

Today's leaders need to focus on defining problems, not solving them

Are we preparing our workforce for what AI can do, or for what AI cannot do? BY CHAI KAH HIN

PROBLEM-SOLVING skills are often rated as one of the most important skills that employers seek in recruitment and talent development. How has this changed in an artificial intelligence (AI)-enabled world?

Generative AI does not render problem-solving obsolete. Instead, it shifts the emphasis to the importance of human intelligence in solving problems, moving the focus from producing answers to framing the right questions.

Where we previously spent much of our effort gathering, analysing and understanding data before suggesting solutions, the focus now shifts to sensing, framing and defining problems, and assessing and judging solutions. Problem-solving generally involves several stages: defining the problem, generating solutions, selecting the best option and implementing it. Traditionally, organisations invested significant resources in the middle stages: collecting data, analysing information and developing recommendations.

Generative AI has fundamentally transformed this equation. Nowadays, anyone can prompt a large language model and receive many credible solutions in less than a minute.

The new economics of problem-solving

The gap between an expert's advice and a novice's AI-assisted suggestions has significantly narrowed. In fields such as science, researchers have confirmed that AI models can accelerate new research, assisting idea generation, literature searches and even proposing solutions to open problems.

Six months ago, I completed an online course to learn prompt engineering, convinced it would be an essential skill for the future. Recently, I realised that the latest AI versions now guide users to prompt more effectively. What I spent weeks learning is already being automated. Prompting will become so intuitive that it will no longer be a differentiating factor.

The implications are stark: If solution generation is becoming commoditised, then the differentiating skills must come from elsewhere.

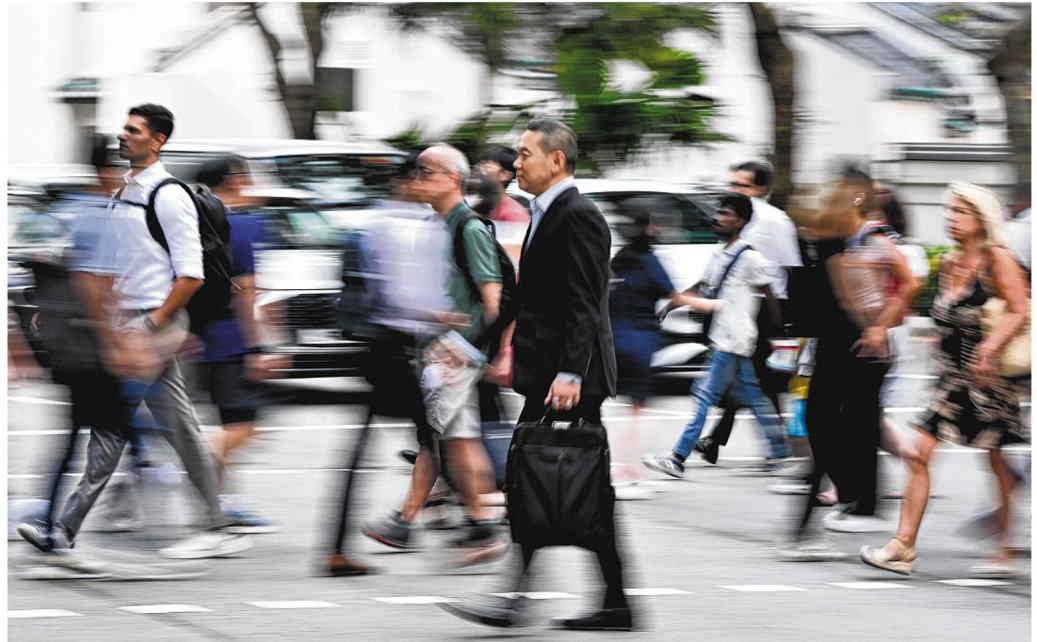
While AI supercharges solution generation, it remains fundamentally limited in its ability to understand context and accurately frame problems. This technical gap will likely persist because business challenges are inherently human and complex.

Problem framing requires identifying stakeholders, understanding their priorities (both explicit and implicit), connecting dots across domains and making sense of ambiguity. It demands navigating organisational politics, cultural nuances and competing interests – a terrain where AI remains helpless without human guidance.

Consider a local restaurant facing declining business. AI can suggest various solutions: expand to delivery, develop innovative menus or implement dynamic pricing. But which issue is the most critical? Is it customer preferences, new competitors, labour costs or brand relevance?

The decision depends on stakeholder priorities, market conditions and strategic aims – all of which require human judgement.

Without an accurate problem definition, even



Organisations face a vital decision: keep training employees mainly in solution generation – a skill AI will increasingly make commonplace – or shift towards fostering empathy and systems thinking. PHOTO: BT FILE

elegantly crafted AI solutions may fail because they ignore social context or organisational constraints.

Two capabilities are essential for accurate problem framing: empathy and systems thinking.

Empathy – the disciplined ability to internalise stakeholders' perspectives, emotions, incentives and implicit needs – turns vague requirements into precise specifications. It prevents solutions from failing by recognising how people actually work and what motivates them. This is the foundation of accurate problem definition.

Systems thinking allows us to recognise interdependencies, anticipate second-order effects and prevent solutions that cause bigger problems later. While empathy helps us hear the right voices, systems thinking connects them into a coherent whole.

In practice, this involves asking: Who are the key stakeholders? What do they genuinely care about? Will this still be relevant in three years? A useful approach is: for any major decision, consider the consequences at three months, one year and three years, then evaluate how stakeholders would be affected.

Organisations thus face a vital decision. They can keep training employees mainly in solution generation – a skill AI will increasingly make com-

monplace – or they can shift towards fostering empathy and systems thinking.

However, this is not about replacing technical skills. Engineers still require engineering knowledge, and marketers still need marketing expertise. The worth of that expertise is increasingly realised through better problem framing rather than solution creation.

The risk of inaction is clear: If junior employees are trained only to generate solutions – a task AI performs faster – then the pipeline of future expertise dries up. Companies lose the capacity to develop professionals who understand context and can frame problems accurately.

Reframing the training mandate

This realisation has prompted me to rethink how we prepare the next generation of business leaders at the university. I now focus on a simple principle: Use AI as a force multiplier for ideation and analysis, but emphasise developing the judgement to identify problems worth solving.

Business leaders should assess their training programmes with a key question: Are we preparing our workforce for what AI can do, or for what AI cannot do?

Many corporate training programmes still concentrate on solution development and analytical

skills – areas where AI is progressing quickly. The focus should move towards improving skills in stakeholder engagement, contextual analysis and strategic framing.

This involves integrating AI tools while emphasising uniquely human skills. Use AI for brainstorming and evaluation, yet double down on the human capabilities to empathise, see the big picture and predict consequences across systems.

There is a well-known saying, often attributed to Albert Einstein: "If I had an hour to solve a problem, I would spend 55 minutes thinking about the problem and five minutes considering the solution."

In an AI-augmented world, we may afford 59 minutes to think deeply about the problem, since one minute is probably all the time AI needs to generate solutions. Now, have we trained our people to use those 59 minutes wisely?

The organisations that recognise this shift and act decisively will build workforces that remain indispensable. Those that do not will find themselves competing on capabilities made commoditised by AI, wondering why their expertise no longer commands a premium.

The writer, an associate professor, is dean of the School of Continuing and Lifelong Education at the National University of Singapore