



Executive  
Perspectives

05

# Unlocking Potential from AI and GenAI

**Finance**

*October 2024*

## Introduction

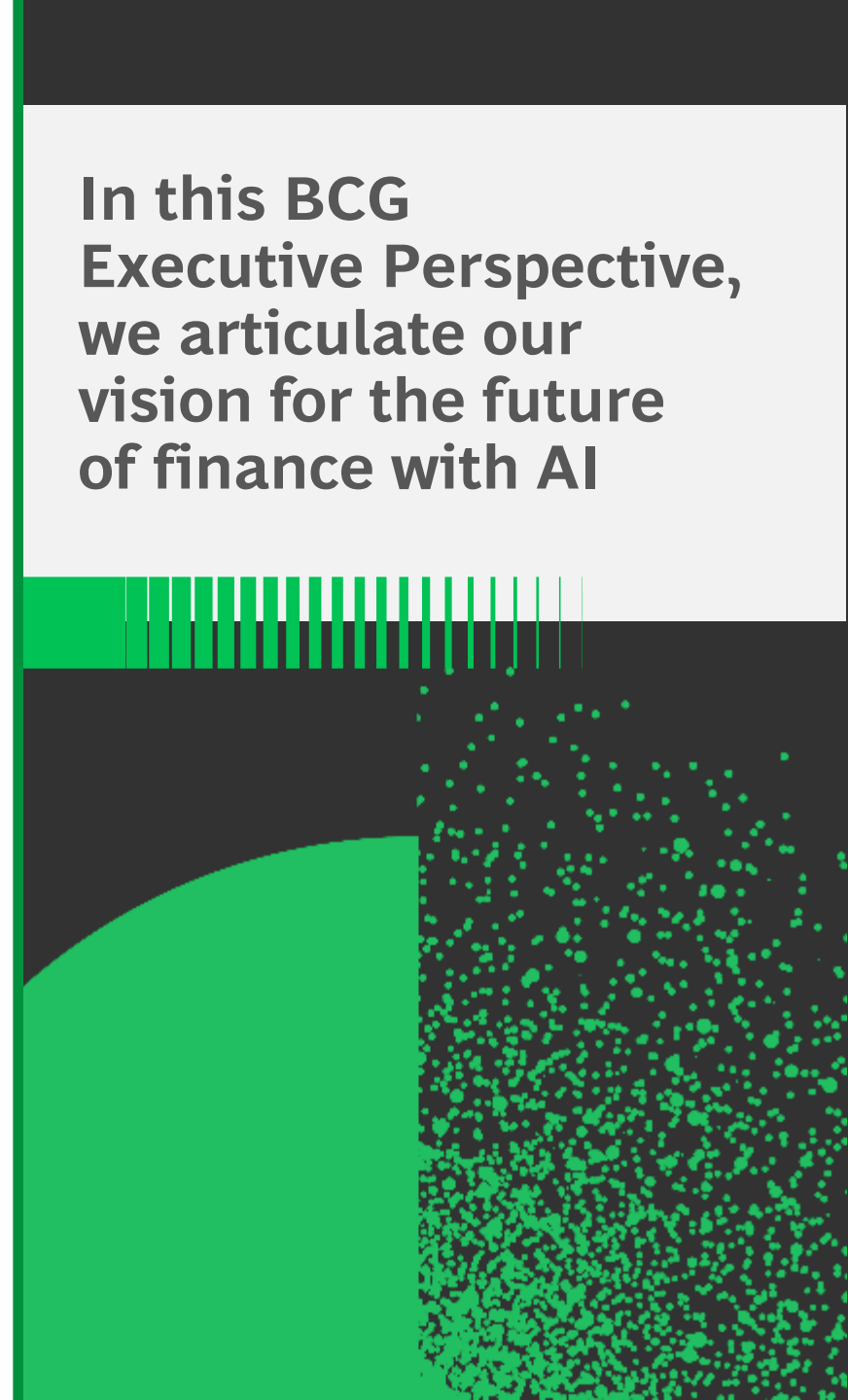
AI a key topic top for CFOs today. After working with numerous clients in the past year, we are **sharing our most recent learning in a new series designed to help CFOs navigate AI**. With AI at an inflection point, the focus in 2024 is on turning AI's potential into *real* effectiveness and efficiency gains.

In this edition, we discuss the future of finance and the role AI will play in unlocking the finance function's full potential. We address key questions on the minds of finance leaders:

- Where are the opportunities for AI in finance?
- How will the finance processes evolve as a result?
- What impact does AI have on the finance operating model and talent?
- How do I get started... and how do I get this right?

**This document is a guide for CFOs and finance leaders to cut through the hype around AI in finance and understand what creates value now and in the future.**

**In this BCG  
Executive Perspective,  
we articulate our  
vision for the future  
of finance with AI**



# Executive summary | Unlocking impact from AI in the finance function

## The time to act on AI is now

While finance functions have taken a bit longer to get started, CFOs are now starting to **explore GenAI** and how it can help finance become proactive **"value drivers"** for business

~**15%** of companies<sup>1</sup> are **actively piloting** or implementing GenAI in the finance function

## AI unlocks many sources of value

AI is a key unlock for finance to **deliver new capabilities** (e.g., AI-based forecasting) and **higher-quality business support** (e.g., GenAI-powered FP&A insight generation)

AI delivers both **efficiency and effectiveness** benefits for the finance function, e.g.:

- **Efficiency:** 20-40% capacity unlock, enabling more focus on business partnerships
- **Effectiveness:** 50%+ increase in forecast accuracy, 2x faster insight for decision making

## Executing successfully

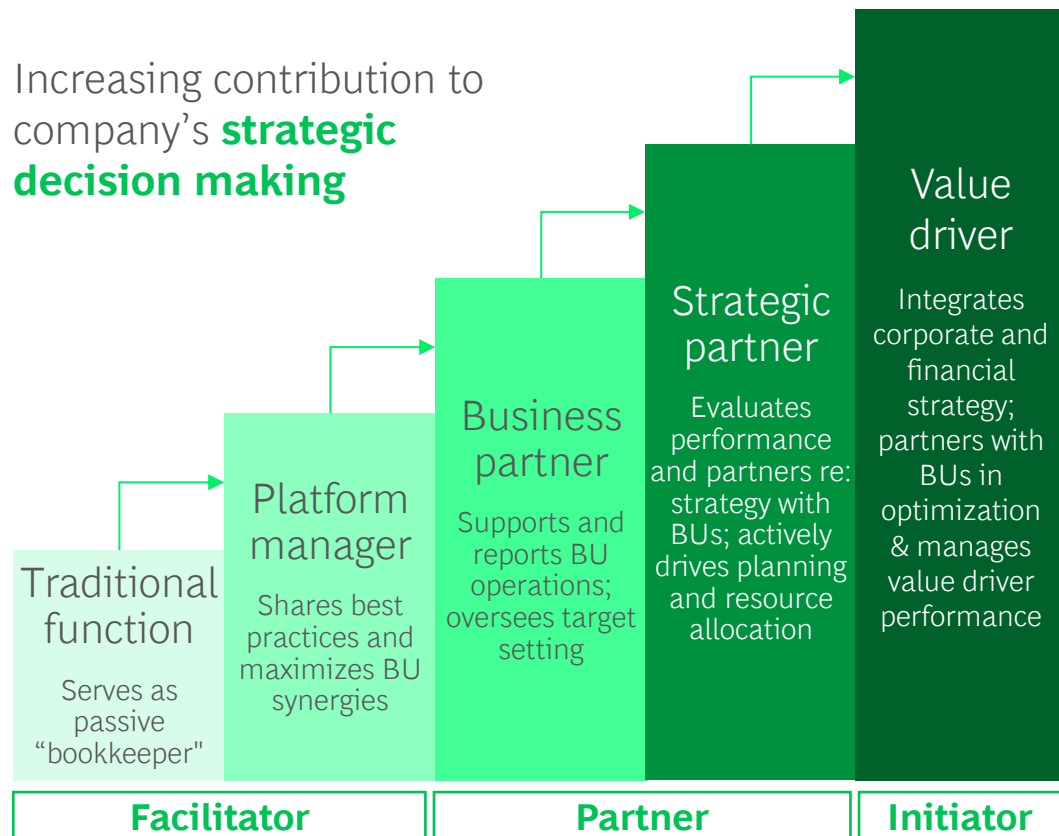
CFOs start their journey by **building high-value use cases** and demonstrating early impact

Yet to fully unlock value from AI, finance functions should move beyond use case exploration to **reinventing end-to-end (E2E) processes**, by:

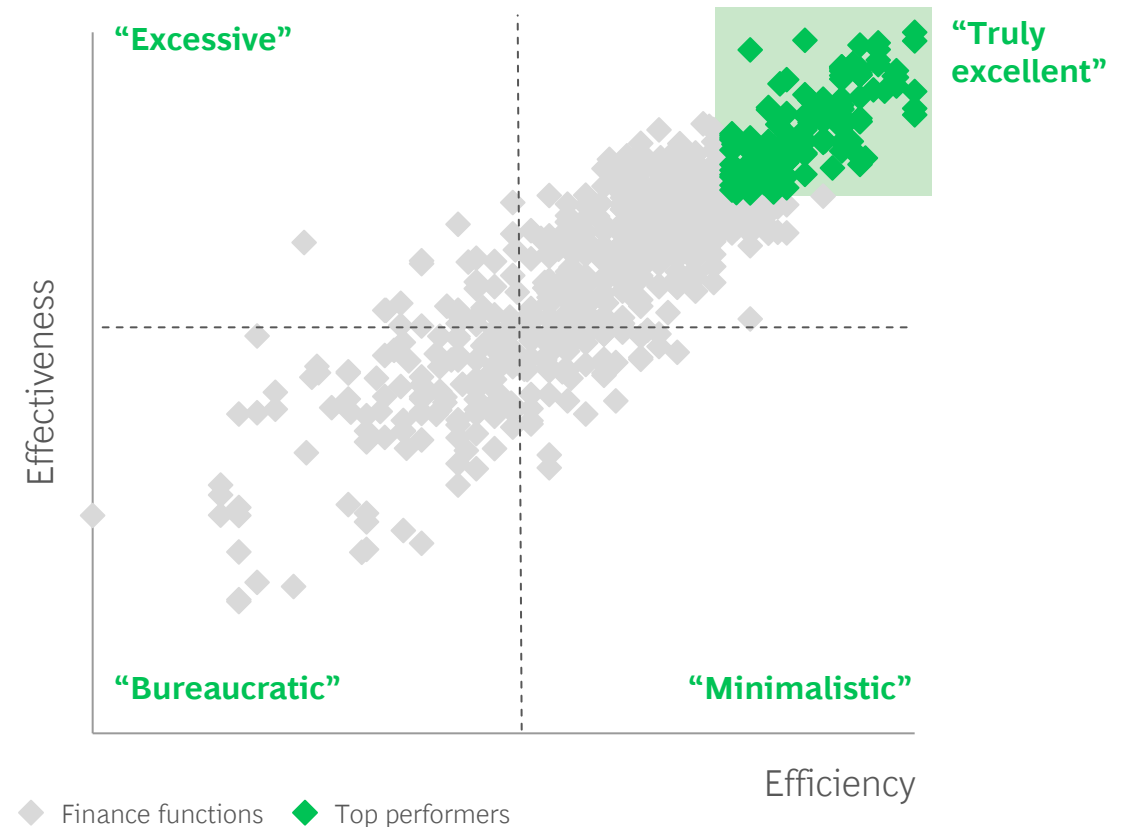
- Adapting the operating model, talent, and ways of working to support new processes
- Modernizing the tech stack and rewiring data hierarchies to enable further value gains

# Next-gen finance functions break the compromise between efficiency and effectiveness, to become proactive value drivers for the business

## Next-gen finance functions actively integrate strategy and drive value...








## ...by delivering on BOTH effectiveness and cost



Source: BCG CFO Excellence Panel, N = 767

# Inspiration | What next-gen finance functions look like

		<u>Common starting points</u>	<u>Digitally mature functions</u>	<u>AI-enabled functions</u>
<b>Planning, budgeting, &amp; forecasting</b>		Fragmented data, heavy Excel use, manually intensive and siloed budgets / forecasts	Integrated cross-functional planning, modernized processes & tools with single-source data	Predictive AI models for planning, forecasting, and scenario analysis
<b>Reporting and business intelligence</b>		Static tools / reports with limited visualization, built on manual processing of fragmented data	Automated dashboards with standardized metrics, using harmonized data & definitions	Self-serve dashboards with GenAI-based commentary, supported by conversational querying and search
<b>General accounting</b>		Fragmented ERP; Excel-heavy, time-consuming reconciliations; manual statutory reporting	Lean GL, automated journal entries, system-triggered controls & exception monitoring	Predictive close, AI reconciliations, GenAI entry recommendations, AI pattern / error recognition
<b>Finance operations</b>		Lack of end-to-end systems, leading to off-tool calculations, tracking / monitoring via Excel	Integrated sub-ledgers, automated invoice generation / processing, auto-matching and data validation	AI-based data extraction (e.g., OCR) & validation, predictive collections, supplier analytics, AI controls
<b>Expert functions</b>		Reliance on Excel & manual inputs limits visibility and future planning	Integrated solutions for transaction processing and global monitoring, with standard insights / alerts	AI-based cash forecasting, FX hedging models, working capital optimization, risk monitoring

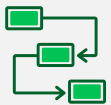
# A combination of levers is required to achieve finance excellence, and AI is an important lever in the digital modernization journey

Levers to achieve finance excellence:



**Digital modernization including AI**

+



**End-to-end process reimagining**

- Reinvent the finance offering with new AI-powered capabilities
- Adopt AI across E2E processes to deliver exponential value

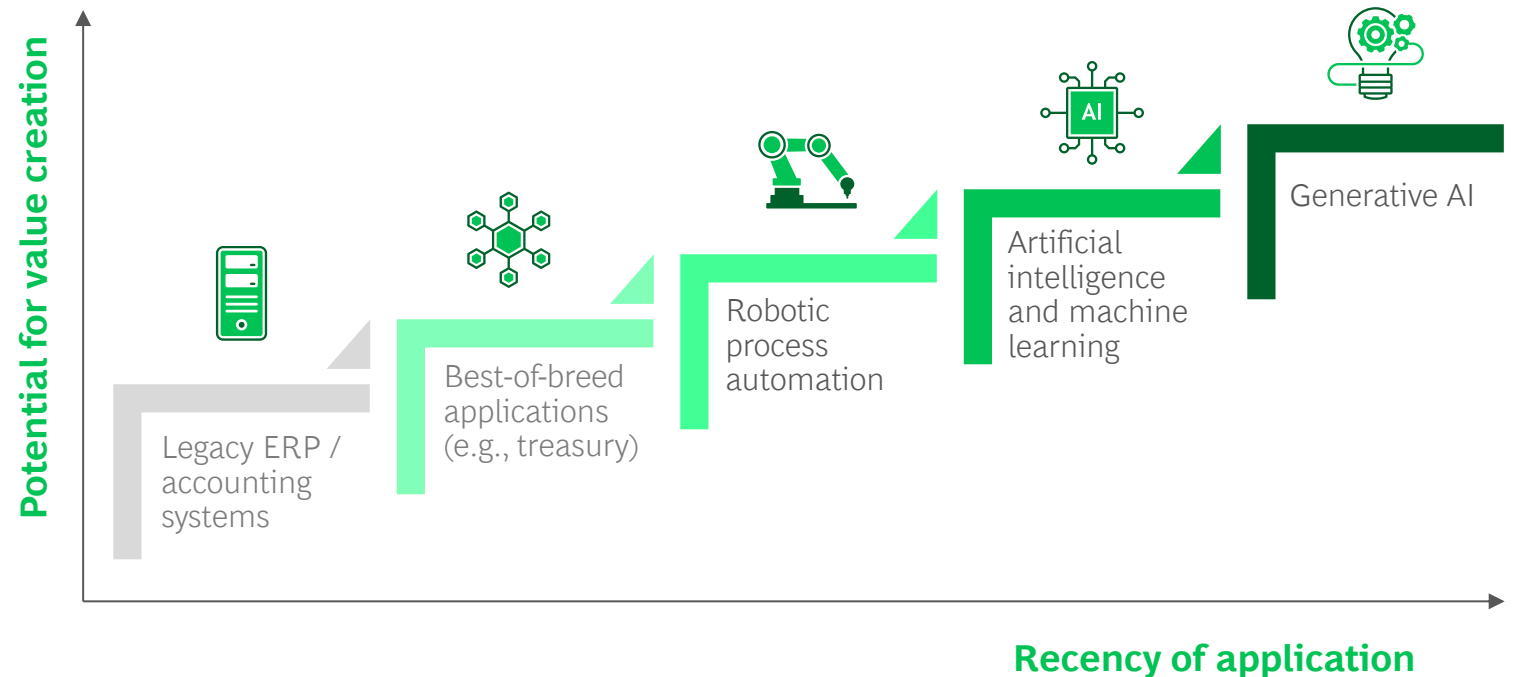
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**New operating model and talent profiles**

- Changes in roles, accountabilities, and skills/expectations driving need for new capabilities and ways of working

**AI tools bring cognitive and predictive capabilities to augment existing tech solutions (e.g., ERP, specialized tools, RPA)**



# While GenAI is still nascent, companies are actively exploring its potential, in addition to expanding the use of traditional AI

 **GenAI in finance still nascent, in exploration stage**

GenAI in finance



 **Traditional AI already prevalent or being planned across multiple areas of finance**

FP&A

AI/AA-based forecasting

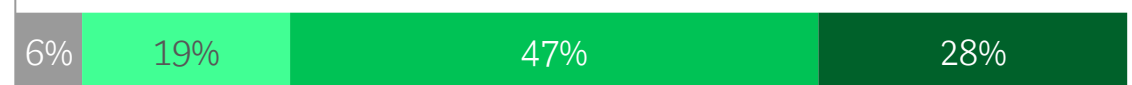


AI-based report generation

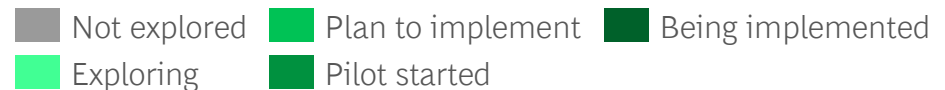


Accounting

AI-based account reconciliation



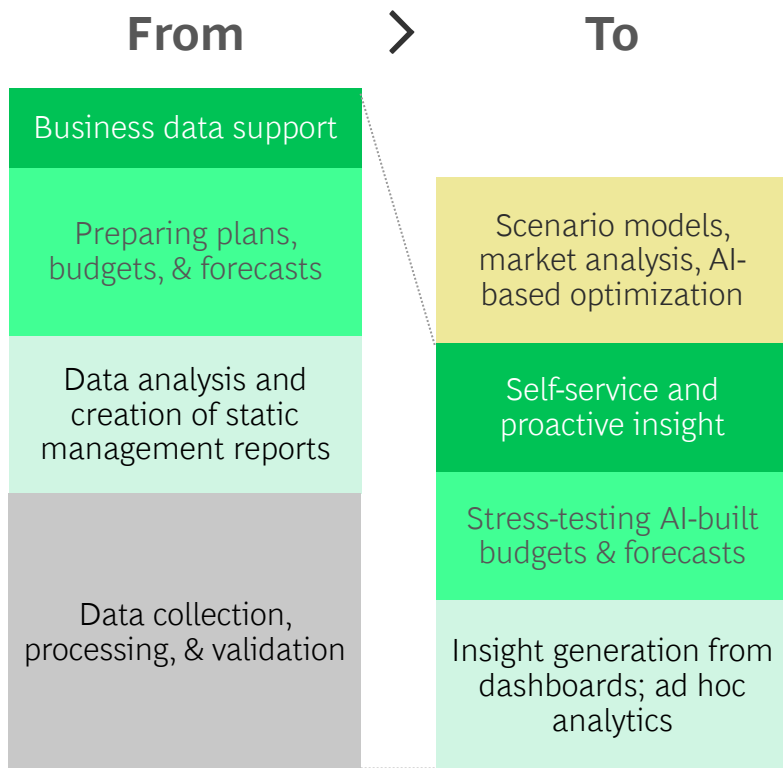
AI-based invoice recognition



# AI combined with other levers will be critical to unlock transformative value across the finance excellence journey

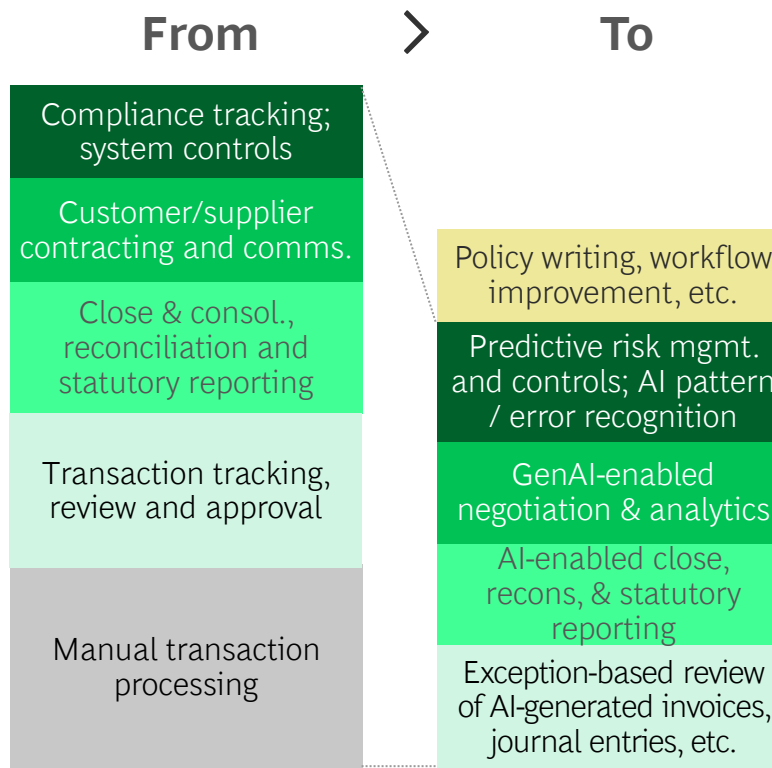
## Transformation of FP&A

(~20-30% efficiency gains applying all levers)



## Transformation of Accounting & FinOps

(~25-35% efficiency gains applying all levers)



## How AI accelerates this transformation:

Reduction of manual work,, e.g., data extraction, rule / pattern-based validation, calculation

Task reinvention through AI-created first drafts, smart reviews/alerts, analytics, etc.

New finance capabilities and insights enabled by AI

Capacity unlock for more strategic advisory and business partnering

Note: Estimated 3- to 5-year impact  
Size = Illustrative share of workflow; pace of change will vary greatly by the starting point of your function



# Use cases | Key opportunities exist for AI across finance processes

## Planning, budgeting, & forecasting



**Business strategy:** Analysis of market/demand, competitive landscape, etc.

AI-drafted plans and budgets, leveraging KPI driver trees and automated data feeds

GenAI-created **variance investigation** and commentary generation

AI-based **forecast** and scenario modeling, AI refinement of driver trees

## Reporting and business intelligence



**Standard dashboards/reports:** GenAI-drafted commentary, performance analysis, creation of leadership decks

**Ad hoc reporting:** GenAI-based data search and visualization, performance analysis and insight generation

**Proactive monitoring** (e.g., overspend, project delays) and **optimization** (e.g., working capital)

## General accounting



**Subledger close:** AI-recommended journal entries, proactive/predictive close monitoring

**Consolidation & filings:** AI-based balance sheet reconciliations, preparation of statutory reports

**Compliance & policies:** AI-based controls and error detection, GenAI policy and guidebook writing

## Finance operations



**Procure to pay:** AI/OCR invoice processing and matching, payment terms monitoring, supplier spend/risk analytics + optimization suggestions

**Order to cash:** AI-based prediction models for credit scoring, early warnings for DSO/aging, predictive collections with AI, GenAI-tailored customer comms.

**Others** (payroll, fixed assets, etc.)

## Expert functions



**Treasury:** AI-based cash forecasting, FX hedging, balance sheet optimization

**Tax:** AI-based provisioning calculation, proactive flags for deferred tax impacts

**Investor relations:** Earnings call Q&A prep, investor sentiment analysis

**Risk management:** Early warnings using pattern recognition; fraud detection

**Cross-finance opportunities:** Chatbots, guided workflows, co-pilot support, etc.

Analysis of opportunities based on additional value that AI can unlock (beyond other digital tools):

High
  Medium
  Low

# AI in action (I/III) | Using AI-based financial forecasting to drive impact

## Context

Large manufacturing client

Struggled to forecast market accurately (17% increase in forecast error)...

..driving business challenges:

- Inability to anticipate and adjust to market situation
- Increased costs of labor & overtime, transport, and increased inventory
- Customer dissatisfaction from decreased service levels and fewer on-time, in-full deliveries

## Solution overview

AI-based demand forecasting engine leveraging internal and external data:

- Trend-sensing engine to identify early shifts in market sentiment, production technology, etc.
- ML-based modeling to adjust for business trends such as seasonality, competition, etc.

Driver tree models linking executive metrics to operational variables (e.g., production units):

- More granular, data-derived forecasts for root cause analysis and sensitivity assessment
- Ability to model various demand / production scenarios and enhance decision making

AI/ML center of excellence created, to enhance models and develop new AI offerings

## Impact

50%+

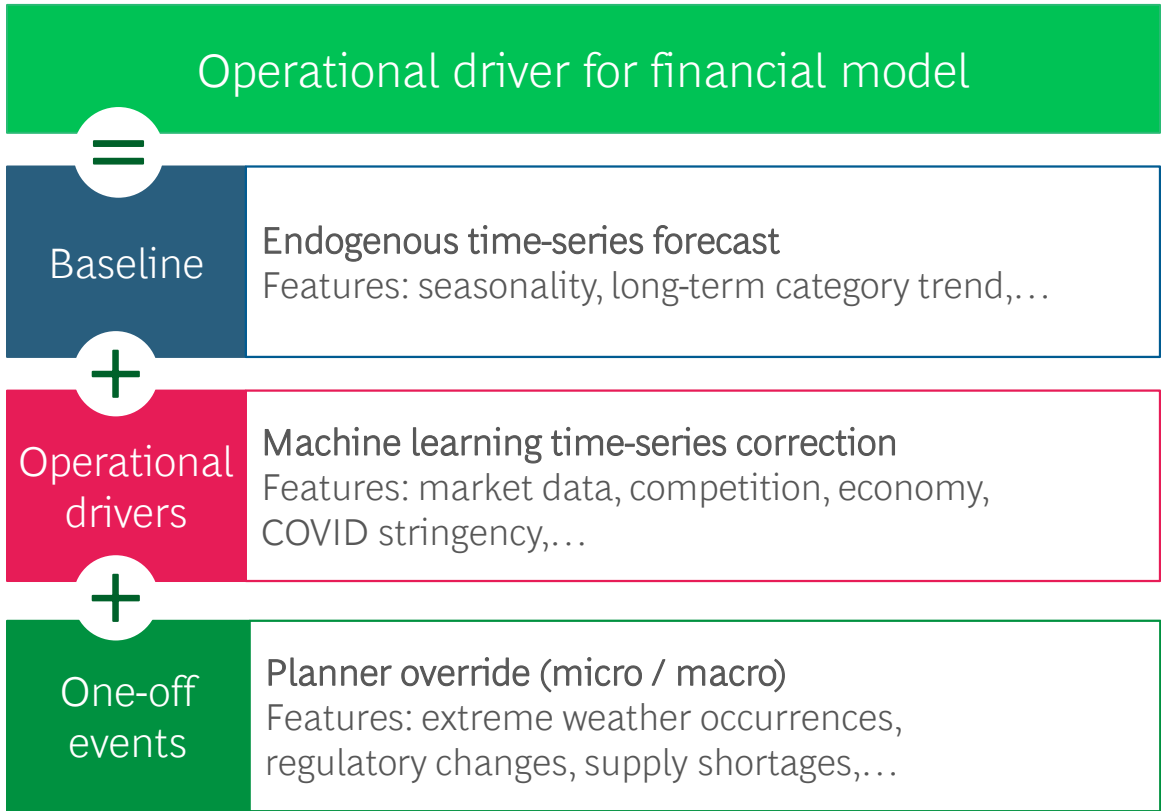
Improved forecasting accuracy

80%+

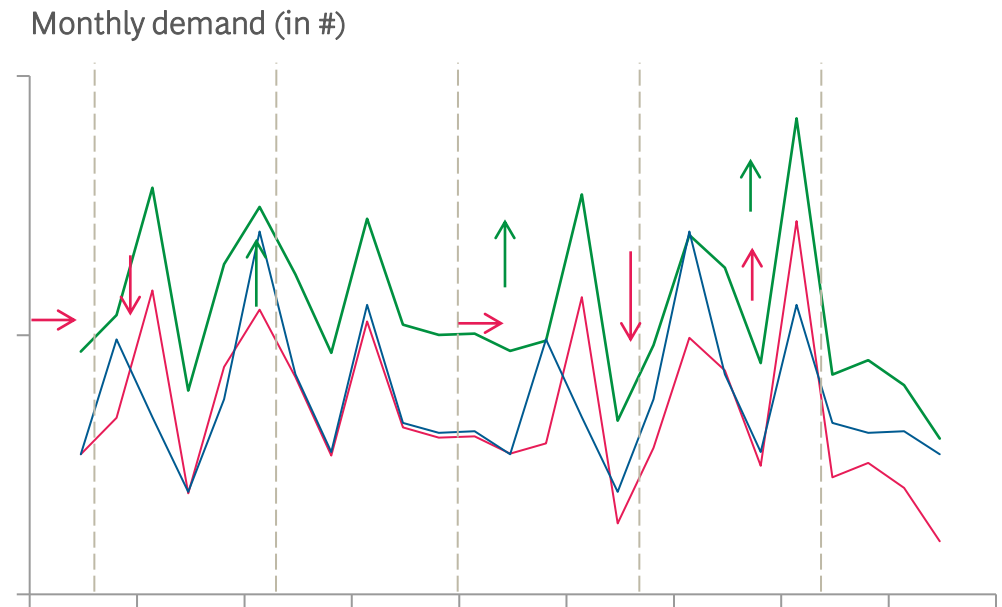
Reduction in forecast variance and bias

Forecasts and scenarios generated rapidly

# Deep dive | Structured and leading-edge AI modeling provides step-change in operational driver forecasting capabilities



Illustrative



**Impact:**

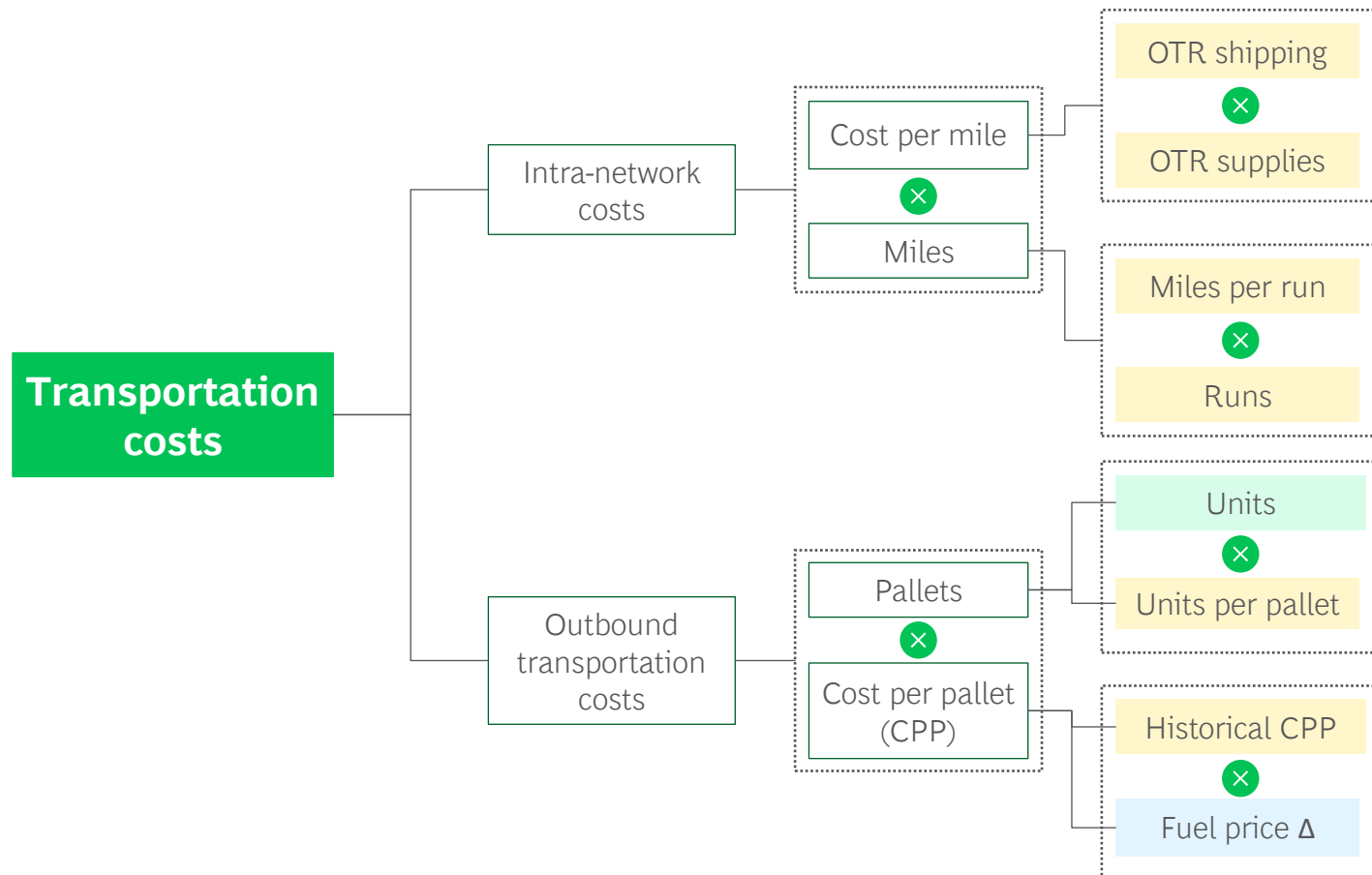
Variability better explained & anticipated, forecast error cut, bias reduced

# Deep dive | Driver trees link operational drivers to financial results, underpinned by AI algorithms

Illustrative

## Level 2 metrics

## Operational drivers



## Data inputs

### Automatic inputs

Automatic data feed of actuals/ forecasts directly from data systems

### AI model outputs

Outputs from relevant AI models (e.g., demand forecasting model) that serve as inputs into driver trees

### Manual inputs

Assumptions and manual adjustments

# AI in action (II/III) | Using GenAI-based business intelligence to drive impact

## Context

Large US retailer struggles to get deep insights on performance, due to rapidly changing market / demand environment, complexity of product portfolio / categories, and fluctuations across cost areas

FP&A analyst faces several challenges while investigating variances to advise business partners on the drivers behind performance:

- Poor view of drivers' under/overperformance
- Significant time needed to analyze variances and identify root causes
- Slow turnaround for ad hoc data investigation requests

## Solution overview

**GenAI chatbot for conversational queries of data and generation of dynamic visualization:**

- Provides 2nd and 3rd order performance insight, with suggested actions for improvement
- Creates live charts that can be interrogated, adapted, and exported into leadership decks

**Driver tree engine enables FP&A analyst to build and live-edit dynamic relationship models between key operational and financial variables:**

- Driver model enables deep investigation into root causes behind variances, to enable timely corrective action

**Scalable infrastructure that can be connected to any data source or system, providing visibility across BUs, categories, and processes**

## Impact

**2-4x**

Faster report generation

**<1 day**

Turnaround for ad hoc analytics

**More data-driven**  
decision making

# Deep dive | GenAI-based chatbot interface and driver tree relationships allow for quick drilldown into root causes of performance

## Conversation between analyst and tool

FP&A analyst

GenAI chatbot



What is driving the forecasted sales miss for [category A] for November and December of 2024?

The forecasted sales miss is due primarily to a drop in sales velocity (-25%), with a slight decrease in expected average price (-5%).



What are the drivers of the drop in sales velocity?

The forecasted sales velocity decline was primarily due to a large decrease (-20%) in purchases per order and small decrease in order rate (-6%).



What were the drivers of decreased purchases per order?

Purchases per order forecast model attributes 50% of the decline to anticipated increase in inflation (+1%), to predicted CDP reduction (-2%), and the remaining 35% due to a drop in expected competitor prices for similar systems ([CLIENT] 15% higher than the expected competitor average price).

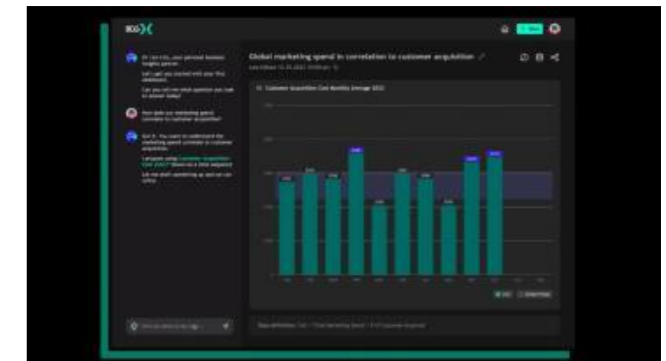
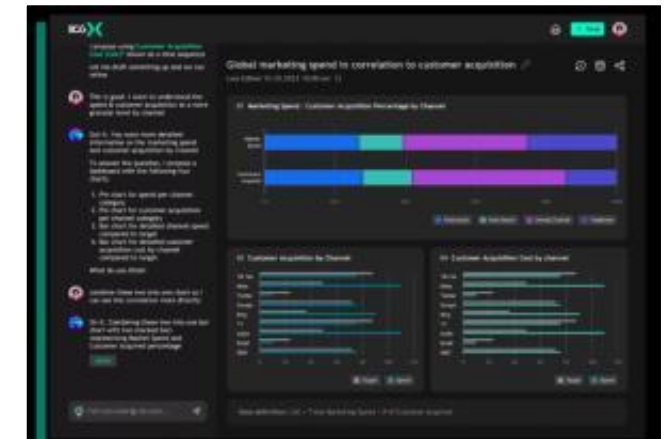


What actions can we take to increase purchases per order?

The economic outlook cannot be adjusted by any levers. However, planning for a steeper discount rate on [category A] heading into Q4 2024 will help offset some of the expected losses and improve the outlook for CY 2024.



## Dynamic charts generated throughout the conversation



# AI in action (III/III) | Using GenAI-based annual report creation to drive impact

## Context

Controllershship team at a large company looking to reduce the time spent on generating investor reports by having Gen AI write the text-heavy section:

- Manual data aggregation and consolidation for 10K-style reporting
- Significant time spent on analyzing peers and market trends to write MD&A commentary
- More time spent by consolidation team on drafting reports and less time on review / insights

## Solution overview

**GenAI-based creation of draft 10K/annual reports based on past filings and latest internal data**

- Tool auto-refreshes data, shifting human focus from data collection to review / refinement

**GenAI-drafted MD&A commentary, using external data to synthesize market trends and implications**

- Tool adapts comments to highlight key business conditions, e.g., demand, industry fluctuations, economic landscape

**Performance benchmarking across peers, based on publicly reported financial metrics, strategic announcements, and other news**

- GenAI provides quick answers on competitive performance and peer outlook, replacing time-intensive manual analysis

## Impact

**40-60%**  
Automation of statutory reports

**2K hours**  
Saved in the controllershship organization

**40+**  
Benchmark companies compared via GenAI tool

# Deep dive | GenAI-enabled tool supports finance function in generating the annual report and inquiring about peer companies



## Annual report generation

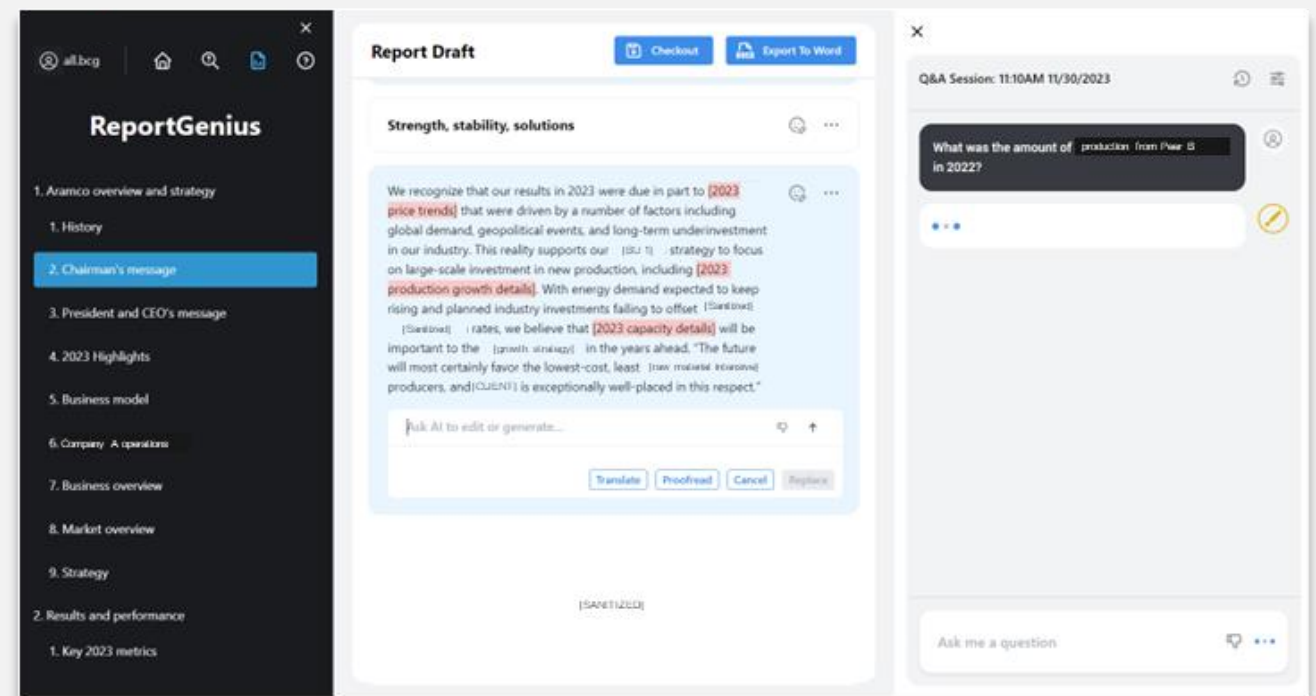
- Creation of draft of annual report commentary based on prior reports
- Benchmarks and sentiment-based text editing, including translation and proofreading
- Conversational interactions to refine and improve on GenAI-created drafts



## Peer reports and press release inquiries

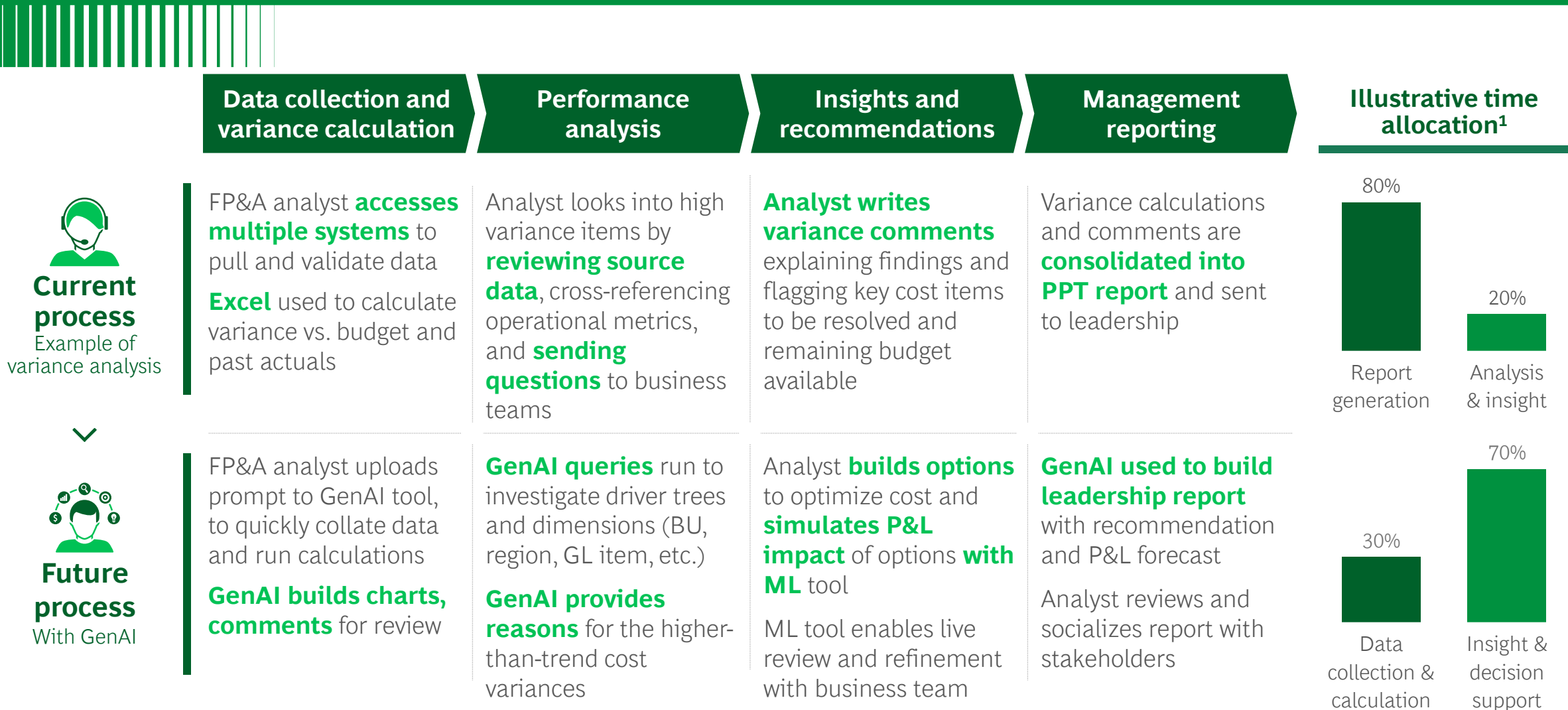
- Query peer reports and press releases to refine commentary around market sentiment, industry outlook, etc.
- Generate answers on peer financial performance based on public data

First-draft commentary generated by tool leveraging past annual reports, news articles, competitor publications, etc.





# AI implications: processes | AI enables finance team members to shift from manual data tasks to strategic insights and business collaboration



<sup>1</sup>Based on client experiences of typical breakdown of FP&A time spent

# AI implications: operating model | AI drives changes in roles, mandates, and ways of working across finance



## New mandates for the CFO organization

- Shift of CFO role toward "**chief performance officer**" driving strategic direction and decision making
- Increased focus on **data stewardship**, to build new insights and analytics for evolving business needs
- **Custodian of value**, providing investment funding and monitoring benefits realization from org-wide GenAI efforts



## New engagement models with the business

- Evolution of finance **service catalogue**, with new offerings for the business (e.g., AI optimization engines)
- Increased push toward **AI-powered self-service**, driving leaner "finance business partner" teams
- Greater **cross-functional collaboration**, to fully leverage internal financial, sales and operational data for insight



## Reinvention of finance talent and skill sets

- **New roles and profiles** (e.g., solution architects) to identify AI opportunities and build use cases
- Need for enhanced **digital skill sets** within finance, such as data analytics and AI capabilities (e.g., ability to create scripts)
- Increased **need for strong business acumen** within finance, resulting from new AI-based offerings and reduction of transactional work

# AI implications: technology | Three types of vendors for AI in finance are suitable for different needs and use cases

Nonexhaustive



## Approach and use cases

### Enterprise tech solutions

Augments their existing ERP / EPM offerings with AI capabilities

Example offerings:

- GenAI invoice creation and AR management
- Controls / transaction review
- GenAI customer / vendor comms
- Fraud / risk detection

### Point solutions

Leverages AI to offer specific solutions tailored for use cases, with focus on building new analytics

Example offerings:

- AI / ML budgeting & forecasting
- GenAI management reporting & business intelligence
- Predictive collections

### Foundation builders

Provides infrastructure and out-of-box models to support a broad set of use cases (including finance)

Clients can leverage a mix of open- and closed-source models / engines to create solutions tailored to their use case



## Sample vendors



Standard, scalable offerings

Ability to customize

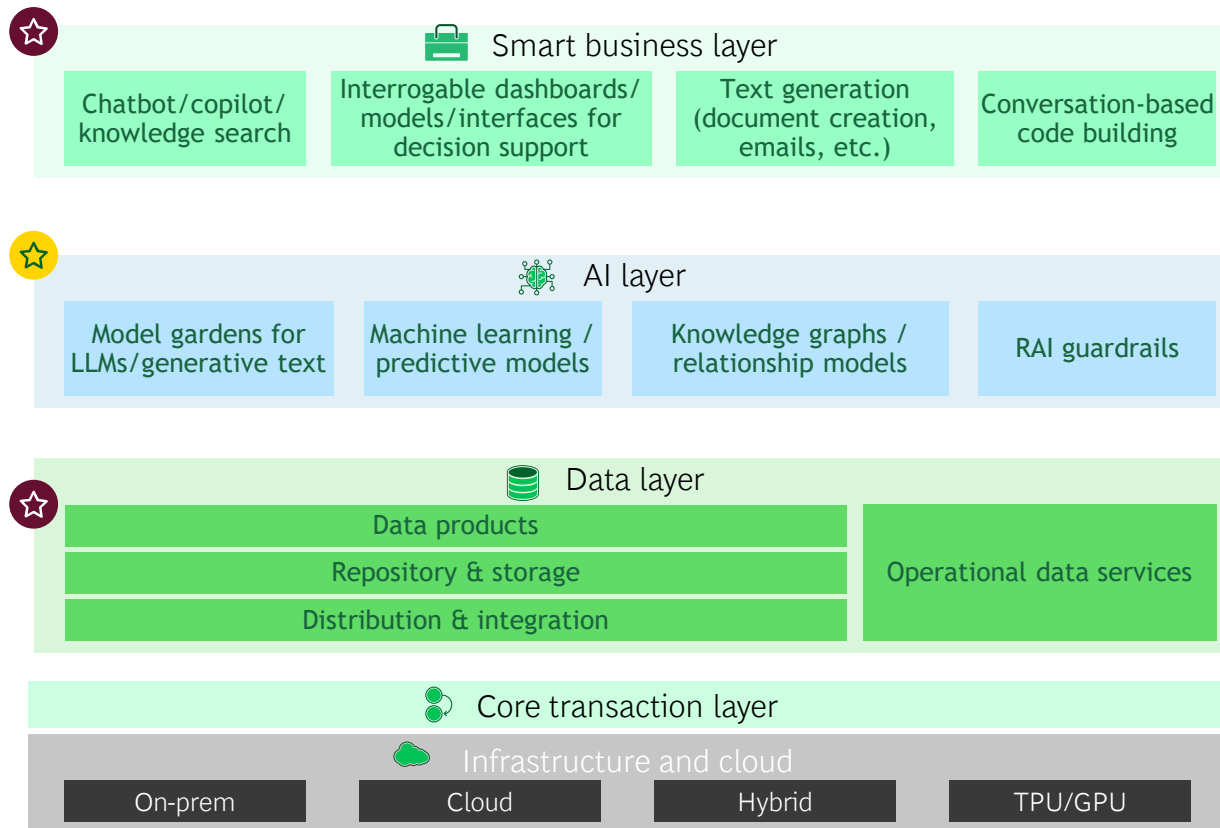
Suitable to augment existing tools with limited build effort

Suitable for companies looking for off-the-shelf models with flexible customization ability

Suitable for companies looking to build highly tailored models with in-house resources

# AI implications: technology | Target state tech landscape for finance will significantly evolve, driven by AI requirements

## Illustrative platform design incorporating AI



## Immediate priorities for AI execution

- **Define stakeholder needs:** AI use cases need to be defined based on current needs, vision for finance capabilities
- **Create roadmap:** Companies are increasingly building quick AI pilots to prove effectiveness/efficiency impact
- **Build models:** AI tools can be developed today on top of existing stack, prioritizing areas with higher data fidelity
- **Set RAI guardrails:** Standards are defined for data / models, based on responsible AI frameworks
- **Augment using AI:** While AI models are evolving, ML capabilities can be used to accelerate data clean-up and improve quality / governance
- **Explore out-of-box capabilities:** AI solutions are increasingly being embedded into transactional solutions (e.g., AI controls within ERP)

# Getting started | 6 critical success factors for CFOs driving AI

- 1 Systematic transformation**  
Use AI as a catalyst to accelerate end-to-end finance transformation, including processes and operating model
- 2 Value-focused build**  
Act as the value guardian, driving the highest-impact use cases and monitoring early benefits realization
- 3 Technology flexibility**  
Leverage off-the-shelf tools when possible and selectively build use cases in-house when existing offerings do not fully address the requirement
- 4 Data foundations**  
Be the "chief data officer," continuously exploring opportunities to better leverage big data for finance and business
- 5 Quality governance**  
Establish safeguards against hallucinations and ensure reliability / security of results (e.g., human-in-the-loop review, GenAI testing and evaluation)
- 6 Leadership buy-in**  
Get finance leaders and key business stakeholders onboard; drive change management/ culture toward supporting AI efforts

# BCG experts | Key contacts for AI in finance transformation

## NAMR



James Tucker



Jody Foldesy



Michael  
Demyttenaere



Hardik  
Sheth



Laurin  
Henderson  
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Patrick Weber

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