

The GenAI Productivity Paradox

A new solution for chief supply chain officers

Introduction

Despite all the hype versus substance debates surrounding generative AI (GenAI) — with many concluding that GenAI isn't always living up to the hype — it's shockingly prevalent across the supply chain.

- At the end of 2023, 80% of chief supply chain officers (CSCOs) told us they were planning on deploying GenAI in the next year.¹ Fast forward, almost 12 months later — 72% of them did.²
- The average supply chain budget allocated to GenAI in 2024 was 5.8%¹ — an 80% increase from 2023.²

Given the focus and sizable spend on GenAI, what's the ROI?

ROI is a widely used, yet often misunderstood, metric. Its accuracy depends on which stakeholders you're considering, the time horizon of the evaluation, the domain you're evaluating and so forth. And, at a certain point, sometimes ROI can be a positive or negative coin toss depending on who is holding the coin.

CSCOs are overindexed on a narrow subset of ROI metrics from GenAI (specifically productivity from desk-based individuals primarily sitting in corporate or regional headquarters) and potentially missing the broader ROI picture. The result is what Gartner calls the "GenAI Productivity Paradox."

Defining the GenAI productivity paradox in supply chain

The typical supply chain individual contributor uses an average of 3.6 GenAI tools in their daily job spread across a wide range of use cases, including quantitative information analysis, chatbots and virtual assistants, and content generation.²

So, with this breadth of use and diversity of use cases, what benefits are organizations seeking from GenAI?

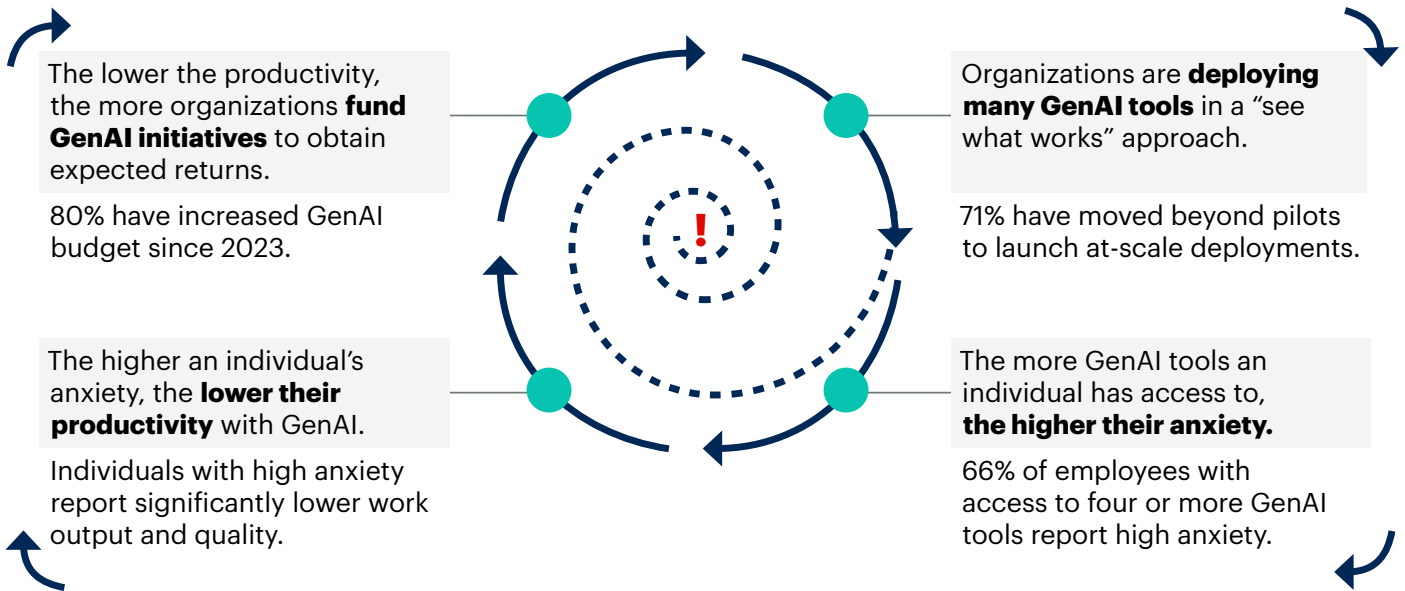
For CSCOs, the No. 1 benefit sought is productivity,² and while the broad definition of productivity is consistent — the ratio of outputs to inputs — the specific value and definition can vary widely depending on whose perspective is being considered.

In the CSCO view, productivity is time and time is money. In fact, GenAI does save individual desk-based workers 4.11 hours of time weekly.²

But it also harms productivity from the perspective of teams, frontline workers, the employee experience and the anxiety they have.

- **Productivity results evaporate at the team level:** Team time savings from GenAI decline by 63% when aggregated. Team managers are more than 10% less likely to see improvements in output, and fewer than half of team managers agree that GenAI is improving their teams’ work quality.²
- **Your workforce is more than just the desk-based worker:** Many organizations are successfully deploying GenAI at the frontline for better access to information, assistance and direction with real-time job tasks, and a host of other activities, particularly when the use cases move beyond text-based use cases. The problem is that GenAI productivity impacts for frontline workers — the largest part of the supply chain workforce — underperform the GenAI productivity impacts for desk-based workers.
- **More GenAI creates more anxiety (which creates less productivity):** Most have probably encountered the narrative in headlines (or even just through water cooler talk) that GenAI can be a job killer, and thus exists a “GenAI-anxiety doom spiral,” as depicted in Figure 1.

Figure 1. The GenAI-anxiety doom spiral



n varies from 55 to 265

Q: Anxiety = average of five questions assessing anxiety over GenAI replacing one’s job or one’s co-workers’ jobs and an intent to leave the organization.

Q: How many different, stand-alone GenAI tools have you personally used in your position?

Q: Thinking about your typical amount of work output, please indicate the impact of the GenAI tools/deployments on your overall output amount?

Q: Thinking about your typical work output, please indicate the impact of the GenAI tools/deployments on the quality of your work?

Q: Was your 2024 supply chain functional budget allocated for GenAI an increase or decrease from the 2023 budget?

Source: 2024 Gartner GenAI and AI in Supply Chain Survey

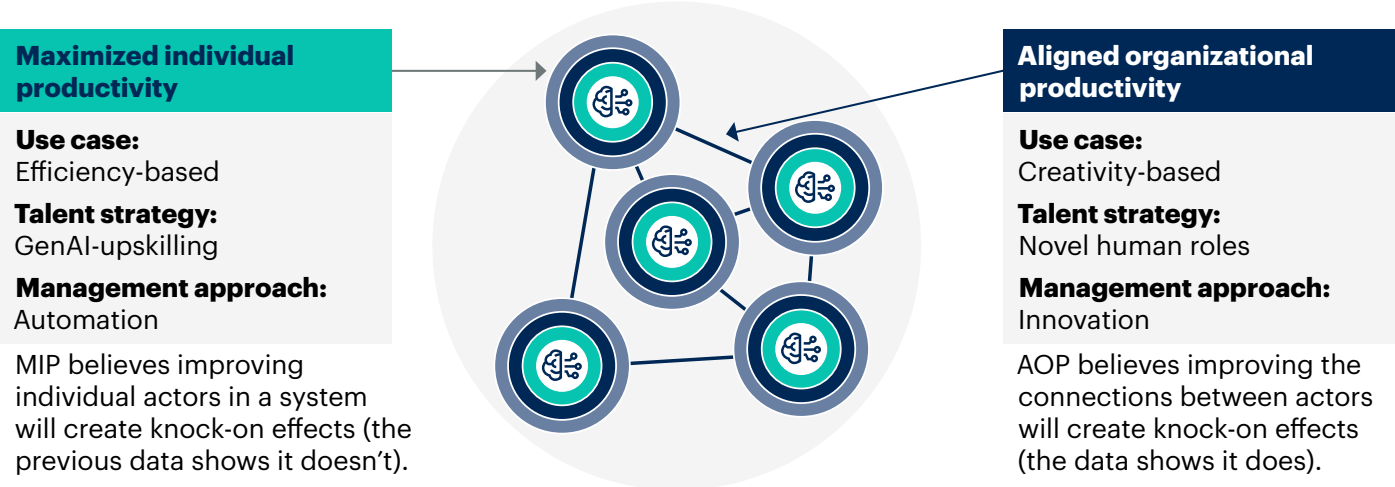
Solving the GenAI productivity paradox in supply chain

To solve the GenAI productivity paradox, Gartner recommends that CSCOs shift away from the traditional approach of maximized individual productivity (MIP) and toward a new approach we call aligned organizational productivity (AOP).

As depicted in Figure 2, AOP is characterized by these elements:

- Use case — Identify use cases that will make individuals more creative.
- Talent strategy — Create novel human roles oriented around using GenAI.
- Management approach — Measure innovation and manage the employee experience.

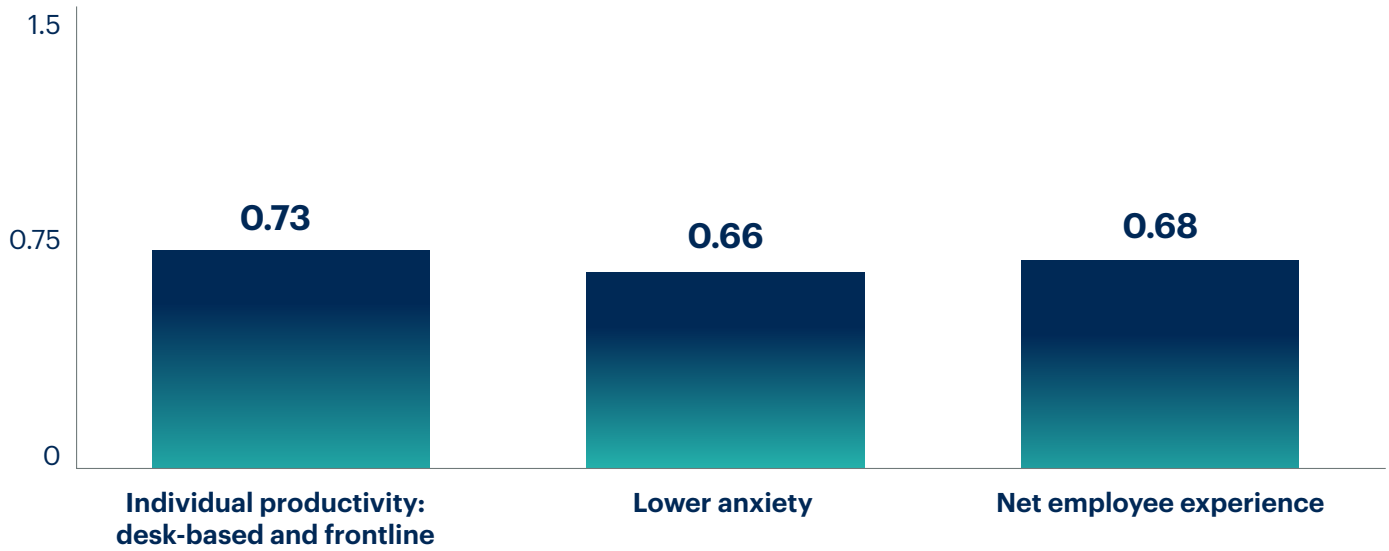
Figure 2. Aligned organizational productivity distinction



Source: Gartner

AOP meaningfully predicts improvements in key outcomes, as shown in Figure 3: individual productivity (both desk-based and frontline), lower anxiety and net employee experience.

Figure 3. Meaningful improvements from aligned organizational productivity



n varies from 77 to 163

Source: 2024 Gartner GenAI and AI in Supply Chain Survey

Note: Beta weights represent amount of improvements on a 1-7 scale; Individual productivity = combination of time saved, quality of work and work output; Anxiety = average of five questions assessing anxiety over GenAI replacing one's job or one's co-workers' jobs and an intent to leave the organization; Net employee experience = security (average of three questions assessing trust and confidence in leadership) - anxiety.

¹Gartner Generative AI 2024 Planning Survey

²2024 Gartner GenAI and AI in Supply Chain Survey

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