



Cleared for Take-Off: How Agentic AI is Transforming Back-Office Financial Control and Compliance

Reinventing Financial Control, Compliance,
and Back-Office Operations



Section 1: Introduction

Airlines operate in an environment of volatility and constant pressure. Costs across the operation, from fuel to aircraft parts, remain difficult to predict, and that uncertainty is unlikely to ease in the foreseeable future. This adds further pressure to an already complex industry, where margins are tight, regulatory requirements are expanding, and operational disruption is a daily reality.

IATA now expects the global airline industry to achieve a net profit margin of just 2% in 2026, down from 4.2% in 2025¹. In short, it makes driving efficiencies across every aspect of the organization essential.

To date, back-office transformation has focused on digitization and workflow automation. While these initiatives have improved efficiency, they have not fundamentally changed how financial control, validation, and risk mitigation operate.

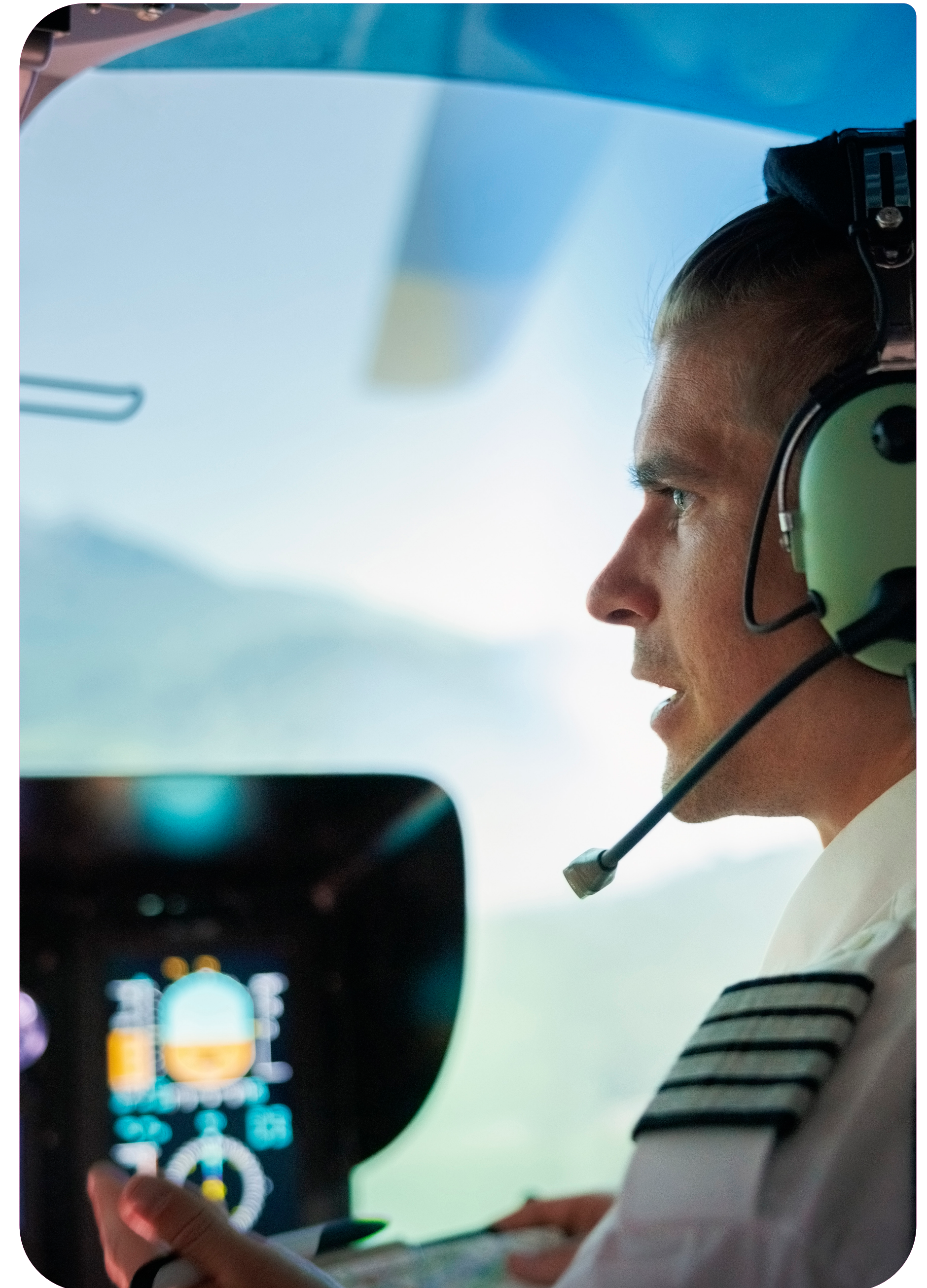
Agentic AI can change this trajectory. Where conventional automation handles isolated tasks, it enables autonomous execution across connected financial and back-office workflows. It's a fundamentally different model for financial operations.

¹ <https://www.iata.org/en/pressroom/2026-releases/06-07-middle-east-disruptions-high-fuel-prices-halve-airline-industry-profitability/>

² <https://www.gartner.com/en/newsroom/press-releases/2025-11-18-gartner-survey-shows-finance-ai-adoption-remains-steady-in-2025>

Stuck on the Runway

Although AI adoption in finance has reached a meaningful level, progress is slowing. Gartner research shows 59% of finance leaders report using AI in 2025, only a marginal increase from 58% in 2024 following rapid growth in previous years.²



However, the hesitation for many airlines is not a question of capabilities.

The central challenge is not whether autonomous AI can improve efficiency, but how airlines delegate execution without relinquishing financial control. For airlines implementing agentic AI within a framework that understands their operational and regulatory landscape, this is not a trade-off. It doesn't remove control. It restructures it.

AI operates within predefined financial and regulatory thresholds. Escalation is triggered only when boundaries are exceeded. All actions remain traceable and audit-ready. This approach not only improves productivity, but strengthens control through consistent, automated enforcement. Implementing it in practice is imperative for airlines looking to thrive in a tough operational landscape. But where to start?

In this paper, we explore:

- The foundations required to enable agentic AI for financial operations
- How agentic AI transforms core back-office functions
- The governance and guardrails needed to scale safely



Section 2: Setting the Foundations for Autonomous Financial Operations

Agentic AI introduces a new operating model for financial control. One that is more intelligent, more proactive, and more resilient.

The key is integrating this in a way that allows autonomy to scale without introducing risk. This is where many initiatives stutter. Without the right foundations, there isn't the structure or trust to allow this independence to translate into value.

In back-office environments, where financial exposure is immediate and regulatory requirements are non-negotiable, this requires a deliberate shift in how **technology**, **people**, and **processes** operate.

Technology: From System Integration to Decision Infrastructure

Most back-office transformation has focused on connecting systems and improving data flow. Although this is still absolutely necessary, it is no longer the end goal.

To operate effectively, AI agents require context. They need real-time financial signals across revenue, cost, tax, and compliance systems to enable intelligent orchestration.

This requires a decision infrastructure. Without it, there is too much fragmentation. This stops AI being able to make contextualized decisions autonomously and limits it to narrow use cases. However, with a strong data foundation, financial operations can be coordinated as a single system, enabling consistent, real-time control across the back office.

People: Evolving Toward HITL and AI Supervision

Finance teams have typically focused on processing activity and reacting to anomalies. While this is still central to back-office operations, it is no longer where personnel add most value.

As execution becomes increasingly automated, the role of human teams shifts toward oversight. Teams are responsible for defining control thresholds, validating AI behavior, and managing scenarios where risk or ambiguity requires human judgment.

This changes how expertise is applied. Instead of working through transactions, teams supervise how those transactions are executed. They define the boundaries within which AI can act and provide human-in-the-loop intervention when risk or ambiguity needs human judgment.

This shift puts your team in charge of giving autonomous operations clear direction and is central to allowing agentic AI to function at scale.



Process: Bounded Autonomy as the Foundation for Scale

Clearly defined decision rights are not new to back-office operations. However, the process of how they are implemented changes with autonomous AI.

They must be clearly structured within financial and regulatory guardrails that leave no room for ambiguity. That means setting out precisely where AI agents can act independently and where human intervention takes over.

This creates a model of bounded autonomy. Within thresholds, AI acts independently, beyond them, human intervention is triggered.

What Bounded Autonomy Looks Like

Situation: A regular supplier invoice has a tax discrepancy.

Agentic AI Action: The AI agent checks the invoice against contract terms and tax rules.

Resolution: If the evidence is clear and the adjustment falls within approved tolerances, the AI agent resolves the issue. Anything outside those tolerances is escalated for human review.

This is crucial to reaping the benefits of agentic AI without introducing risk. The clarity and structure of processes allows financial control to become more consistent, auditable, and scalable.

Implementation to unlock the full capabilities of autonomous AI is set to be a process over several years, but even putting the foundations in place can drive impact.

Section 3:

Three High-Value Opportunity Areas for Agentic AI

With the fundamentals in place, AI becomes scalable and synonymous with resilience, not risk. Now airlines can shift their focus from process efficiency to continuous financial and operational integrity.

We can demonstrate this across three key areas:

Revenue Integrity

Operational Finance

Control, Cash, and Compliance



Revenue Integrity

Revenue integrity is highly sensitive to even the smallest errors and inconsistencies. Delays in detection or resolution quickly scale into material revenue leakage.

Order Accounting: Error Management

Current challenges: Every revenue accounting platform generates exception queues. Human analysts then manually investigate across multiple systems, interpreting records and contract terms to resolve discrepancies. It creates delays and inconsistency.

Transformational benefits: The model shifts from flagging exceptions to investigating them. It can retrieve relevant data, assess discrepancies against defined tolerances, and resolve straightforward cases autonomously. More complex scenarios are escalated with a fully constructed recommendation and supporting evidence, reducing resolution time and improving consistency.

Cargo Accounting: Billing Integrity Across the Supply Chain

Current challenges: Cargo accounting is complex, involving multi-party settlements, air waybills, and cross-border documentation. Manual validation increases operational drag and exposure to billing errors and disputes.

Transformational benefits: Shipment and financial data is validated repeatedly, matching movement records with documentation to surface inconsistencies before they become disputes. This improves transparency across the supply chain and protects margin.

Revenue Assurance: Closing the Leakage Gap

Current challenges: The current approach to revenue assurance relies on sampling and retrospective audits, limiting insights and delaying issue detection.

Transformational benefits: AI agents detect booking anomalies, fare violations, and distribution discrepancies in real time, escalating when risk thresholds are met. They also perform cross-system analysis across revenue, pricing, and settlement data to identify root causes and quantify impact. This turns revenue assurance into proactive margin protection without increasing audit headcount.

Operational Finance

Operational finance sits at the point where operational decisions translate directly into financial impact, with delays or inefficiencies quickly driving cost escalation and margin erosion.

Network Planning: Scenario-Based Decision Intelligence

Current challenges: Network planning operates on long decision cycles with high financial impact, where changes affect profitability, fleet utilization, and passenger connectivity. Manual scenario modeling is time-intensive and limits the range of options evaluated.

Transformational benefits: The planning process changes fundamentally. Rather than constructing scenarios manually, agentic AI assesses thousands of network permutations across profitability, feasibility, and connectivity constraints. Planners are presented with ranked, pre-evaluated options, freeing them to evaluate and refine. This accelerates decision-making and improves financial and operational outcomes.

Operations Control: Disruption Management

Current challenges: Disruption recovery is a time-critical, high-cognitive-load process requiring coordination across aircraft, crew, and passenger constraints. Manual decision-making under pressure impacts optimization and increases operational and financial costs.

Transformational benefits: Faster disruption recovery starts with earlier detection. Agentic AI monitors signals across operations, infrastructure, weather, and the wider network to identify potential disruption and anticipate the downstream impact. It can then orchestrate recovery (e.g. crew adjustments, passenger rebooking), within pre-established operational parameters. This enables faster, more coordinated responses, reducing disruption costs, protecting revenue, and allowing human operators to focus on exception handling and critical decision-making.

Control, Cash, and Compliance

Control, cash, and compliance functions underpin financial stability, where gaps in oversight or delayed visibility can expose airlines to financial pressure, inefficiency, and regulatory risk.

Direct Operating Costs: Intelligent Cost Optimization

Current challenges: Direct operating costs are one of the largest and most volatile expense categories. Cost control relies heavily on reporting and post-period analysis, limiting the ability to respond to emerging issues.

Transformational benefits: Agentic AI monitors supplier performance, tax application, rate structures, and consumption patterns as they develop. Agents can then flag emerging cost anomalies, model alternative scenarios, and initiate corrective workflows within pre-set financial thresholds. This extends into procurement and operations, optimizing decisions around fuel purchasing and crew costs, for example. Cost management moves from the rear-view mirror to the windscreen, supporting stronger financial control and minimizing the effect of volatility.

Asset Management: Predictive Asset Lifecycle Management

Current challenges: An aircraft on the ground earning nothing is the most expensive outcome in the airline business. But asset management systems often operate in silos, limiting visibility into maintenance risk, utilization, and lifecycle planning, increasing the likelihood of unplanned downtime.

Transformational benefits: Predictive lifecycle intelligence changes everything. It analyzes operational performance, maintenance history, and utilization trends to forecast downtime risk, recommend lifecycle decisions, and identify opportunities to extend asset life. It improves asset utilization, reduces disruption, and strengthens capital efficiency.

Accounts Payable and Receivable: Autonomous Payment Governance

Current challenges: Accounts payable and receivable processes are automated but still rely on manual oversight for discrepancies, disputes, and exposure management.

Transformational benefits: Invoices are validated against contractual terms, tax rules, and regulatory requirements. Disputes are managed within defined thresholds, and receivables monitored to reduce default risk before it materializes. The result is improved working capital management and reduced error exposure, allowing teams to move toward exception-based oversight.

GRC Management: Staying Ahead of Regulatory Change

Current challenges: Regulatory complexity continues to increase across jurisdictions, requiring significant effort to interpret requirements, maintain compliance, and manage obligations.

Transformational benefits: Agentic AI enables autonomous regulatory intelligence by analyzing regulatory changes, mapping them to internal processes, and generating audit-ready documentation continuously. It also monitors workforce compliance, including licensing and training requirements, to identify gaps before they become operational or regulatory problems. The organization stays audit-ready without being asked to prove it.

Section 4:

Governance, Risk Architecture, and Trust in Autonomous Finance

Agentic AI delivers in financial operations only when the governance around it is as rigorous as the autonomy itself.

Structured decision frameworks, bounded decision rights, transparent audit trails, explainability mechanisms, and tiered risk thresholds. Together, these components form the backbone of a trusted agentic model for financial operations. They determine how decisions are executed, when escalation is required, and how risk is mitigated.

In Practice

This becomes tangible when applied to real airline use cases.

Scenario	AI Action	HITL Intervention	Outcome
A fare rule mismatch is identified post-issuance	Checks booking data, GDS/ NDC fare rules, and pricing context to determine if the ticket requires automated revalidation or re-ticketing within set tolerance limits	Escalates high-value tickets, complex interline/codeshare rules, or ambiguous fare conditions for human intervention	Protects yield integrity and eliminates post-booking revenue leakage
Cargo billing and shipment records conflict post-flight	Reconciles Air Waybills (AWB), shipment milestone logs, and partner records to pin down the source of the discrepancy	Missing customs documentation, cross-border tax conflicts, or partner disputes prompt human review	Shortens dispute resolution cycles and improves billing accuracy
A partner airline’s interline settlement is overdue	Tracks outstanding receivables, reconciles settlement data according to IATA SIS processes to identify emerging counterparty risk patterns in real time	Escalates unusual payment behavior, exposure that exceeds defined limits, or elevated default risk, triggering human intervention	Strengthens working capital control and mitigates counterparty financial risk
A flight disruption triggers passenger compensation	Evaluates passenger entitlements, rebooking options, and statutory compensation according to regional regulations, for example, EU261 or US DOT, as well as the airline’s policy	Triggers human review when it detects regulatory ambiguities, complex multi-leg journeys, or high-value claims	Balances customer satisfaction and statutory compliance with strict cost control
A multi-jurisdictional tax/regulatory filing deadline approaches	Aggregates multi-entity financial ledgers, validates regional tax/passenger fee rules, and generates submission-ready audit packages	Requests human judgment for conflicting statutory interpretations or incomplete source data	Supports continuous audit readiness and eliminates last-minute compliance penalties

These scenarios illustrate how autonomy moves beyond the rule- or ML-based approaches currently in place toward outcome-led solutions. Outcomes depend on how clearly decision parameters, escalation points, and control mechanisms are defined. For this to work in a back-office context, governance must be embedded as part of autonomous AI adoption.

Governance Checklist

- **Financial thresholds and decision rights** that define how transactions are executed across revenue, cost, payments, and compliance. Establish clear tolerance levels, escalation triggers, and boundaries for autonomous resolution.
- **End-to-end visibility and auditability** across financial workflows, ensuring that all AI-driven decisions can be traced, explained, and validated across all systems and jurisdictions.
- **Structured validation and control frameworks** for AI-driven processes, combining testing environments, model oversight, and human intervention for high-risk or ambiguous scenarios.
- **Finance-centric performance measures** ensure agentic systems act with the right outcomes in mind: protecting yield, controlling costs, optimizing working capital, and maintaining regulatory compliance.
- **Ongoing monitoring and recalibration** of AI behavior to detect drift in pricing, billing accuracy, cost performance, and compliance risk as autonomy expands.

Addressing every aspect of the governance checklist is essential to build trust in AI-generated workflows and code and enable the transition to a resilient and autonomous back-office.

Proper governance doesn’t hamper transformation. It ensures that autonomous operations reinforce financial integrity rather than erode it.



Section 5: Evolving Toward the Autonomous Operating Core

Put the value of AI for airlines into perspective. By 2030, AI leaders in the airline industry will enjoy operating margins five to six points higher than their peers. For an industry where 2% is now the baseline, that gap is not insignificant.

For a complete look at how agentic AI is also transforming front-office operations, [see our companion POV](#).

Efficient back-office operations are critical for airline profitability and are the heart of financial control.

Agentic AI introduces a different model for how that control is exercised to deliver both improved margin and operational resilience.

With agentic AI directly embedded into how financial activity is monitored, assessed, and acted upon, airlines benefit from real-time and proactive operations. Revenue is protected earlier, costs are controlled more consistently, and compliance becomes continuous.

Additionally, as agentic AI models mature, cascading disruption that once required coordination across revenue, operations, and finance can be handled through a coordinated AI layer, presenting a single, prioritized set of actions.

There isn't a quick fix for achieving this. Guardrails must be established, implemented, and continuously enforced to deliver the results outlined in this POV.

But over time, autonomy will extend across revenue, cost, and compliance, enabling more coordinated decision-making across the entire operating core. The outcome is not simply greater efficiency but an operation built to hold its margin when conditions work against it.



Evolution with Sutherland

The Sutherland Altra® suite enables agentic AI transformation across back-office operations, supporting airlines at each stage of the journey toward autonomous financial control.

With extensive industry-specific expertise and a proven track record, Sutherland is your transformation partner, designing and implementing operating models that embed intelligence, governance, and control into the core of financial operations.



Learn more about the Sutherland Altra® suite.

Sutherland is an AI-driven business transformation partner to enterprises, including several Fortune 500 clients. We design, run, and automate business operations at scale, helping clients improve efficiency, strengthen customer experiences, and deliver measurable outcomes.

Most companies either build AI-led capabilities or run operations. Sutherland does both. We run complex, mission-critical processes while engineering the AI-led solutions that sit within them. This closed loop helps clients move beyond AI pilots to reliable, governed outcomes that improve and scale over time.

With deep operational expertise, advanced products, platforms, and engineering, we help clients modernize operations and build future-ready businesses.

