Productivity, *meet* Gen AI.

From deductions to prevention: Transforming revenue leakage into *strategic advantage* in CPG

Capgemini | snowflake

Executive **summary**

In today's hypercompetitive CPG landscape, profit margins face unprecedented pressure from all sides. While external market forces demand constant attention, a significant and often underestimated threat to profitability lurks within your organization's own processes: revenue leakage through invalid retailer deductions and compliance penalties. This paper outlines how forward-thinking CPG companies are transitioning from reactive deductions management to proactive prevention through advanced analytics, driving millions in recoverable revenue directly to the bottom line.

The evolving *deductions* challenge

The reactive paradigm is failing

For decades, CPG manufacturers have treated deductions as an inevitable cost of doing business – a financial footnote managed retroactively through labor-intensive reconciliation processes. Most companies maintain dedicated teams who manually investigate deduction codes, validate disputes, and attempt to recover revenue weeks or months after the fact. This reactive approach is increasingly unsustainable for several critical reasons:

Escalating financial impact:

Retailer compliance programs like OTIF (On-Time In-Full) now impose penalties of 1–3% of invoice value, which compound rapidly across product portfolios and retail partnerships.

Growing complexity:

Documentation requirements, routing guides, and packaging specifications have become increasingly intricate and retailer-specific.

Resource inefficiency:

High volumes of low-value disputes drain finance resources that could be redirected toward strategic growth initiatives.

Lack of cross-functional visibility:

When deductions data remains siloed within finance systems, the organization loses crucial operational insights that could prevent future occurrences. Deduction approvals require a back and forth between finance and sales, often done manually and resulting in increased time to resolve retailer claims.

Retail deductions – *Handling shortages / overages*

Today, with the help of technology, both sides are applying more scrutiny to this process, but costs continue to go up. A more collaborative and modern approach with Snowflake AI can solve underlying issues, benefit relationships, and provide a more proactive solution.

Brands

"Dispute only what I can handle"

"Dispute everything"

Rising costs:

- Analytics and manual reviews
- Software management layer
- Dispute resolution costs (legal, executive costs, etc.)
- Negative impact to retailer relationship
- Etc.

Retail deductions process

20-35% of sales
Planned 15-28%
Discounts, OIAs, etc.
Unplanned 5-7%
Shortages, damages, OTIF, etc.

All retail deductions:
Chargebacks, shortages, discounts, allowances, etc.

Successfully disputed and resolved funds

4-6% of sales

Retailers

"Better operations and additional revenue stream"

"Increasingly larger and more complex process"

Rising costs:

- Analytics and manual reviews for order and contract compliance
- Software and data management layer
- Dispute resolution costs (legal, exec costs, etc.)
- Negative impact to supplier relationship
- Etc.

Retailer penalties as *strategic signals*

It's essential to recognize that retailer chargebacks aren't arbitrary punitive measures. Although the deduction mechanisms are standard practice for consumption-based promotions, a number of deductions are caused by anomalies that can be avoided. They represent structured feedback mechanisms designed to enforce operational excellence across the supply chain. Every deduction communicates a specific message about where your organization is falling short of retailer expectations:

- OTIF penalties signal supply chain reliability issues
- Labeling chargebacks indicate packaging compliance failures
- Promotion disputes reveal flaws in trade planning processes
- Pricing deductions expose master data inconsistencies

As one major North American retailer bluntly states: "If you're not helping us make the shelf profitable, we'll find someone who will."

In this environment, the traditional post-mortem approach to deductions management isn't merely inefficient – it's a strategic disadvantage that prevents manufacturers from addressing the root causes of revenue leakage.

The *data-driven* prevention model

From reactive to proactive: The analytics advantage

Leading CPG companies are fundamentally reimagining deductions management through a prevention-focused lens. By unifying disparate system and data streams and applying advanced analytics, these organizations can:

1. **Predict compliance failures** before they occur
2. **Identify systematic patterns** across their deductions portfolio
3. **Simulate operational impacts** of commercial decisions
4. **Automatically detect** high-risk orders, promotions, and processes
5. **Embed preventive controls** at key decision points

This shift transforms deductions from a financial burden into a strategic insight engine – one that drives continuous improvement across the entire order-to-cash process.

Building the *prevention ecosystem*: Six critical capabilities

1. Predictive OTIF risk scoring

By aggregating historical order and delivery data, sophisticated machine learning models can now forecast which shipments are likely to miss delivery windows days before they ship. These models incorporate numerous variables:

- Warehouse throughput patterns by day and time
- Carrier reliability metrics by lane, season, and customer
- SKU-level fill rate volatility
- Weather and traffic risk factors on planned routes
- Historical performance by distribution center and customer destination

With advance warning of OTIF risk, supply chain teams can implement targeted interventions:

- Expedite at-risk orders
- Communicate proactively with customers about potential delays
- Adjust routing to prioritize high-compliance-risk shipments
- Deploy backup inventory from alternative locations

One leading beverage manufacturer reduced OTIF penalties by 38% in its first year of implementing predictive risk scoring, translating to over $3.8 million in avoided deductions.

OTIF solution approaches are greatly enhanced by technology enablers. The ability to work with structured and unstructured data on a single platform with the ability to seamlessly share data in a secure manner across the ecosystem partners is a step change versus traditional approaches. The timeliness of information exchange and the ability to fill in any data gaps ensure that every partner has timely visibility into shipment status at any given time.

Snowflake's AI data cloud – *OTIF future state*

Data

- Retailer data
- ERP
- Carrier companies
- Third-party solutions
- Order management

Retailer data
Retail Link
Walmart Luminate
84.51°

Carrier companies
J.B. HUNT
SWIFT
Old Dominion Freight Line

Logistic partners
XPO Logistics
highradius
ups

Snowpipe

External tables

Data sharing

Snowflake's AI data cloud

snowflake

OTIF data unification

Single source | Cross-cloud | Data sharing

Data marketplace

Mobility | Weather | Sentiment | Financial
Pandemic | CPI | Foot traffic | Event

BI & analytics
Power BI
tableau
ThoughtSpot
alteryx
DOMO
sigma

Data science
DataRobot
Amazon SageMaker
dataiku
H_2O.ai
zepl

Activate / prescriptive

Reverse ETL	Ad-Tech Mar-Tech	Partners

Teams

- Deduction management
- Merchants
- Finance
- Carriers
- Leadership

2. Comprehensive root cause analytics

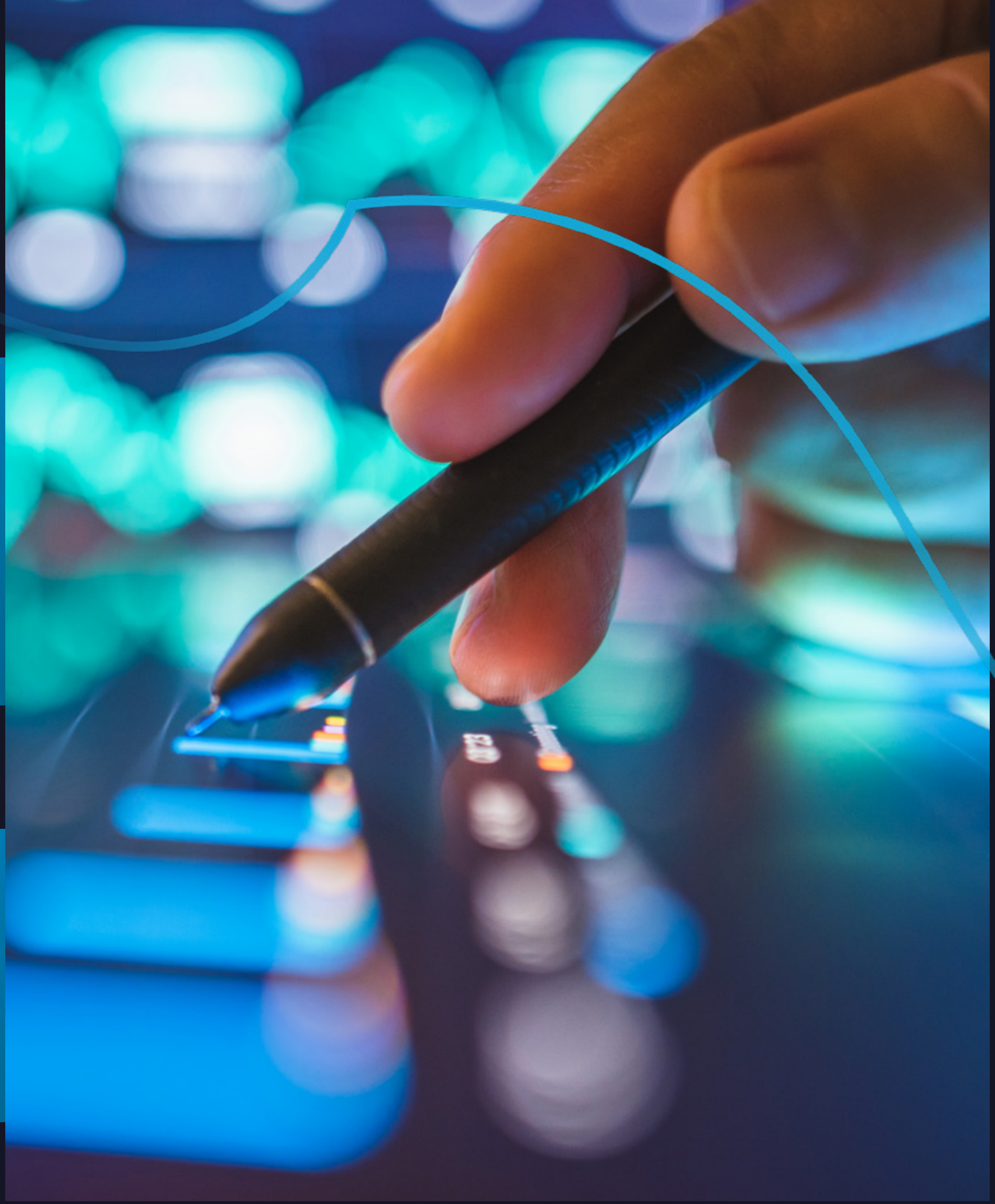
Most organizations struggle to establish a unified view of deduction drivers. By integrating data from ERP, Trade Promotion Management (TPM), claims systems, and supply chain platforms into a consolidated analytics foundation, companies can apply sophisticated classification techniques to identify:

- Trade promotion execution gaps
- Pricing inconsistencies and unit-of-measure discrepancies
- Partial order fulfillment patterns
- Case pack and packaging compliance failures
- Documentation and EDI communication breakdowns
- Validation of consumption data with promotion deductions

Advanced pattern recognition can surface previously invisible connections – for example, deductions clustering around specific:

- Product categories or SKUs
- Retail partners or banners
- Distribution centers or lanes
- Seasonal or promotional periods
- Manufacturing facilities or production lines

This multidimensional root cause visibility enables targeted process transformation rather than superficial symptom management.



3. AI-powered trade promotion reconciliation

Given that trade spending represents the largest marketing investment for most CPG companies, promotion-related deductions deserve particular scrutiny. Intelligent promotion analytics can:

- Evaluate historical promotion performance against actual execution metrics
- Model forward-looking impact across retailers, channels, and geographies
- Identify high-risk promotion types that frequently generate disputes
- Simulate volume scenarios to prevent over-commitment
- Align trade calendars with production and logistics capacity constraints
- Detect cannibalization patterns that lead to volume shortfalls
- Optimize discount structures, timing and tactics to maximize compliance and ROI

By designing promotions that are financially sound, operationally feasible, and a win-win for retailer and manufacturer, manufacturers can dramatically reduce approving deductions that are invalid due to lack of proper data while improving promotional effectiveness.

4. Real-time compliance monitoring systems

Innovative CPG companies are implementing real-time monitoring capabilities that track adherence to retailer-specific requirements throughout the fulfillment process. These systems leverage IoT sensors, computer vision, and digital workflows to verify:

- Label accuracy and placement
- Pallet configuration conformity
- Documentation completeness
- Advance shipment notice (ASN) timeliness
- Product presentation standards
- Temperature and quality parameters
- Routing guide compliance

When potential violations are detected, automated alerts enable immediate corrective action before products leave the facility – preventing deductions that would otherwise be discovered weeks later.

A leading food manufacturer implemented real-time compliance monitoring across five distribution centers and reduced labeling-related deductions by 86% while improving warehouse throughput by 12%.

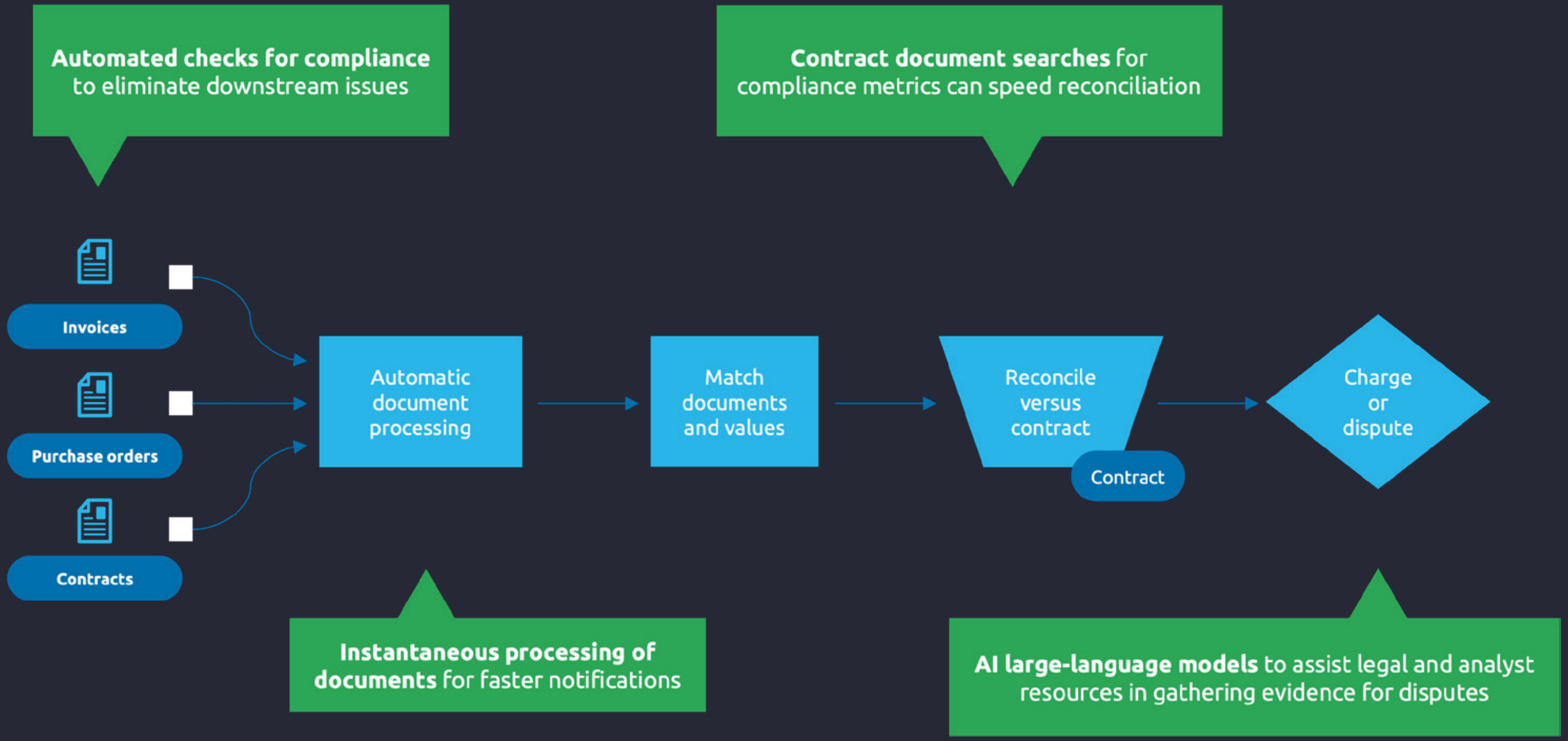
5. Generative AI for deduction resolution and knowledge management

Emerging Gen AI technologies are transforming the efficiency of deduction management teams. Advanced language models can now:

- Automatically classify incoming deduction documentation
- Extract key information from unstructured retailer communications
- Match claims with internal order and shipment records
- Suggest likely root causes based on historical patterns
- Draft resolution responses and supporting documentation
- Preserve institutional knowledge that was previously lost with team turnover

AI-assisted deduction resolution doesn't just reduce manual effort – it increases consistency, accelerates recovery, and creates a feedback loop that continuously improves prevention models.

AI-accelerated solution with *Snowflake cortex*



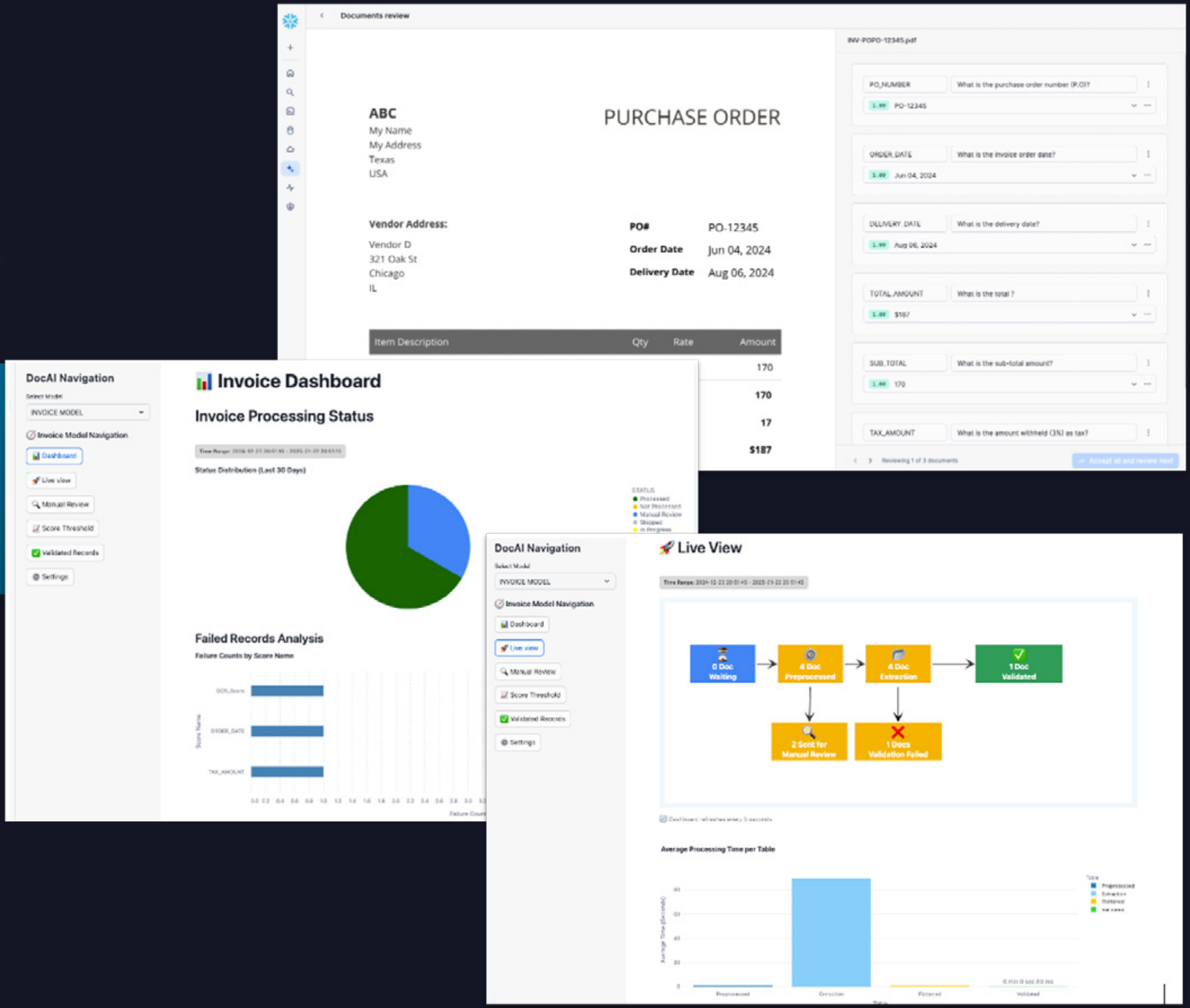
Doc AI *quickstart*

Snowflake Quickstart to build an application for end-to-end process to POs and invoices.

Steps included:

- Pre-process data
- Train an AI model
- Use model to process documents
- Build app for business users

[*Link to Quickstart*]



6. Closed-loop integration with business planning

The ultimate value of deductions analytics comes from its integration into core business processes. Insights derived from deduction patterns should inform:

- Account planning and customer segmentation strategies
- Sales team incentive structures and focus areas
- Inventory allocation and safety stock decisions
- Production scheduling and capacity planning
- SKU rationalization initiatives
- Packaging design and standardization efforts
- Logistics network optimization

When deduction intelligence informs commercial and operational strategy, it becomes a catalyst for transformation rather than a financial afterthought.

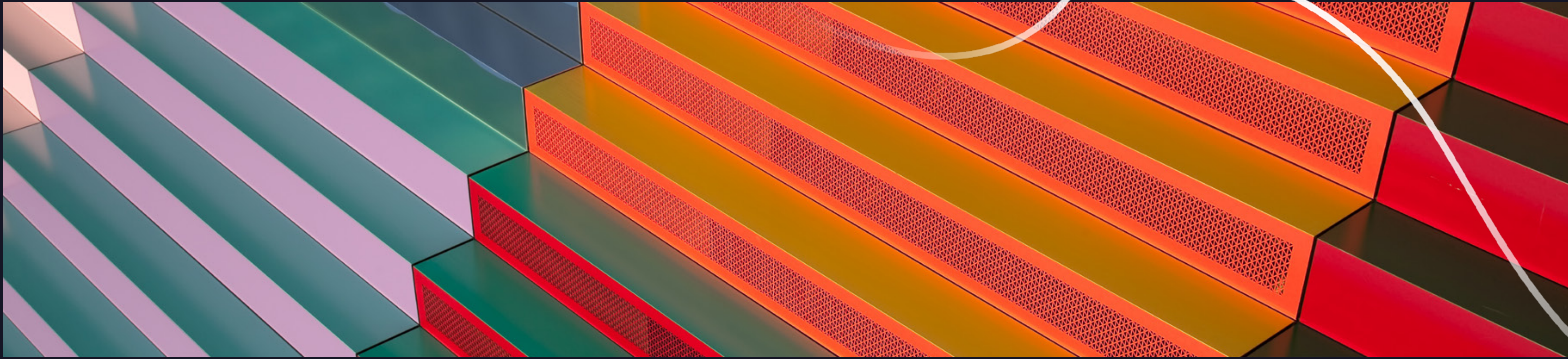
Implementation roadmap: *Where to begin*

The maturity journey

For organizations still operating in a reactive model, the transformation to prevention requires a staged approach:

Stage 1: Visibility foundation (1–3 months)

- Establish a centralized, cloud-based data foundation connecting order, shipment, deduction, trade, and customer data
- Implement standardized categorization of deduction root causes
- Create executive dashboards showing deduction trends by customer, category, and cause
- Conduct initial pattern analysis to identify highest-impact opportunity areas
- Identify data capture requirements in transactions systems (TPM, ERP) to ensure clean and accurate data to drive the analytics



Stage 2: Targeted prevention pilots (3–6 months)

- Select 1-2 high-volume, high-risk retailers or product categories for focused intervention
- Deploy predictive models for OTIF risk on selected lanes/customers
- Implement real-time compliance monitoring for highest-value products
- Establish cross-functional deduction prevention team with clear governance

Stage 3: Scale and integration (6–12 months)

- Expand predictive capabilities across your network
- Integrate prevention insights into core business processes
- Implement Gen AI-powered deduction resolution
- Build automated feedback loops between deduction data and planning systems
- Develop supplier-specific performance metrics and improvement tracking

Stage 4: Transformative value creation (12+ months)

- Achieve real-time prevention across the entire order-to-cash process
- Transform retailer relationships through proactive compliance management
- Redeploy recovered resources toward growth initiatives
- Establish deduction prevention as a competitive advantage

Cross-functional *ownership*

Successful deduction prevention requires collaborative ownership across multiple functions:

Finance:
Deduction data governance and financial impact tracking

Supply chain:
OTIF performance and logistics compliance

Sales:
Customer-specific compliance requirements and commercial terms

IT/data:
Analytics infrastructure and system integration

Trade marketing:
Promotion design and execution metrics

Executive leadership:
Strategic prioritization and resource allocation

By establishing clear accountability and shared performance metrics, organizations can overcome the traditional functional silos that have made deductions so difficult to address.

The future of *revenue* assurance in CPG

From deductions management to revenue intelligence

Forward-thinking CPG leaders recognize that the evolution from reactive deductions management to proactive prevention represents just the beginning of a larger transformation in how organizations protect and optimize revenue. The future state is Revenue Intelligence – a comprehensive approach that:

- Predicts and prevents value leakage across the entire commercial process
- Optimizes pricing, promotion, and terms in real-time based on compliance data
- Automates routine decision-making to ensure consistent execution
- Embeds intelligence into everyday commercial workflows

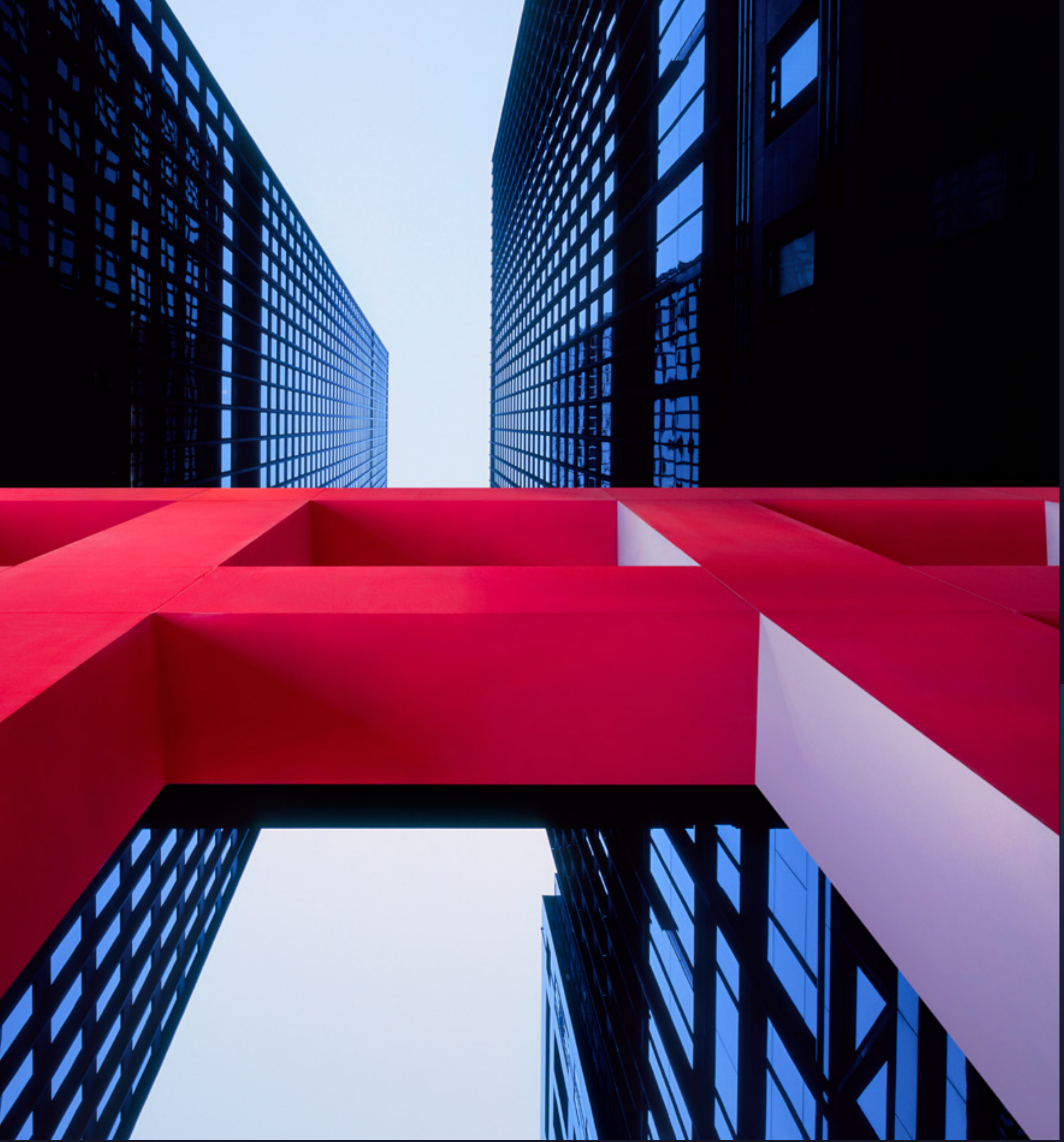
As data capabilities mature, the distinction between deduction prevention and commercial optimization will blur. The same predictive models that prevent OTIF penalties can also optimize inventory placement, route planning, and production scheduling. The algorithms that reduce promotional disputes can simultaneously enhance promotional ROI.

The competitive imperative

In an industry where net margins typically range from 2–5%, the ability to reclaim even a portion of the 1–3% of revenue lost to deductions represents a significant competitive advantage. Organizations that master deduction prevention don't just protect margin – they free up working capital, reduce operating costs, strengthen customer relationships, and enable their teams to focus on growth rather than recovery.

As one CPG Chief Financial Officer observed: "We spent decades accepting deductions as a cost of doing business. Now we understand they're actually the cost of doing business poorly."

The tools to transform deductions from an accounting challenge into a strategic advantage are available today. The question is not whether your organization can afford to invest in deduction prevention – it's whether you can afford not to.



About our *services:* The Capgemini and Snowflake advantage

Capgemini and Snowflake have joined forces to deliver a comprehensive deduction prevention solution that combines industry-leading expertise with best-in-class technology. This powerful partnership brings together:

Capgemini's industry expertise:

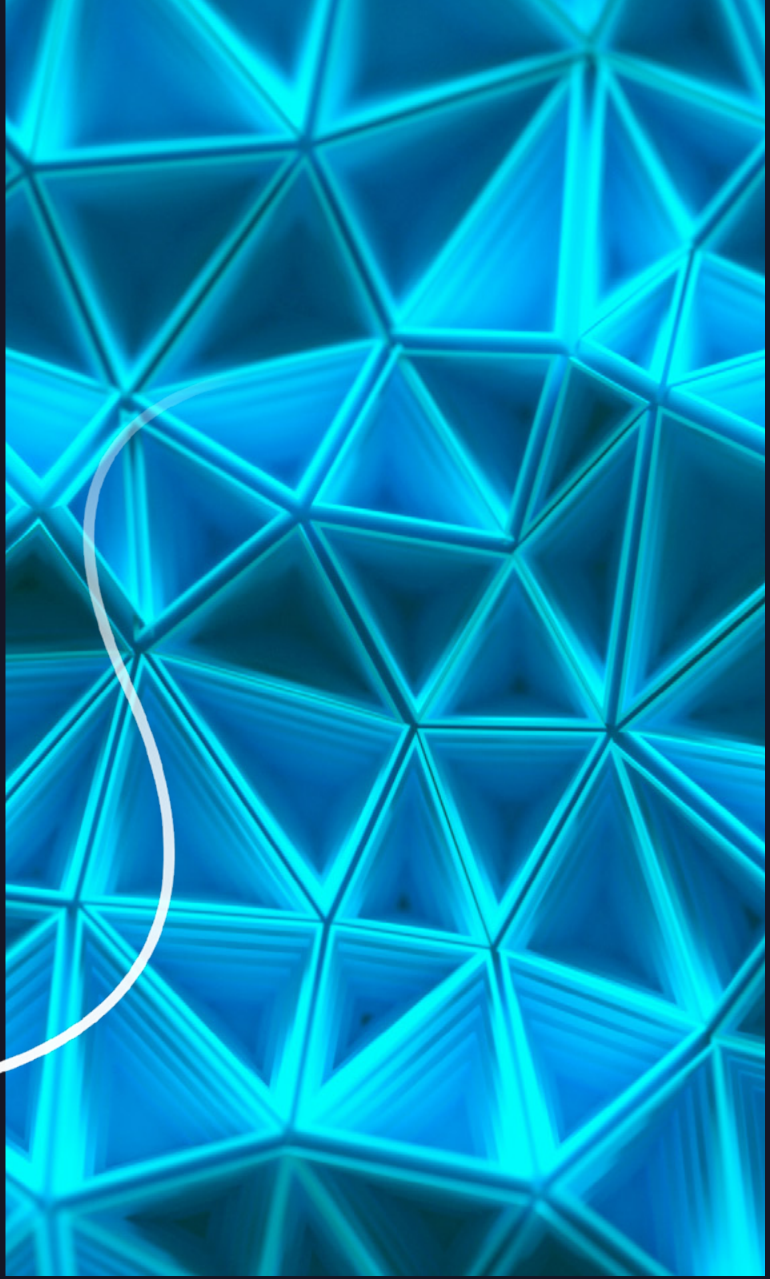
- Deep CPG domain knowledge across sales, supply chain, finance, and commercial functions
- Proven methodologies for business transformation and change management
- Advanced analytics and AI capabilities tailored to deduction prevention and promotion analytics
- Global delivery model with specialized industry consultants
- Deep operational learning running day to day operations for promotion management, claims, deductions processing for large CPG companies

Snowflake's AI data cloud:

- Unified data foundation that eliminates silos between ERP, TPM, and logistics systems
- Real-time data processing capabilities for instant detection and alerting
- Inter operability across clouds and secure data sharing capabilities
- Enterprise-AI ready platform
- Seamless scaling to handle massive transaction volumes across your enterprise
- Native support for advanced analytics and machine learning workflows

Together, our integrated solution enables CPG companies to:

- Establish a single source of truth for deduction data across the organization
- Implement predictive risk scoring for orders, shipments, and promotions
- Deploy real-time compliance monitoring throughout the supply chain
- Embed intelligence into everyday commercial workflows
- Achieve measurable financial results within months, not years



Our collaborative approach can help leading manufacturers reduce deduction volume by 30–50% while improving team efficiency by up to 70%. Unlike traditional recovery services that focus on cleaning up after the fact, we partner with you to stop revenue leakage at its source.

Capgemini brings the industry expertise, business services and transformational capabilities, while Snowflake provides the technological foundation – creating a solution that addresses both the technical and organizational dimensions of effective deduction prevention.

Contact us today to learn how Capgemini and Snowflake can help transform your approach to deductions management and unlock hidden value across your organization.

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About Snowflake

Snowflake is the platform for the AI era, making it easy for enterprises to innovate faster and get more value from data. More than 11,000 companies around the globe, including hundreds of the world's largest, use Snowflake's AI Data Cloud to build, use and share data, applications and AI. With Snowflake, data and AI are transformative for everyone. Learn more at snowflake.com (NYSE: SNOW).

About Capgemini

Capgemini is a global business and technology transformation partner, helping organizations to accelerate their dual transition to a digital and sustainable world, while creating tangible impact for enterprises and society. It is a responsible and diverse group of 340,000 team members in more than 50 countries. With its strong over 55-year heritage, Capgemini is trusted by its clients to unlock the value of technology to address the entire breadth of their business needs. It delivers end-to-end services and solutions leveraging strengths from strategy and design to engineering, all fueled by its market leading capabilities in AI, generative AI, cloud and data, combined with its deep industry expertise and partner ecosystem. The Group reported 2024 global revenues of €22.1 billion.

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