



CAMO

HKU Centre for AI,
Management and Organization

March 2026

Deloitte-HKU Lab for Organizational Transformation

Perspective: The Great Compression

Most executives see AI as an efficiency tool: higher productivity, fewer headcounts. They miss the bigger prize. AI is the Great Compressor: it enables scaling but requires organizational redesign.

A century ago, Henry Ford's assembly line compressed physical skills. The gap between a master craftsman and a novice became irrelevant. Tasks became uniform. Uniform tasks can be standardized. And standardized tasks can be scaled.

AI does the same to cognitive work. It compresses knowledge workers' skills, making routine cognitive output uniform. Scheduling, record keeping, and inventory planning—tasks once dependent on individual expertise—now yield consistent results regardless of who holds the job.

The first implication of the Great Compression is direct. Uniform cognitive tasks can be standardized by handing them to AI entirely, and standardized tasks can be scaled. This is the obvious win.

But the second implication is where the real prize lies. Most jobs bundle uniform tasks with messy human ones: motivating a team, handling an angry customer, and making a judgment call under ambiguity. When AI takes over the uniform tasks, it frees up time. But if no additional changes are made, you gain nothing but idle capacity. Human workers finish early, take more cigarette breaks, and coast.

To capture the full gain of AI, redesign your organization. Consider a fast-food restaurant manager. If AI handles scheduling and inventory, their core work now takes two hours instead of eight. What do you do with the remaining six? The answer: expand the management radius. Let that manager run three stores. Or five.

This breaks a deeply held assumption: one manager, one store. But that assumption was never a law. It was a constraint imposed by scarce cognitive capacity. AI has removed the constraint. It is time to remove the assumption.



Jin Li

Director, HKU Centre for AI, Management and Organization
Area Head and Professor, Management and Strategy Area
Zhang Yonghong Professor in Economics and Strategy
HKU Business School