

Trend topic: **People readiness**

By



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Akira Sakakibara assumed the role of CTO at Panasonic Connect in 2021, following its predecessor organization, Panasonic Corporation's Connected Solutions Company. In April 2026, he was appointed Panasonic's first Group CAIO. In this capacity, he leads the group's AI strategy and oversees enterprise-wide AI implementation aimed at addressing customer challenges and improving internal operational efficiency. He began his career as a systems engineer working on account processing systems for major banks and later participated in a range of development projects across manufacturing industries including automotive and steel.

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# The power of “abstraction” in the AI era

**Executives must advance AI despite low readiness. By abstracting work to redesign processes and embedding governance from the start, leaders can scale AI and build lasting competitive advantage.**

According to Kyndryl's People Readiness Report 2026, only 26% of leaders say their organization is ready to successfully leverage AI. At the same time, 79% of leaders agree that the speed of AI adoption will outpace their organization's ability to adapt its workforce, governance and operating model.

What is clear is that organizations today cannot afford to pause their AI strategies until they feel fully 'ready'. Readiness is not a prerequisite for progress; it is built through the work itself. And I believe introducing 'abstraction' as a strategic business process is key here.

## **Abstraction: Reimagining how we work**

To clarify, by abstraction, I am referring to the computer science term for removing the superficial layers such as tasks or roles, in order to get to the underlying structure. The goal of this process is to create an opportunity to reimagine how businesses can work – and therefore develop an

environment better suited to successfully implementing diverse AI strategies.

Let me bring this idea to life: In order to improve AI literacy, Panasonic Connect has established “Connect AI,” a system that switches between LLMs like GPT, Gemini, and Claude, prepares prompt templates, and connects to quality manuals, research and development APIs, and more. Departments such as legal, public relations, marketing, and others are actively using it, and we now have fertile ground for experimentation. Employee AI literacy has improved compared to before. Through the introduction of Connect AI, we have reduced business hours by 448,000 annually.

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But the adoption of AI to save hours through automation is not the full story. In many cases, on-site teams try to replace their jobs directly with agents. But this only extends to how far software can automate routine tasks. What is truly necessary is to question whether these screens, approval processes, or even the data itself are still needed in a world where AI agents and generative AI are part of the workflow. This is where “abstraction” truly becomes key. Abstraction is not about determining how to automate existing tasks as they are, but actually reconsidering what those tasks could mean if we look beyond their surface to see the underlying structure.. A helpful way to do this is to view work through the lens of modeling, particularly as we

shift toward processes designed for AI agents. For example, in past system design, DFDs (Data Flow Diagram - diagramming input, processing, output, and data flows) and logical/physical model concepts are worth reevaluating as methodologies for this. DFD is a method that emerged in the United States in the mid-1970s as part of structured analysis. It was widely used in systems analysis and design to generalize and visualize the flow of work and information, helping practitioners represent complex processes in terms of inputs, transformations, outputs, and data flows. By drawing a DFD to grasp the current flow of work and information, we can then model the process step by step through the following three stages:

1. **Current Physical Model:** Visualize how the business actually operates now – steps and mechanisms (which screen is used for input, which forms are viewed, who approves).
2. **Current Logical Model:** Abstract the process from the business, removing roles and channels (“Person A sends an application via email, Person B checks it in Excel, Department Head C stamps it, and it is re-entered into System X,” becomes “Receive application → Verify validity → Approve → Record”).
3. **New Logical Model:** Visualize what the business should become with new elements like new technology. Where could AI agents come in the ‘abstracted’ process of “Receive application → Verify validity → Approve → Record”?

Manual modeling is very labor-intensive, which is why it fell out of use. But in the AI era, we can automate and execute this work. Through this method of abstraction, we can see the essence behind the immediate tasks and processes. As a result, instead of improvements based on existing practices, we gain an opportunity to see how to redesign the structure itself. It is in this redesigned environment that I want employees to actively use AI: try various things, and if an effective agent emerges, share it within the group. Organizational readiness grows in this way and so therefore does people readiness.



## AI design specific to manufacturing

As a group centered on manufacturing, the concept of abstraction becomes concrete very quickly. AI, within our context, is not confined to digital workflows, documents or office processes. It moves into physical environments, where machines must interpret visual information, act safely and adapt to real-world variation. This is what is often described as physical AI, and it is a field that is advancing rapidly. For the moment, much of its development is being driven by general-purpose robots trained in digital environments based on data and video captured from real-world sites. Through this process, they learn motions and tasks before being deployed in the field. At Panasonic, we are working on approaches like VLA (Vision-Language-Action model that integrates visual and language information to understand a situation and translate that understanding into robotic action), which provides massive video data to teach robots box packing. However, human tasks involve countless variations. Unless a model can build on what it has learned, generalize by analogy, and continue learning iteratively, it cannot cope with such complexity. Existing methods have clear limits in dealing with the wide range of variations and unexpected situations found in real-world settings.

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In my current position, I want to fundamentally change manufacturing. Pursuing the centralized model of hyperscalers or big tech is not realistic for Japanese manufacturing. The biggest hint is on-site. By orchestrating specialized AI with on-site data and know-how, we can improve the whole operation without increasing investment or risk. And how to formalize the skilled craftsmanship of on-site workers and teach it – this is the market's greatest challenge.

AI alone cannot solve all problems. Today's generative AI and deep learning systems are inherently probabilistic in nature. They generate outputs by estimating the most likely response based on patterns learned from large volumes of data, rather than by deterministically deriving a single correct answer. This means they cannot guarantee 100 percent accuracy at all times. It is therefore essential to consider how to include complementary systems or human roles as part of the system. The engineering knowledge accumulated in manufacturing so far provides guidance here. On-site, there are already various methods for managing quality and risk, such as FMEA (Failure Modes and Effects Analysis) for failure analysis, which is an excellent methodology for systematically grasping what problems may occur in which processes. Combining such practices for prediction and judgment with AI's probabilistic learning capabilities allows us to build more realistic and reliable systems.

What is needed is a perspective on how to design holistically. And the key to that is abstraction. By recapturing the essential structure of business, we can see the optimal relationship between AI, humans and existing practices. This design will become the source of competitiveness in the AI era. —