BCG

Executive Perspectives

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Unlocking Impact from AI

Driving Sustainable Cost Advantage with AI

May 2025

Introduction

In 2025, cost reduction remains a top priority for most CEOs—especially amid a complex economic environment and rapidly evolving tariff dynamics. While there's significant interest and excitement around using AI-based tools and technologies including agents/agentic processes to unlock savings, many **CEOs and C-suite leaders face frustration when AI programs do not deliver the hyped cost savings**.

After working with over 1,000 clients on AI and cost in the past year, we are **sharing what successful companies have done differently to drive sustainable cost advantage with AI.**

In this edition, we address key questions on the minds of CEOs and transformation leaders:

- How can productivity gains and nonlabor savings from AI be translated into sustainable cost savings?

- What are the high-impact areas to focus on that can get costs out "here and now"?

- What are the watch-outs as you scale AI?

This guide helps CEOs cut through the hype around AI, focusing on actionable strategies to create bottom-line impact—quickly.

Note: For BCG's latest perspective on delivering in uncertain times, refer to https://www.bcg.com/publications/2025/how-ceos-can-deliver-in-uncertain-times

In this BCG Executive Perspective, we articulate how industry leaders use AI to drive sustainable cost impact quickly

Executive summary | Drive sustainable cost advantage with AI

Companies are recognizing AI's role in reducing costs here and now

Amid a complex economic landscape and rapidly evolving tariff dynamics, cost reduction continues to be a top priority for executives. However, executives report that only 48% of cost-saving targets are achieved and that their companies face challenges in maintaining efficiencies

Over 90% of executives are planning to invest in AI and are recognizing the critical role AI will play in reducing costs over the next 18 months. Already, 25% of executives report significant gains, strengthening their competitive advantage

Integrating AI into broader cost transformation efforts can boost your cost transformation outcomes – enabling more sustainable cost transformation, eliminating work, improving experience and quality, and future-proofing the organization

Maximize AI's impact on cost reduction across four key patterns

If your company has one of these four patterns, AI can make a lasting step change in your cost base and make a structural change for long-term competitiveness

- Codified knowledge (e.g., internal / external content creation, software engineering): Leveraging GenAI-assisted tools for content generation and analysis of codified knowledge can lead to 20-30% in cost savings and 50X faster content creation
- Interaction with individual customers (e.g., contact centers): Chatbots/GenAI assistants instead of human-assisted support for in-store/ call center interaction can lead to ~10X lower costs and ~20% FTE reduction in the operations
- Large supply bases (e.g., frequent price negotiations): Leveraging GenAI for tender document creation and smart contracts management can lead to ~50% efficiency gains and a decrease in contract review from 2 days to 20 mins
- Significant field forces (e.g., maintenance): GenAI-enabled workflow operations can help organizations achieve up to ~40% reduction in preventive maintenance spending and 20-30% improvement in FTE capacity
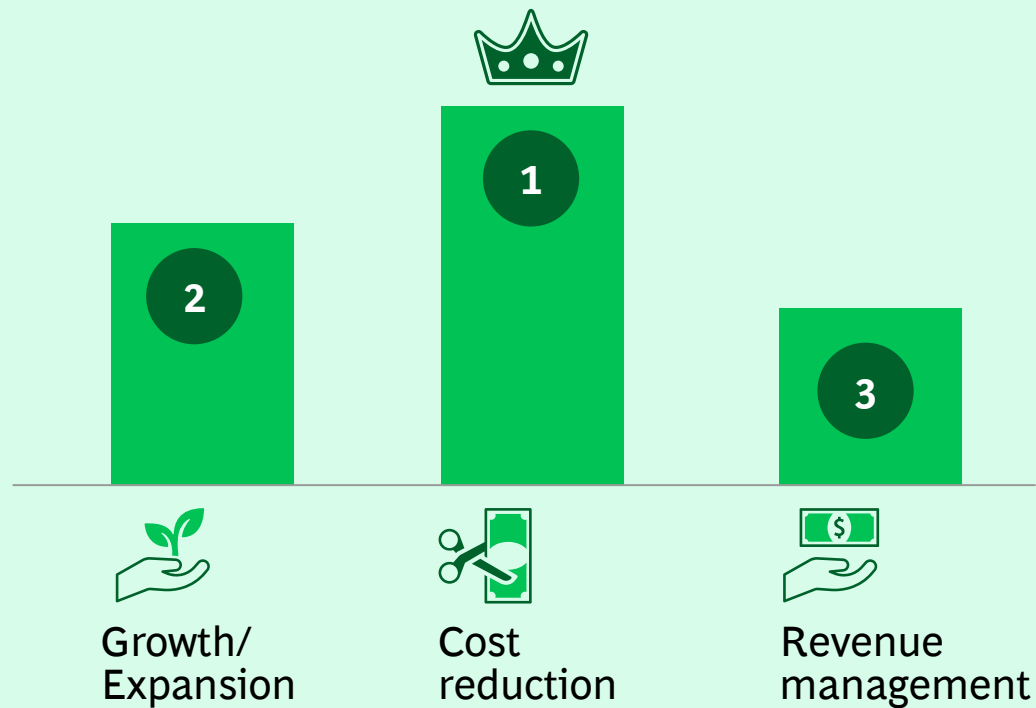
Be vigilant about key watch-outs

Industries leaders should be vigilant about a few watch-outs:

- Don't forget to cash the check - Embed the discipline to change processes, reorganize people, and shape the culture to execute on the business case and take cost out
- Focus on pace of adoption – This can significantly impact efficacy of cost reduction efforts
- Be vigilant about rising tech expenses (including potentially hidden costs) and complexity of the application landscape as AI scales
- Incorporate rigorous value tracking and build AI-enabled cost reduction in budgets – this will be critical to ensure sustainable cost takeout

In an ecosystem of high uncertainty, cost management remains the top priority for executives…

Top three 2025 strategic priorities for C-suite executives globally[1]

Growth/ Expansion

Cost reduction

Revenue management

93%

of executives view
AI as an instrument of cost
reduction in next 18 months[2]

Sources: 1. BCG global C-suite survey on strategic priorities (N=569) across industries, fielded
Sept–Dec 2024; BCG analysis.
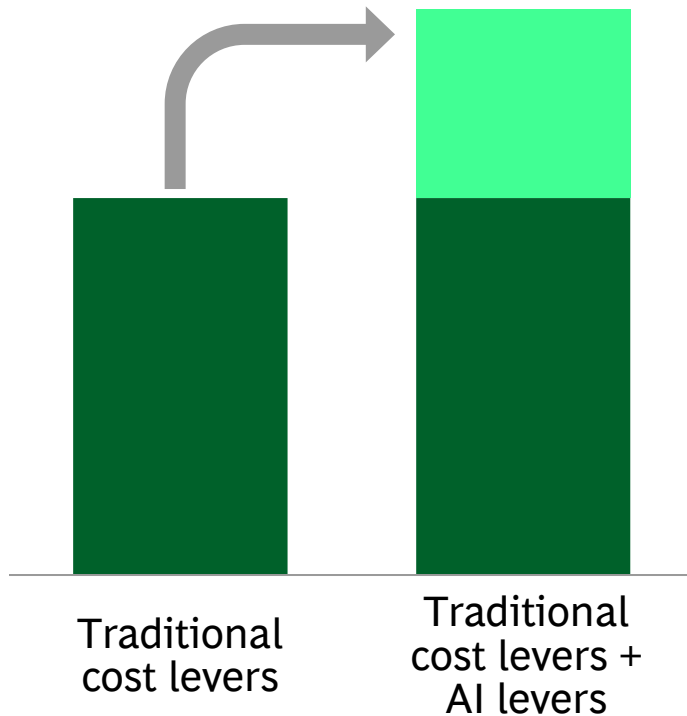2. FT Longitude x BCG research (N=770), August 2024.

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AI is the next frontier of cost advantage, providing an edge on top of traditional cost levers

Cost impact (illustrative)

Traditional cost levers

Traditional cost levers + AI levers

How AI reduces cost

Transparency: Provides real-time insights into cost drivers in traditionally hard to track areas, such as third-party spending
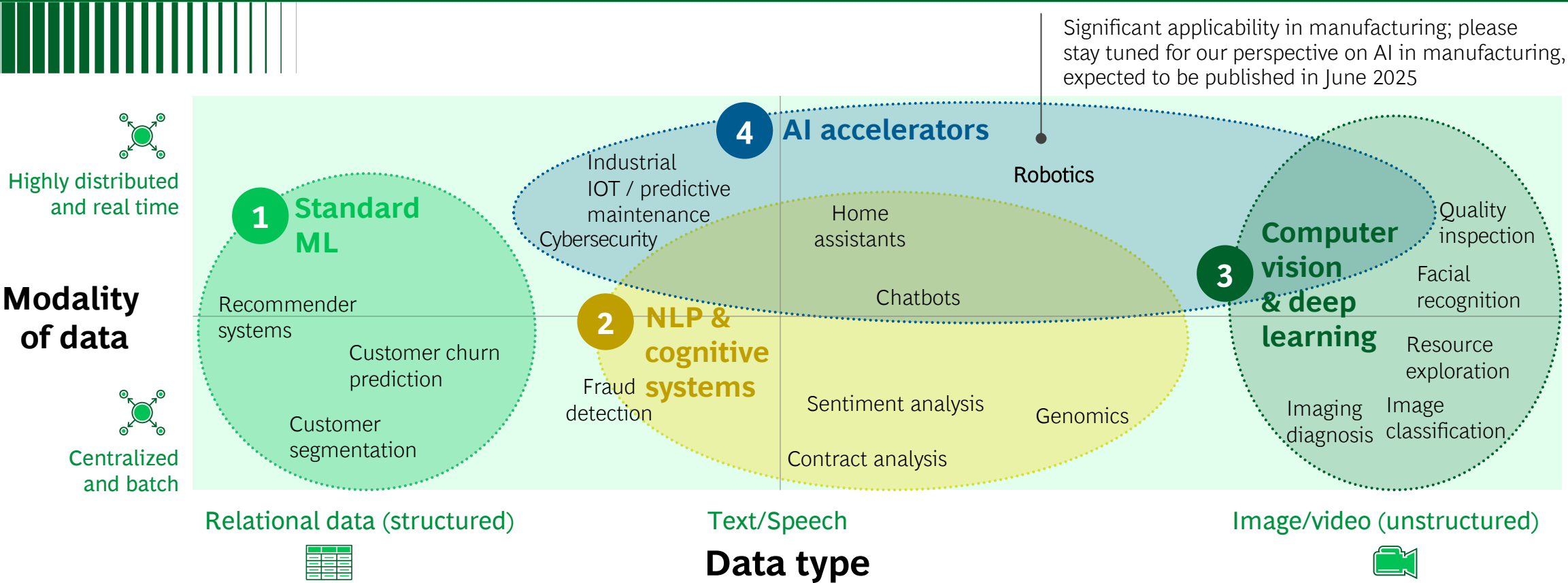
Innovative workflows: Drastically simplifies processes and enhances cross-team collaboration to increase organizational agility

Work elimination: Scales transformation by completely eliminating work through automating tasks and decision making

Structural advantage: Dramatically boosts productivity, leading to a lower cost base and long-term competitiveness

Adaptive learning: Continuously learns from data, feedback, and interactions, improving performance of the decision-making process over time

Note: Traditional levers focus on optimizing the cost base without relying on advanced technology like AI. Some examples include delayering, operating model simplification, outsourcing, lean process optimization, and others
For BCG's latest perspective on AI agents, please refer to _AI Agents_

Companies can apply different technologies in the AI ecosystem to deliver sustainable cost advantage

Significant applicability in manufacturing; please stay tuned for our perspective on AI in manufacturing, expected to be published in June 2025

Modality of data

Highly distributed and real time

Centralized and batch

4 **AI accelerators**

Industrial IOT / predictive maintenance Cybersecurity

Robotics

1 **Standard ML**

Recommender systems

Customer churn prediction

Customer segmentation

2 **NLP & cognitive systems**

Fraud detection

Home assistants

Chatbots

Sentiment analysis

Contract analysis

Genomics

3 **Computer vision & deep learning**

Quality inspection

Facial recognition

Resource exploration

Imaging diagnosis

Image classification

Relational data (structured)

Text/Speech

Image/video (unstructured)

Data type

1 Traditional machine learning techniques primary applied to structure data

2 Processing, analysis, and generation of textual data and cognitive interactions

3 Solutions for leveraging processing, analysis, and generation of image and video data[1]

4 Specialized chips and hardware tailored to advanced/high-volume AI workloads

1. For the purposes of this work, we have included deep learning (DL) as part of the computer vision solution cluster as the primary space where DL technologies achieved practical breakthroughs and widespread adoption. However, as noted in our solution cluster deep dives and trends, DL is increasingly applied in previous NLP and standard ML domains as well

This set of technologies can be applied in four key patterns to alter the cost structure, creating a sustainable and long-term competitive advantage

Codified knowledge

(e.g., internal / external content creation, software engineering)

Interaction with individual customers

(e.g., contact centers, self=service agents)

Large supply bases

(e.g., frequent price negotiations, complex supply chains)

Significant field forces

(e.g., dynamic dispatch, complex maintenance)

Embedding AI has significantly expanded the potential for cost reduction across industries

Deep dive	Codified knowledge	Interaction with individual customers	Large supply bases	Significant field forces
	Consumer goods • €250M cost savings identified by 2026 by transforming end-to-end marketing processes enabled by AI	**Global asset manager** • $100M opex savings by 2026 through optimized customer support operations with AI	**Logistics company** • 35-50% estimated efficiency gains by using GenAI in RFP generation and support operations	**APAC O&G major** • 40%+ preventive maintenance spending decrease and 70% error reduction through enhanced maintenance operations using GenAI
	Consumer goods • ~95% cost reduction in marketing content generation and 50X faster content creation (<1 day from 4 weeks/blog)	**Global bank** • ~10X lower cost of conversation than with human agent; ~40-50% credit-card operations cost-saving potential in 12 months	**Luxury automobile manufacturer** • ~50% efficiency gain with GenAI-assisted procurement tender document creation & offer analyst	**Renewable energy asset developer** • ~15-20% decrease in average job duration for frontline technicians through GenAI assisted troubleshooting
	Biopharma company • ~20-30% decrease in external agency cost for marketing assets creation	**Japanese life & health insurance co.** • ~20% FTE reduction in the operations expected through customer/ agent service in call center operations	**Chinese fast-food restaurant chain** • 90% reduction in cost through smart leasing contract review; contract review time cut from 2 days to 20 mins	**Property insurance provider** • 20-30% freed site inspector capacity expected, driving more client-facing time
	Retail electric provider • >2x increase in revenue from organic traffic to website through GenAI-powered hyper-fast SEO content generation at scale	**Multinational cosmetics manufacturer** • ~90% cost difference expected vs. human-assisted in-store /call center sales from GenAI assistant	**Energy provider** • ~2-3% improvement in negotiation results across direct/indirect procurement spending using advanced AI tender assistant	**Large refrigeration & construction company** • ~20% maintenance cost reduction through AI-powered, data-driven digital service technician platform

Leading companies are driving significant cost reductions by embedding AI into broader transformation efforts focused on these four patterns

€250M
cost savings
by 2026

$100M
opex savings
by 2026

30-50%
efficiency gains

40%+
preventive
maintenance savings

Codified knowledge

Interaction with individual customers

Large supply bases

Significant field forces

Consumer goods company

AI-led marketing transformation, with productivity gains, agency cost savings, and faster production and adaptation of content

Global asset manager

Opex reduction program across large function within organization (leading to 33% opex decrease), through process automation

Logistics company

30-50% estimated efficiency gains by using GenAI in RFP generation and support operations

APAC O&G company

40%+ preventive maintenance spending reduction and 70% drop in error rate through enhanced maintenance operations using GenAI

Case example 1 – Codified knowledge | A global CPG transformed end-to-end marketing processes enabled by AI

Context

A global CPG company had a strong desire to drive growth and competitive advantage and significantly reduced marketing operational costs by €250M

BCG partnered with the client's marketing team to apply GenAI to boost competitive advantage in core marketing activities via three workstreams

- Data-rich human insights
- Inspired creativity and higher effectiveness
- Marketing productivity

Actions taken

Launched multiple pilot lighthouses and invested heavily in change efforts to implement GenAI solutions

- Used GenAI to reduce time spent on retrieving knowledge from consumer insights and data, and create new product concepts
- Automated contextual analysis to rapidly analyze campaign metrics vs. brief
- Implemented faster creative origination and content production, e.g., automated translation and modification of existing marketing assets from one market to other markets
- Used AI-generated reports to reduce manual time spent on day-to-day marketing tasks and monthly reporting
- Invested heavily in change management and upskilling efforts

Impact

€250M | Cost savings

60-90% | Task automation

30-40% | Content localization and adaptation time saved

65% | Automated insights, less time spent on insight generation and less spent on agencies

Context

A global asset manager reduced customer support costs by $100M and significantly improved relationships with customers using a digital-first model

To achieve this, the company conducted a call analysis and surfaced eight primary customer intents (e.g., account management, transaction assistance), which highlighted the need for deeper understanding of customer needs, augmentation of existing agent capabilities, and more automation across processes

Actions taken

Three big rocks to drive cost reduction in customer support:

Developed AI-powered voicebot and chatbot to enable self-service by customers
- Improved channel mix and enhanced customer experience across platforms

Expanded & accelerated existing crew-focused initiatives to address greatest opportunity areas
- Decreased AHT, empowered generalists, and retained key specialist agents

Created a "zero ops" model through automated tools and streamlined processes
- Increased speed to resolution and reduced total cost to serve

Impact

$100M | Cost savings

2.5M | Total calls contained/deflected

270+ seconds | Average handle time (AHT) reduction

420K | Decrease in net processing hours

Case example 3 – Large supply bases | A logistics company implemented GenAI in RFP generation and support operations

Context

Leading global third-party logistics provider with multi-billion revenues and large blue chip client portfolio.

GenAI was offering unique opportunity to re-shape and enhance internal and customer-related processes and solutions. BCG supported in identifying high-impact Gen AI use-cases in the Order-to-Proposal process

Actions taken

Developed proof of concept for two customer-focused use cases, showcasing business value and feasibility

1. Implemented GenAI-powered proposal development – Used GenAI to summarize RFPs, extract key insights, highlight gaps, and pull together useful information (e.g., similar proposals, customer background)

2. Launched GenAI-backed operations design – Generated analysis for the operations design (e.g., warehouse solution), by analyzing clients' data (unstructured and in different formats)

Created GenAI roadmap for client

Triggered client's GenAI skills and capabilities

Impact

30-50% Efficiency gains estimated through the two use cases

10% Increase in win-rate anticipated

Context

A leading Asia-Pacific oil and gas company was looking to improve maintenance operations, revamp its preventative maintenance strategy, and reduce its backlog

This required a granular view of asset health, specifically failure rates. Failure data was unstructured, free-text equipment notifications, which required multiple staff-hours and a complex rule-based system to analyze and draw insights

Actions taken

Developed a GPT-4 tool that analyzes over 200,000 equipment notifications in two days

- The solution was used to summarize notifications in standard formats that surface insights for engineers and technicians

- GPT-4 was used to enhance the existing event classification process with its ability to consider the broader context of each sentence and provide reasoning for each classification

- It was also used to identify equipment failures from reading notifications

Client integrated GPT-4 into a live production-grade tool to improve quality and usability

Impact

40+% Reduction in preventative maintenance spending

70% Drop in error rates

80+% Decrease in time to process maintenance history logs

Be vigilant about these watch-outs

Don't forget to cash the check

This will embed the discipline to change processes, and reorganize people to execute on the business case

Focus on pace of adoption

This can significantly impact efficacy of cost reduction efforts

Be vigilant about rising tech expenses

This includes potentially hidden costs and complexity of the application landscape as AI scales

Incorporate rigorous value tracking and build AI-enabled cost reduction into budgets

This will be critical to ensure sustainable cost takeout

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"Cash the check" by dedicating a majority of the effort to changing processes, reorganizing people, and driving adoption

30%

Build new algorithms

Deploy the tech stack and ensure the right data feeds into the right systems

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70%

Reorganize roles to put the right talent with the right skills to deliver on vision

Adapt processes to enable seamless human-AI interactions and create agile learning cycles to rapidly innovate, learn, and pivot as technology evolves

Drive adoption by changing ways of working to embrace AI

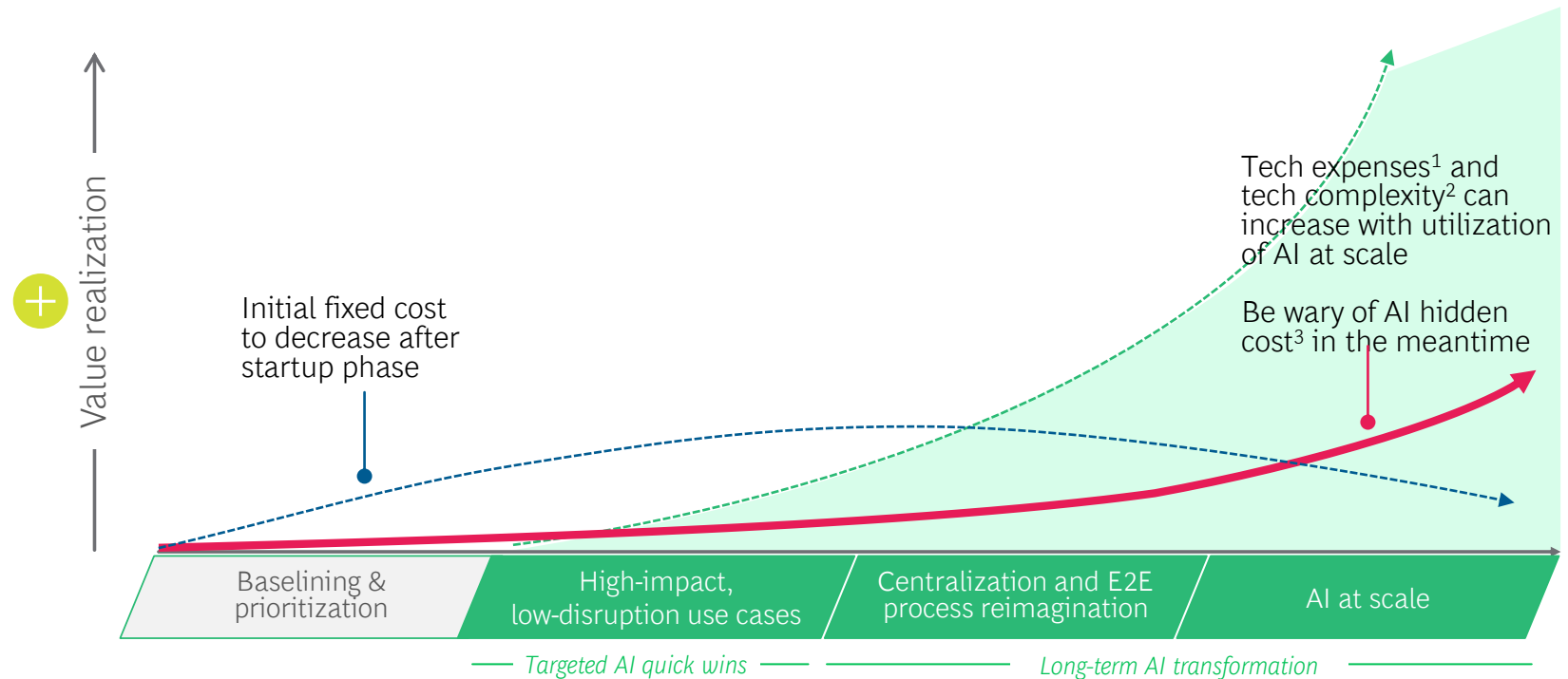Measure and evaluate performance against business objectives

AI at scale can result in **higher tech costs and tech complexity** as utilization grows

Be vigilant about **hidden costs**, as third-party vendors often have limited incentive to reduce cost

Companies must proactively **manage incremental and hidden technology costs**, as well as **growing tech complexity** to achieve a successful cost transformation

Our latest thinking talks about Cloud Cover: Cloud Prices Rise as the Era of Generative AI Dawns

As AI scales, companies should remain vigilant about increasing tech expenses, complexity in tech infrastructure, and potential hidden costs

Value realization

Initial fixed cost to decrease after startup phase

Tech expenses[1] and tech complexity[2] can increase with utilization of AI at scale

Be wary of AI hidden cost[3] in the meantime

| Baselining & prioritization | High-impact, low-disruption use cases | Centralization and E2E process reimagination | AI at scale |

— Targeted AI quick wins —   Long-term AI transformation —

1. i.e., token-usage (pay-per-use pricing), cloud computing costs, data storage and bandwidth, etc.
2. i.e., application management, data complexity (volume and diversity, curation and labeling), etc.
3. i.e., vendor dependency (raising cost), transition cost (downtime, retraining), hidden licensing, IP claims, etc.

Ensure rigorous measurement of value and AI-enabled cost reduction targets in budgets

Integrate AI initiatives into broader **transformation governance** to monitor AI implementation and oversee both traditional and AI-driven transformation

Implement **transparent P&L tracking** to effectively realize cost reduction during transformation

Ensure **coordinated**, **scalable** investments to **eliminate silos** and decrease tech spending

AI initiatives integrated into transformation governance

1 Value tracking & prioritization

Portfolio management and value/risk tracking enables dynamic AI-driven P&L value steering

- AI risk model
- Portfolio prioritization
- Integration of AI savings/targets in budgets
- P&L impact tracking

2 Program governance

Manages interdependencies and stakeholders' coordination to support efficient AI scaling

- Leveraging of traditional cost-saving PMO for AI program governance
- Investment coordination to minimize tech spending

3 AI center of excellence

Oversees technical standards and talent to support high-impact AI product builds

- Responsible AI
- AI technical standards
- AI talent upskilling
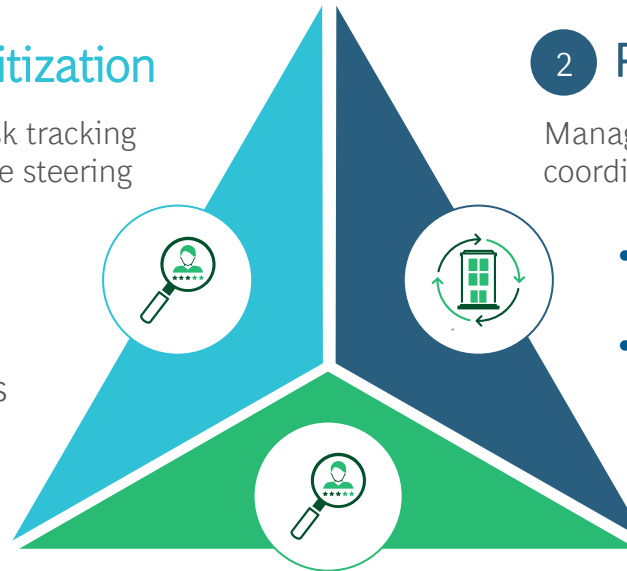
In summary:

Start with an AI-focused diagnostic including typical activity baseline/time study to explore what to automate

Focus initially on high-impact and low-disruption areas to fund the journey

Thoughtfully invest in infrastructure to build incremental AI layer and upgrade existing tech stack

Incorporate AI-enabled cost reduction into budgets as part of regular planning cycle to create scarcity and pressure to deliver

Develop and track metrics to assess AI's contribution to P&L

BCG experts | Key contacts for driving sustainable cost advantage with AI

Cost leads

Paul Goydan
Managing Director and Senior Partner
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Managing Director and Senior Partner
Dallas

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