigators is encoded into adaptive models. It includes detection rules for jurisdiction-specific fraud patterns, behavioral profiles for repeat offenders and organized rings.

Results

- In a recent implementation with a leading European carrier, the solution delivered results that manual investigation teams, at any scale, could not have matched.
- 5x increase in fraud detection rate, up from less than 1% detected manually, with 100% of claims now assessed for fraud. An outcome previously unfeasible due to cost and effort constraints.
- Over \$2 million saved annually in fraudulent payouts, directly strengthening revenue integrity and reducing exposure from inflated claims, repeat offenders, and organized fraud networks.
- 90% faster settlement decisions for travelers, driven by real-time claim processing that eliminates manual queues and review cycles, thereby, reducing resolution from days or weeks to near-instant, improving customer loyalty and brand trust.
- Up to 60% lower operational costs through automation of manual review teams, elimination of sampling-based audit overhead, and redirection of investigators to complex, high-value cases.
- 25% increase in customer loyalty driven by faster, fairer resolutions for travelers; a competitive advantage on thin airline margins.

Bottom line

Capgemini's entry backs up its claims with production evidence rather than a roadmap: in a recent implementation with a leading European carrier, the solution delivered results that manual investigation teams, at any scale, could not have matched. That's the kind of evidence this category was built to reward.

Learn more about Capgemini at capgemini.com

Appendix: About the Category and the Awards

Best Services Eating Software

This category tracks what HFS Research calls services codified as software: traditional, people-led services (in areas such as finance, IT operations, and back-office processing) broken down into repeatable workflows, bots, and AI agents, then repackaged as modular, platform-enabled, subscription-style offerings. Entrants are judged on how far they have moved from billing for effort toward delivering software-defined, observable outcomes.

Every submission in this category was evaluated by HFS analysts and board members against five shared criteria:

- AI-driven delivery – is the solution genuinely autonomous, or is AI still assisting humans doing the work?
- Agentic adaptability – does the platform learn and orchestrate across workflows, or does it execute fixed rules?
- Outcome orientation – are commercial terms tied to results? Is there a quantified business case?
- Scalable architecture – is the IP reusable across clients and industries, or bespoke to one engagement?
- Proven enterprise success – verifiable, production-scale evidence with named or named-tier clients.

The HFS Services-as-Software Awards recognize the enterprises and technology providers leading the shift from labor-based delivery to AI-native, software-defined operations. Finalists in each category were selected by the HFS analyst team following a structured review of submissions against the criteria above. Winners were then determined by the HFS board of external advisors, who scored and ranked the finalists to reach a final result.

About HFS Research

HFS Research is the leading global analyst firm focused on business operations, digital transformation, and enterprise modernization.

For over a decade, HFS has shaped market language – from OneOffice to Services-as-Software – helping enterprises and providers understand where operating models are headed.

We work with global enterprises, IT and business services providers, software and cloud vendors, investors, and innovators.

The Services-as-Software Awards extend that leadership by recognizing organizations delivering measurable transformation in the market.