



Executive
Perspectives

The AI-First Tech Function

How to evolve the AI/tech function from a
service provider to a strategic partner

September 2026

The AI/Tech function must evolve – expanding capabilities and embedding closer to the business

As part of our ongoing series of C-suite conversations on AI, we track the latest developments in this fast-evolving space. In the past 12 months alone, the speed of change has fundamentally accelerated

- **AI agents** now reliably **complete multi-step enterprise workflows**, and CIOs/CTOs are balancing an **unprecedented volume of agent builds and support requests across the org**
- **Inference costs** for frontier-level performance have **dropped approximately 10x**; the economics of digital labor have inverted.
- **Open-source models** nearly match **closed-model performance** across many tasks, with companies experimenting with **vendor neutrality** via international models and on-prem deployments
- **Agentic AI** already **accounts for approximately 17% of total AI value** in 2025, on track **to reach 29% by 2028**.¹
- The **tech function** is at an inflection point: it no longer manages software – it **manages a workforce of agents**.

Who this is for:

CEOs who want to better collaborate with their AI/Tech function (incl. CIOs, CTOs, CDOs, CAIOs et al.²) as they shape their AI agenda

What you will take away

Why your current function must evolve

The shift from software delivery to digital labor, living systems, and AI-native operations

What the new AI/Tech function requires

Three new pillars to address the systemic risks created by agentic organizational shifts

How to make it real

Key actions winning CIOs/CTOs take to navigate the transition and capture AI value

Executive summary | The AI/tech function is transforming from a back-office cost center to the enterprise's AI strategic partner

Shifts due to AI

Agentic AI is fundamentally rewiring enterprises: AI is reshaping the enterprise and AI/tech operating model, moving from building or buying software to deploying and optimizing digital labor. This requires a strategic shift

To date, the role of the AI/tech organization has mostly been to run enterprise infrastructure and build on behalf of the business as a service provider. The agentic era calls for a reshaping of these functions

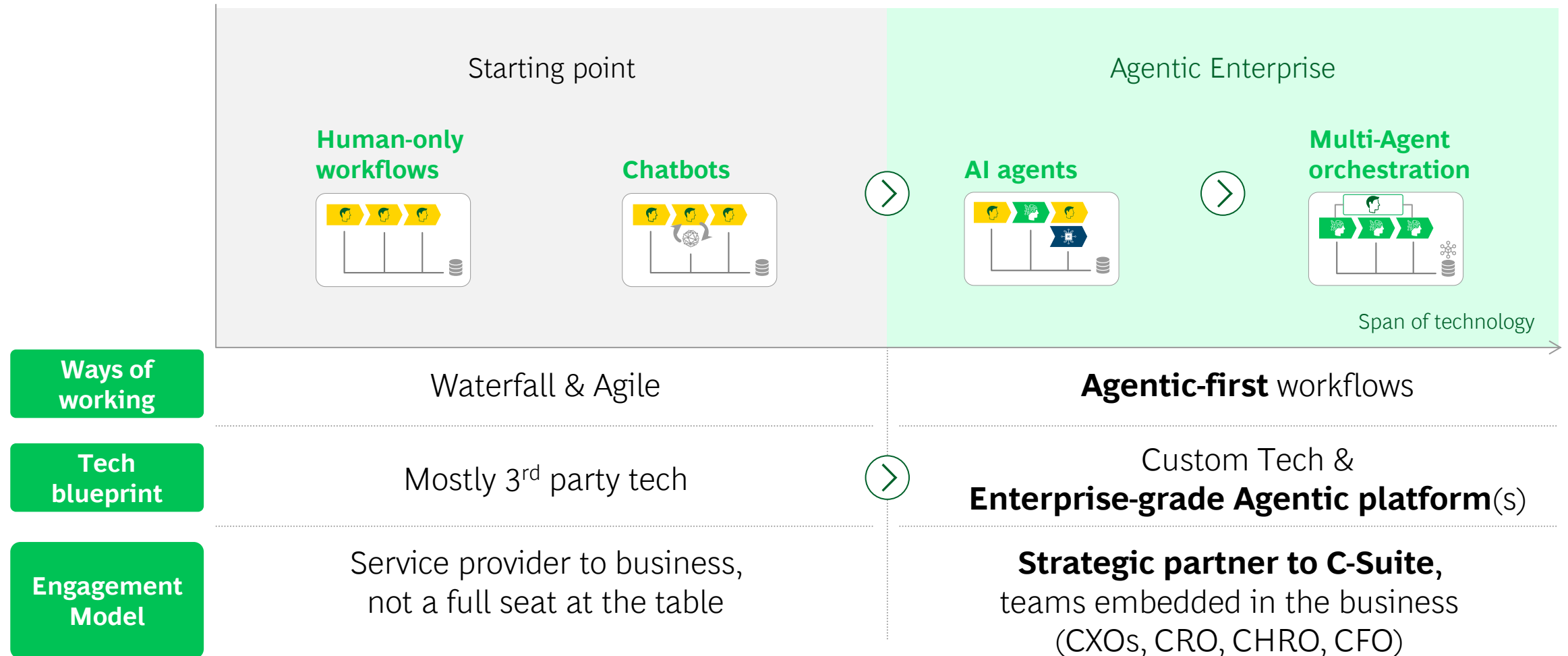
- ① Lead by example through **faster, more effective AI/tech function processes (including agentic PDLC, IT ops, and tech sourcing)** to serve as a proof point and unlock efficiencies that can fund the journey
- ② **Architect an enterprise-wide AI platform** that enables all teams to build or operate secure, scalable AI workflows

New roles for the AI/tech function

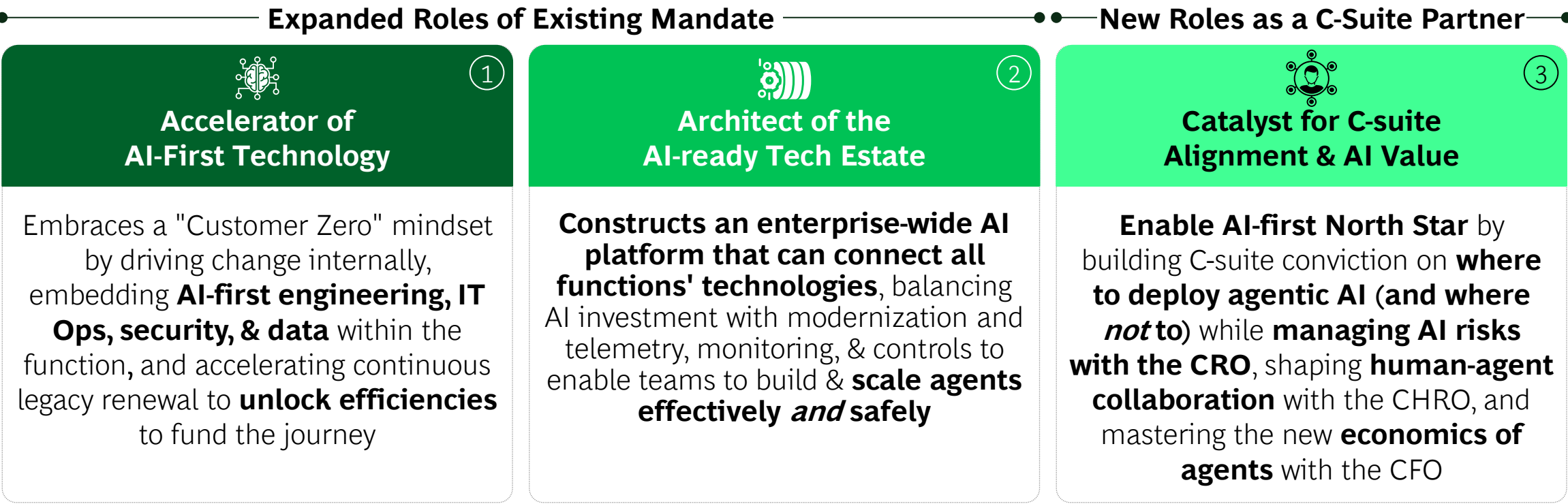
- ③ **But the role of the AI/tech function is also evolving, requiring it to shift from service provider to a true strategic partner for the C-suite:**
 - Enabling an **AI-first North Star** by spearheading conversations with **CXOs on where agentic AI wins**
 - **Protecting against new AI risks**, screening new tool/data requests and **enforcing guardrails in production**
 - Shaping **human-agent collaboration with the CHRO** and supporting organization-wide **AI upskilling**
 - Mastering the new **economics of agents with the CFO**, providing telemetry mechanisms for value

CEOs need to ensure their AI/tech functions are equipped with the relevant skills and plans to meet this moment in order to capture value from AI their competitors can't

Context | Agents are fundamentally shifting the role of the AI/Tech function's core mandate and expanding its engagement with the C-Suite



The AI/Tech function must now focus on three pillars – each closing a critical gap the traditional mandate was never designed to address



Ambitions for, and impact of agentic transformations seen at our clients¹

2-5x Faster tech delivery cycles ¹	30-70% Tech function productivity unlock ¹	5-10% EBITDA uplift for front office productivity ²
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1. Clients typically see 1-2x faster delivery and 30% productivity unlock organization-wide, with power teams reaching 3-5x uplift and up to 70% productivity unlock 2. E.g., AI in Marketing, Sales

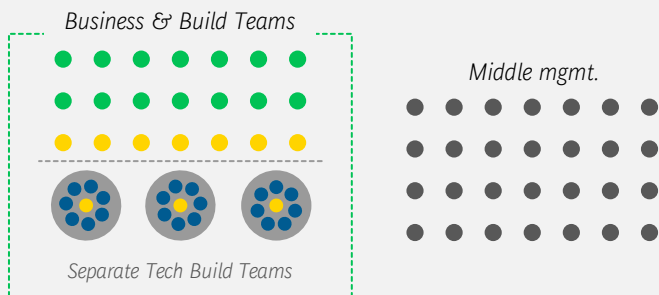
AI/Tech function must lead the AI-first transformation internally, reshaping its build & run functions, team structures, and operating model

Current function:

Support role that receives business requirements with limited input on prioritization

Manage large backlogs of build & run priorities

Little influence in AI conversations



Future state:

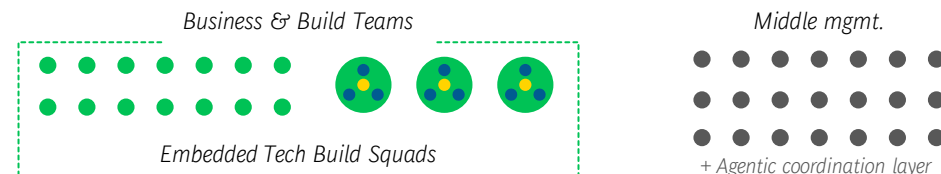
Build proprietary software: AI-assisted PDLC with agents accelerating design, coding, & deployment and migration & refactoring of legacy code

Transform 3P software: Agentic migration & management of 3P SaaS

Run & KTLO: Productizing, aligning teams to product portfolios for better scalability with AI; **Self-service** (e.g., automated provisioning) & infra agents for standardized services

Team structure: Smaller, focused tech teams embedded within the business for rapid deployment & better coordination; **Insourcing work** to retain AI-upskilled talent & see return on tool investment

Operating model: Business drives prioritization directly with **embedded tech teams; leaner management layers** with larger spans of control, aided by agentic coordination

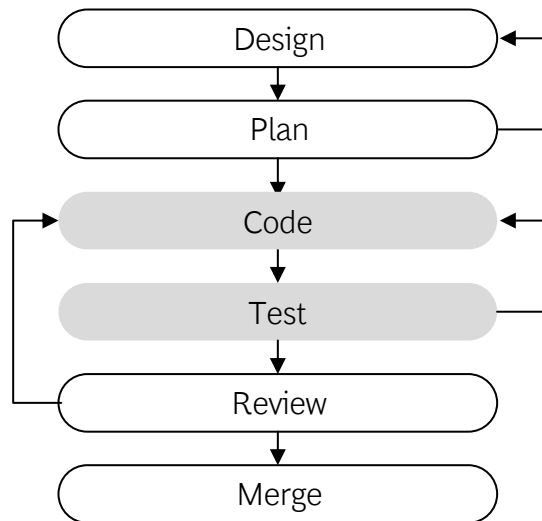


Build proprietary software | Leading companies are already moving from AI-assisted coding to full agent factories to unlock productivity gains

Today

AI-assisted PDLC

Humans assisted by AI to complete work



Human as the author

Months per feature

North Star

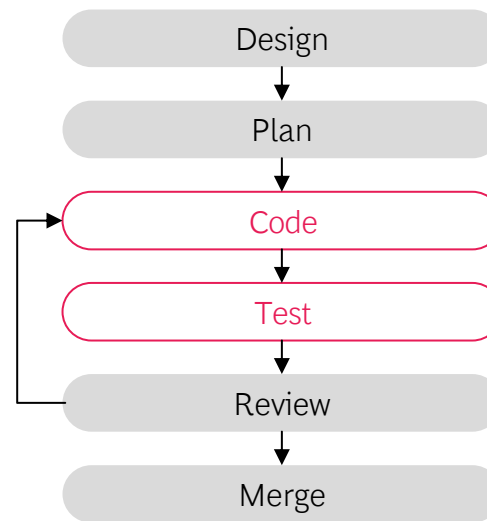
PATH 1: ENABLEMENT FOR ALL



PATH 2: EXPERIMENT IN SELECT PROJECTS

AI-driven PDLC

Humans supervising AI that executes software delivery

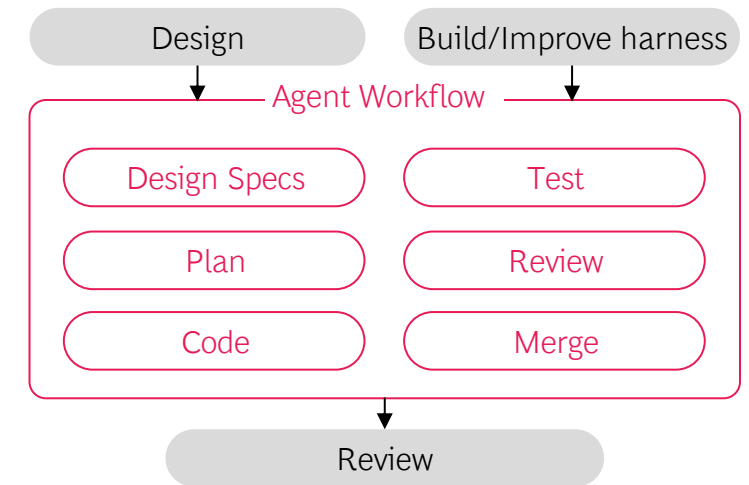


Human as the orchestrator

Days or weeks per feature

Agent factories

Humans managing AI agents that create and optimize end-to-end value



Human as the agent builder & supervisor

Hours per feature

Human

Human & Agents

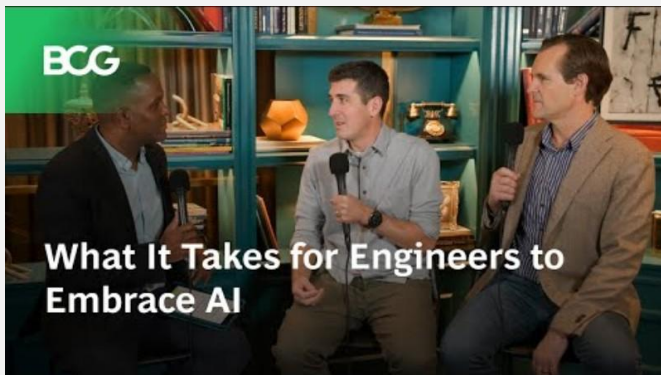
Agents

Build proprietary software | BCG helped drive 100%+ productivity at a large tech hyperscaler through AI adoption sprints



Case Study: Driving 100%+ productivity at large tech hyperscaler

Reference video: Matt Yanchyshyn of AWS on what it takes engineers to embrace AI



Source: BCG case experience

Context

- ~1,000 person engineering org
- Jun'25: High AI adoption rate 80%+ AI weekly users
- Jun'25: Goal to 2X productivity, but minimal uplift to date (~10%)

Approach & Impact

Facilitated **tailored 6-week adoption sprints** – focused on techniques & behaviors to sustain GenAI ways of working, especially improving adoption quality across:

- **Depth:** From unit tests only to E2E feature development procedure, class, & dependency
- **Breadth:** From coding only to full SDLC
- **Reuse:** From using agents to building in re-usable skills

Pursued a holistic approach across Adoption, Tooling, Metrics, & workforce activation

Delivered demonstratable value proof of **~100%+ productivity uplift**, with a 10x increase in “power” users (5 -> 50%)

Build proprietary software | BCG helped drive 5x productivity with agentic software factory harness to modernize legacy stack



Case Study: Driving 5x productivity growth at large tech hyperscaler



Source: BCG case experience

Context

- **Two business-critical legacy stacks** (JBoss EAP and Sybase) at the heart of operations
- **Years of manual migration** with traditional tooling, limited progress on the modernization roadmap
- Ambition to migrate apps and databases to a **modern, cloud-ready stack** while preserving functional equivalence

Approach & Impact

Established AI-powered migration factory integrated into CI/CD, running legacy migration E2E across the full SDLC in three stages:

- **Analyze:** Parse legacy code deterministically into graph of every table, procedure, class, and dependency
- **Target Design:** Set migration strategy, roadmap, target architecture
- **Migrate and Execute:** Generate code, run equivalence and integration tests, verify behavioral parity, deploy via CI/CD

Migrated four applications and over 30,000 lines of code to modern, cloud-ready stack

Built full dependency **graph of over 5,000 stored procedures**, mapping replacement APIs across tightly coupled applications

Delivered 5x productivity gain, completing 350 person-day estimate in four weeks

Build 3P software | BCG helped drive \$300M+ P&L impact & 90% reduction in the number of process & systems through an AI-first ERP transformation



Case Study: Achieved 90% reduction in number of key ERP processes & legacy systems¹ for a top-10 healthcare org

Context

- **1k+ inconsistent processes & 20+ legacy ERP systems** within a top-10 healthcare org
- Many different templates and local customizations across 20+ manufacturing sites and 40+ countries

Approach & Impact

BCG led the organization in an AI-first ERP transformation, focusing on 5 pillars:

- **Drove deep education of ERP capabilities** and ownership of value
- Built a business owned, **executive-committee approved value case** centered on P&L impact, inventory reduction, and revenue protection
- **Established rigorous program management across 30+ leaders** to drive cross-functional alignment, problem solving, and accountability & efficiency
- Drove productivity with an **E2E AI-first program delivery** across all phases
- Reduced transformation costs using **AI to streamline deployment schedule and resource optimization**

Reduced the number of **processes & legacy ERP systems by 90%**, drove **\$300M+ P&L impact, \$1B+ revenue protection**, and achieved **30% transformation cost savings**

¹1k+ processes reduced to 96, 20+ systems reduced to 3
Source: BCG case experience

Run & KTLO (Tech Sourcing) | AI/Tech organizations must streamline their IT sourcing with AI tools across 4 major steps of the sourcing process

To reduce manual efforts in sourcing, deploy AI across 4 main workflows

RFI/RFP Analysis



RFI/RFP Process

Enhance sourcing with AI-driven vendor evaluation

RFI/RFP response scoring:

AI-powered analysis, evaluation and scoring of vendor responses based on pre-defined criteria

Proposal and vendor comparison:

Data-driven selection based on multi-dimensional comparison across business and tech factors

Contract Analysis



Contract Transparency

Full visibility into contractual terms & obligations

Automated ingestion:

AI extracts & summarizes key contract terms (e.g., SLAs, shoring model, scope of services)

Question-based extraction:

Targets specific data points (e.g., uptime level, fee escalation) to ensure structured, comparable insights



Best Practices Comparison

Comparative contract analysis against market standards

Best practice comparison:

Evaluates contract terms against predefined best-practice libraries (e.g., SLAs, productivity commitments)

Peer & market alignment:

Benchmarks service levels, and contractual terms against industry averages and client peers to flag deviations



Recommendations & Savings Potential

Insights for cost optimization potential opportunities

Cost optimization levers:

Provides actionable recommendations to improve contract quality with suggested saving potentials

Risk mitigation actions:

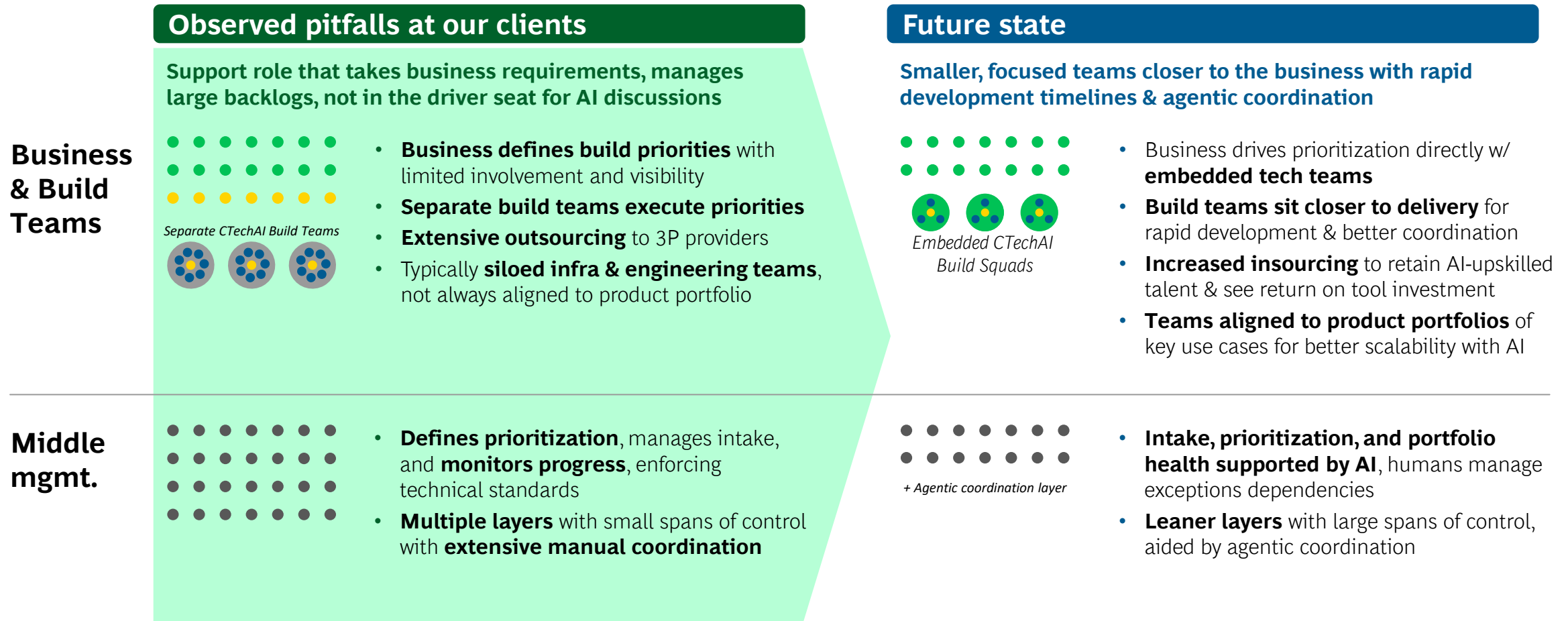
Suggests changes to strengthen contractual protections, e.g., adjusting SLA penalties, or optimizing shoring model

Demonstrated Impact:¹

BCG's Agent-based tool has helped leading tech organizations...

- Reduce manual assessment time **up to 80% from 2-4 weeks to 2-4 days**
- Surface potential IT **cost savings of 15-35%**

Team structure & operating model | Function should reorganize, embedding teams with business partners & reducing layers



AI/Tech function must architect an enterprise-grade AI/Agent platform that can connect technologies across all functions

Why build an Agent & AI Platform?

- Leaders today need to focus on **delivering value today** with helpful, narrow agents while **laying the foundation for their evolution** into capable, autonomous assistants
- 75% of technology leaders fear “silent failure”¹; leaders ask **how to keep AI value-focused, under control, and how to scale beyond one use case**
- **Agent & AI platforms provide the future-ready foundation** required for sustainable AI enablement with **scalable, safe adoption** across functions
- More companies are shifting toward **platform thinking**, balancing market solutions and customization



Success factors for an Agent & AI Platform

Vendor neutrality: Partner with a few players to benefit from innovation and maintain neutrality & adaptability to global vendors

At scale capabilities: Ensure coverage across key capabilities:

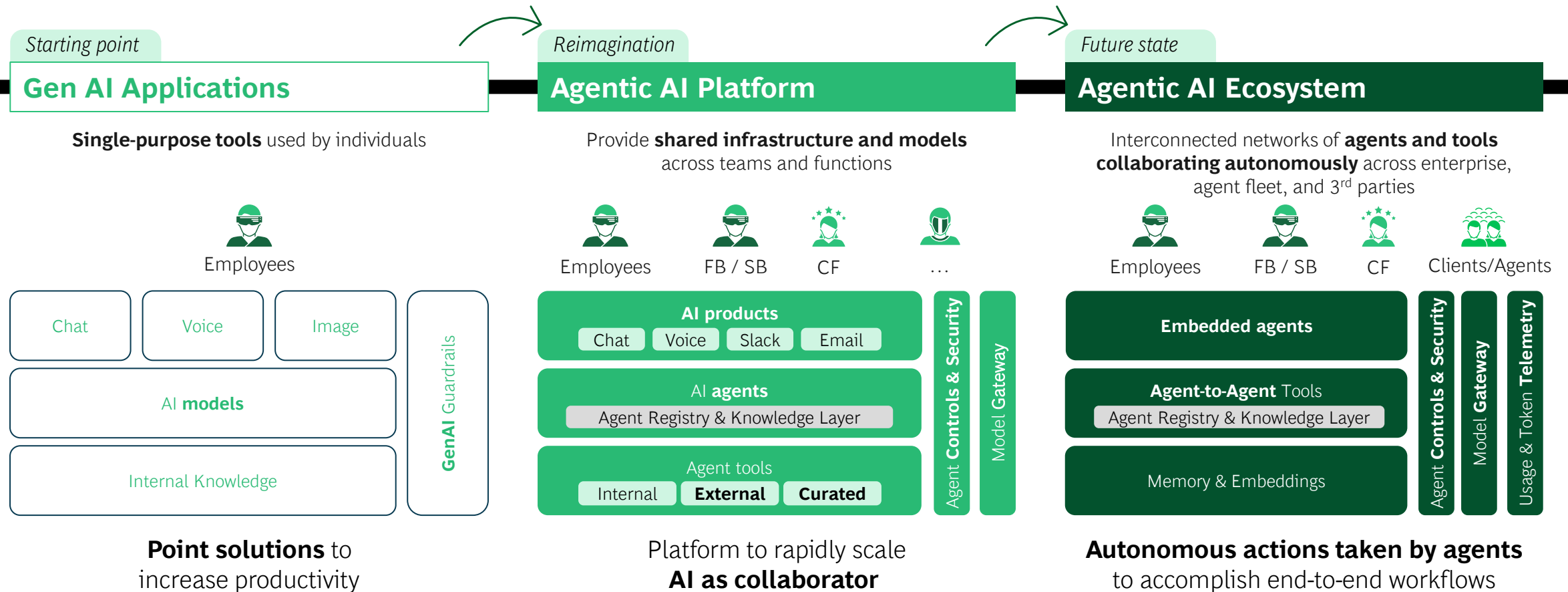
- **Cost control** via agentic gateway & governance to manage access & model selection
- **Agent/tool registry** and **agent orchestration** to effectively manage multi-agent ecosystems
- **Long term memory for agents** to ensure they maintain context & learnings over time
- **AI-powered security** (e.g., AI SOC triage) to prevent AI-enabled attacks

Data foundation: Establish a comprehensive data layer, securing diverse & multi-modal datasets; enforce privacy, security, & ownership

AI/Tech platform teams: Increase gearing ratios with engineers leveraging AI coding tools & agents

AI/Tech function must guide enterprise along 3-stage maturity journey to grow platform from portfolio of apps to a full agentic ecosystem

Scaling Agents Without
Creating Your Next
Tech Legacy



Effective agentic AI ecosystems require an enhanced platform data & knowledge layer (e.g., agentic data access & brokering layer, context & semantic enrichment capabilities, metadata management, real-time integrations, RAG support)

AI/Tech function's role will expand to become a strategic partner for the C-Suite to enable an effective AI-first transformation



Currently, AI/Tech org. often has limited C-Suite engagement

Lacks strategic engagement with other organizations and leaders

- **Reactive engagement:** perceived as service provider for rest of organization, largely outside the business
- **Outside Ex-Comm:** CIOs often do not receive a seat at the table for strategic conversations
- **Limited influence:** Other CXOs view AI/Tech function as gatekeeper for AI & IT tools



AI/Tech function must become a strategic partner to the C-Suite, working with CXOs to drive the enterprise's AI-first transformation



AI/Tech

Drive AI-first practices for tech workflows
Own enterprise-wide agentic platform enabling transformation

With the CEO...

Collaborate to define the enterprise's AI-first North Star

With CXOs...

Show art of the possible on where agentic AI wins *(and where it doesn't)*
Support reshape of functions to deliver on the CEO's North-Star

With CHRO...

Define human-agent engagement model, AI upskilling & hiring strategy
Establish agent evaluation and on/offboarding frameworks

With CFO...

Build mechanisms to track agent & token costs and associated value
Create framework for efficient AI use to mitigate avoidable token spending

Deep dive on following slides

With the CRO...

Act as defender against AI-enabled threats

CIOs/CTOs must partner with the CRO/CISO and business to secure their AI tools and processes against increasing vulnerabilities

89%

of organizations reported experiencing AI-enabled attacks; including **35% with significant operation or financial impact**

Rise of AI-enabled threats

AI is part of the hacker toolkit, making attacks faster, easier to scale, and more frequent

80%

Organizations rely **on incomplete AI threat intelligence**, and cannot identify what an AI-powered phishing attack would look like in their own systems

Partnership loop between tech & business to address threats

Security for AI

Build security into all tech & AI processes

25

Average number of incidents per organization in the last year of leakage of sensitive data through GenAI tools

1

Median number of AI security controls implemented, but those who have implemented 7+ report meaningful impact in mitigating threats

Builders

AI applications & technologies are **creating new cyber & data privacy risks**, significantly expanding the digital attack surface

Defenders

To keep up with evolving threats and a growing attack surface, organizations are **adopting AI-powered cybersecurity capabilities**

AI for Security

Ensure the organization is prepared for secure AI-use

59%

Plan to adopt AI-powered SOC triage (Tier-1/2 operations) in 2026; fully autonomous SOC at least 3-5+ years away

33%

Practitioners comfortable with GenAI powered security tools – 44% are waiting for stronger AI governance and clearer vendor value before moving forward

Effective AI/Tech functions must collaborate with CHROs to enable the enterprise's agentic workforce strategy

Evolution of the future of work



AI agents as digital collaborators, autonomously executing tasks and collaborating across systems



Agent proliferation creates new enterprise management issues, requiring additional monitoring & controls



Rethinking skills, changing how and where companies source talent



Companies redesigning as AI-first, embedding AI at the core of processes, structures, and value creation

Areas of collaboration for AI/Tech function and CHRO

Embed with the business to redefine work & rewire processes to incorporate **autonomous agents**

Establish controls to monitor agent use as number of agents grows

Provide input on skills for updated entry-level roles and career paths

Provide bridge to key ecosystem vendors & share function's **approach to AI upskilling** to drive org-wide AI adoption

Help define culture and capability shifts to support AI-integrated operations

Provide input on **credential criteria** for enterprise-wide AI **readiness assessments**

Create **agent evaluation framework** to assess performance and **agent onboard & offboarding processes**

AI/Tech must work with CFO to build synthetic P&L governance, helping direct human & agent capacity toward efficiency gains & value



Four items to partner with the CFO on:

AI/Tech and CFO functions must master new economics of agents & AI

- **Transparency**

Tracking mechanisms for agentic costs, productivity, and outcomes

- **Predictability**

Helping forecast token spend across organizations

- **Proper attribution**

Ensuring agentic costs are categorized effectively into OpEx vs. CapEX vs. COGS

- **Optimization**

Creating more efficient workflows



Govern AI spend as a value portfolio

Synthetic P&L links human-agent cost, output, & value across three cost types



- **Opex: Run internal workflows**

Lowers per unit cost, raises throughput, improves operations predictability



- **Capex: Build new capabilities & growth areas**

Improves business-side KPIs, reduces FTE need, creates new revenue streams



- **COGS: Power customer-facing AI**

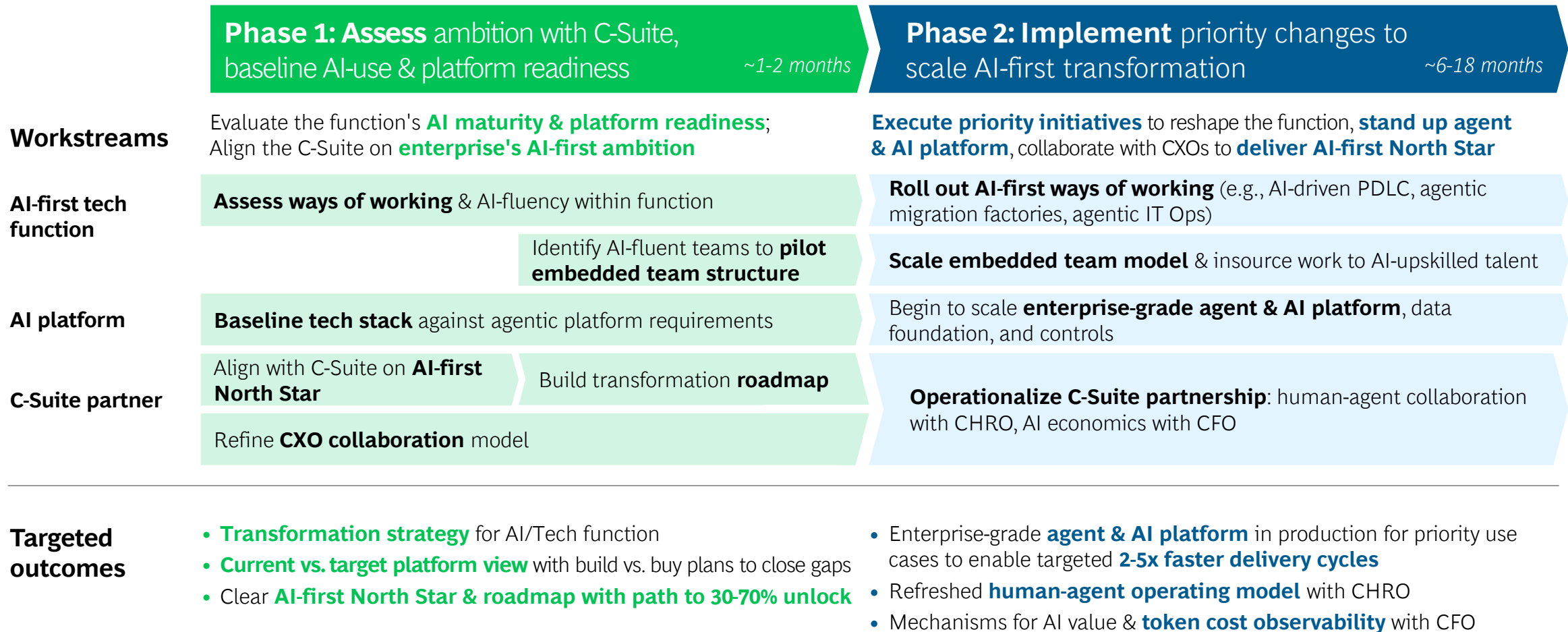
Enables products shipped to customers

AI/Tech & CFO should pull five levers to exercise intelligent control over token spending and returns

- 1 Stop or minimize**
Prevent avoidable spending
**Push work out of AI models.** Revisit **low-ROI workflows** and eliminate unnecessary agentic loops. **Deterministic problems** (e.g., structured lookups, routing, and calculations) are solved more cheaply, faster, and reliably by code and APIs than by AI.
- 2 Route**
Pick the right workhorse
**Match each task** to the **right level of intelligence** rather than the strongest model. Use **frontier models** only where frontier reasoning changes the outcome; self-host only when usage is steady and high. **Cap session length and budget reasoning tokens.** Let the system auto-route where it can.
- 3 Cache**
Ask the right questions
**Reusable context**, such as system prompts, policies, knowledge bases, and standards, can be **cached** and read back at a steep discount on major platforms such as **Anthropic** and **OpenAI**, which creates big savings for cached input.
- 4 Govern**
Apply the right controls
**Assign every material workflow an owner, outcome, P&L line, and decision threshold.** Re-architect agent flows to **share workspaces and pass goals, not full logs.** Batch non-urgent work and **buy at the right rate.**
- 5 Train**
Increase AI literacy
**Train employees to understand what model to use, when to cache, and what outcome they are targeting,** driving rapid adoption. Reward **outcomes, not tokens burned**, and set a **budget per workflow** to measure cost per outcome.

Typical companies can drive ~40% token cost savings over 12 months through improved token management

Approach | AI transformation journey will take place over multiple phases



Next steps | CEOs must assess if their AI/Tech function is ready for an AI-transformation and take immediate steps to start the journey

5 key questions to bring to your AI/Tech function leader

- 1 **Function transformation:** What **use cases** have you put in place for AI-first ways of working in your own function? (e.g., L0/L1 ticket agent, PDLC, ...) What is the **measurable impact to date**?
- 2 **Platform vision:** What is the **concrete roadmap to build or buy** the necessary components of our Agent & AI platform? How are we **preventing vendor lock-in**?
- 3 **CXO partnership:** Are **tech and business teams embedded** enough to deliver their AI use cases? What **measurement mechanisms** are in place? **Controls**?
- 4 **Agent collaboration:** Have you collaborated with HR on their **design of human-agent teams**? What is the **upskilling strategy** for our key AI tools?
- 5 **Financial expertise:** Have you built a **central dashboard & model gateways for AI tooling** costs? How should tool spend map to business cases?

BCG experts | Key contacts for AI and the Future of CIOs/CTOs

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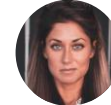
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