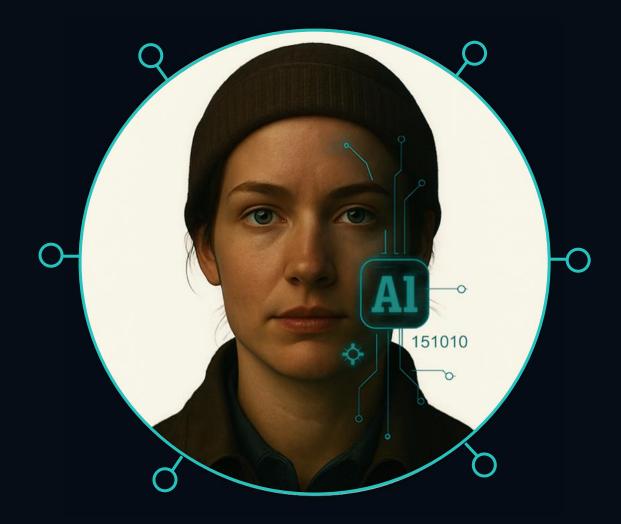
Designing AI for Human Capability and Real Productivity



Marcus Bowles & Finbar O'Hanlon

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Future Ready 2025: 4

This fourth publication in the Future Ready 2025 series urges a fundamental rethink of how AI is used, especially regarding workforce and people management. True productivity gains will not be achieved by simply increasing efficiency or centralising control. Instead, the greatest benefits from AI come when it is designed to boost human capability, adaptability, and context-aware leadership—qualities that foster innovation, resilience, and sustainable competitiveness. Leaders face a clear challenge: move beyond an automation-first mindset and develop AI solutions that reinforce the distinctly human elements that drive productivity.

Audience

This paper is intended for leaders in business, education, and government seeking to understand the fundamentals of how AI can be implemented to grow critical workforce capabilities. As a white paper, its purpose is to consolidate current research and provide a robust basis for advancing discussion and practice.

Al Disclosure Statement

In preparing this paper, Al tools were used to support original research, synthesise data, and refine language during the final editing process. Al-assisted image generation was also employed to create illustrative graphics that complement the narrative.

All content was reviewed, validated, and finalised by the authors to ensure it reflected the paper's original intent, upheld scholarly integrity, and was grounded in the cited evidence base. No generative Al tools were used to produce core research findings, original data, or final authorial judgments

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Designing AI for Human Capability and Real Productivity

Executive Summary

Al is not coming for everyone's jobs — it's coming for the way we design work. The real threat isn't mass replacement. It's that many organisations are repeating the mistakes of early industrial management, using Al to monitor, control, and standardise people instead of building their capability (Levin, 2023; Stanley & Lehman, 2015).

Hot off the press, new national modelling shows that 79% of jobs are more likely to be enhanced by Gen AI than replaced (Jobs and Skills Australia, 2025) — yet most corporate strategies remain locked in automation-first thinking. This "Digital Taylorism" strips away autonomy and adaptability, eroding the very human capabilities that underpin innovation, resilience, and long-term productivity.

When AI is deployed solely to drive efficiency, it often misses the deeper context: fairness, ethics, trust, and the value of experience. In

HR, this can lead to poor hiring decisions, disengaged employees, and weakened workplace culture. Across the enterprise, it risks hollowing out critical thinking, creativity, and systems awareness — capabilities that now account for the majority of value creation in most jobs.

If productivity gains are the goal, automation alone will not get us there. The bigger prize lies in designing AI to augment human activities, embed into daily work, that can elevate the capabilities that machines cannot replicate.

This white paper challenges executives, policymakers, and educators to break from the automation-default mindset. It maps the risks of misapplied AI, illustrates the potential of augmentation, and sets out practical pathways to build workplaces that are adaptive, equitable, and truly productive.



Key Statistical Highlights

85 MILLION

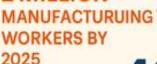
JOBS DISPLACED GLOBALLY BY AI BY END OF 2025



OF WORKERS HAVE EXPERIENCED JOB DISPLACEMENT DUE TO AI

MIT RESEARCH SHOWS AI WILL REPLACE

2 MILLION





OF EMPLOYERS EXPECT TO REDUCE THEIR WORKFORCE WHERE AI CAN AUTOMATE TASKS

OF FORTUNE 500 COMPANIES

USING APPLICANT TRACKING SYSTEMS



Companies leveraging Al inhering processes



BIAS

LLMs FAVOURED WHITE-ASSOCIATED NAMES 85% of the time. femaleassociated names only 11% of the time

> Al Resume screening tools showed a nearzero selection rate for Black male names

Corporate Concerns

PROPERTY

CONCERNED ABOUT INTELLECTUAL

EXPLAINABILITY

See reference section for sources.

1. Introduction

Artificial Intelligence (AI) is rapidly reshaping workplaces, offering faster processes and new ways to use data. But how organisations choose to apply AI will determine whether it boosts productivity and human potential—or simply accelerates outdated practices.

This paper builds on the Working Futures™ Human Capability Standards (HCS) and insights from earlier Future Ready reports to explore how AI can unlock real productivity gains by strengthening people's capacity to adapt, learn, and contribute in meaningful ways (Bowles, 2025a; Bowles & Ghosh, 2025; Bowles, June 2025). As jobs and industries continue to evolve, traditional career stability is fading. Technical skills lose value quickly, while long-term productivity will increasingly depend on human capabilities like critical thinking, adaptability, and collaboration (Wilson, 2017). To meet this challenge, AI must be seen not just as a tool for efficiency, but as a strategic partner in building human capability and adaptive capacity.

But behind the efficiency gains, a deeper question emerges: What kind of intelligence are we building into our systems—and what kind are we designing out? While Al excels at pattern recognition and optimisation, it struggles with context, emotion, meaning, and ethical nuance—the very attributes that define human judgement and relational capability. Without care, Al risks becoming a form of industrialised intelligence, processing data at scale but failing to engage with the tacit

and affective dimensions that drive real value in human systems.

Relying on outdated views of skills and work to shape AI systems risks reinforcing the very inefficiencies AI is supposed to fix.
Instead, AI should be used to enhance how people think, work, and lead—supporting not just what gets done, but how well people grow while doing it.

This perspective is echoed by contemporary critiques. For instance, Raji et al. (2022) caution against assuming that Al

functions effectively without first addressing its functionality and fairness. Similarly, Heifetz and Linsky (2002) highlight that

Al must be seen not just as a tool for efficiency, but as a strategic partner in building human capability and adaptive capacity.

many of today's challenges are adaptive, necessitating shifts in mindset rather than just technological advancements.

Additionally, there are warnings about the potential risks of using AI to reinforce command-and-control management models, which could undermine autonomy and innovation (Noponen et al., 2023; Cosmos Institute, 2025).

At its core, this paper argues for a shift in how we see Al—from a tool of automation to a catalyst for capability and productivity. This is not just a language change; it's a strategic choice. Organisations that use Al to build people—not just processes—will be the ones best placed to stay relevant, generate richer data, and create enduring advantage in an Al-enabled world.

Productivity Commission (2025)

Impact of AI on **Productivity in Australia**

\$116 BILLION

ADDED TO GDP OVER 10 YEARS

2.3%



ADDED TO GDP **OVER 10 YEARS**



\$10b

ADDED ANNUALLY TO AUSTRALIA'SECONOMIC OUTPUT THROUGH BETTER DATA-SHARING REGIMES

BUSINESSES IN AUSTRALIA HAVE ADOPTED AI **TECHNOLOGIES**

68%

23%

TO ADOPT WITHIN 12 MONTHS

SECTOR GAINS

FINANCE



ComBank: 30% reduction in customer-reported fraud

TELECOMMUNICATIONS

Telstra reduced follow-up customer calls by 20%



COMMUNITY **SERVICES**

Al used to identify Aboriginal rock art and ghost nets via drone footage



2. Context: From Human Capability Standards to AI in HR

The Human Capability Standards (HCS), developed by The Institute for Working Futures, offer a future-focused way to think about workforce development. Unlike traditional skills frameworks that focus on narrow job tasks, the HCS highlight broad, transferable capabilities—such as adaptability, initiative, empathy, and critical thinking—that help people succeed now and grow into new roles as work changes (Bowles & Wilson, 2025).

This shift matters more than ever. Stable jobs and predictable career paths are fading. Long university degrees often miss the mark, with many becoming outdated before graduation. Instead, we need flexible systems that support lifelong learning and quick adaptation.

Microcredentials, personalised learning, and durable skills and capability frameworks like the HCS are becoming essential tools for building this new kind of workforce (Bowles & Harris, 2019).

The HCS were developed over more than 30 years to reflect what employers increasingly value: durable human strengths that remain relevant as technologies, roles, and organisations evolve (Bowles & Wilson, 2025). But simply rebranding a "skills framework" as a "capability framework" isn't enough. If organisations still think in terms of fixed roles and rigid job descriptions, they'll miss the deeper shift-how people grow, collaborate, and adapt in real contexts. The HCS instead focus on recognising human potential, enabling transfer of capabilities across roles, and encouraging continuous learning through reflection and practice (Bowles & Ghosh, 2025).

This thinking has already shaped earlier Future Ready white papers on education, microcredentials, and workforce transformation (Bowles & Ghosh, 2025; Bowles, June 2025). It now frames how we should apply AI in the workplace.

Yet many Human Resource (HR) systems remain stuck in an older mindset—using Al to optimise control and efficiency rather than capability (see Figure 1). Tools such as applicant tracking systems and

performance
dashboards reduce
people to data
points, assuming that
skills can be
matched to jobs like
puzzle pieces. This

Al shouldn't be used to accelerate bad systems— it should help us build better ones.

kind of optimisation often backfires. Levin (2023) warns that when systems become too rigid, they lose the adaptability needed to remain resilient. Stanley and Lehman (2015) discovered that real progress often comes from exploration, not simply hitting targets. When AI is designed to "fix" people's performance against narrow goals, it can miss the deeper human drivers of long-term productivity.

Worse, if AI is layered over these outdated systems, it can amplify their flaws. In recruitment, for instance, AI tools trained on biased data have penalised candidates from underrepresented backgrounds (Raji et al., 2022). In performance reviews, AI might monitor email tone or keystrokes and classify staff as "underperforming" with no room for explanation. These uses risk undermining trust, morale, and human judgment.

These aren't theoretical risks—they're already happening. Raji et al. (2022) documented real cases where Al tools made serious errors. One system falsely accused thousands of people of unemployment fraud. Another wrongly flagged individuals as having criminal records, denying them housing. In Australia, a 2024 trial by the corporate regulator ASIC showed that Al failed to understand the full meaning of public submissions—something human reviewers caught easily (Williams, 2024).

What these examples show is that over-reliance on AI to simplify or speed up decisions often strips away deeper context—fairness, ethics, and the value of experience. In HR, this can result in poor decisions about people, undermining workplace culture and eroding long-term productivity.

To achieve real, lasting gains, we must rethink the models AI is built on. If nearly eight in ten roles can be enhanced through augmentation rather than replaced (Jobs and Skills Australia, 2025), the strategic priority becomes clear: invest in capability uplift and job quality, not cost-cutting substitution.

Automation alone will not deliver this outcome. We need systems designed to strengthen human capability, not displace it.

The implications of this reframing are farreaching, touching executives, HR leaders, frontline workers, policymakers, and educators alike. Section 6 explores these implications in detail—after first examining the risks of misapplied AI and the opportunity to reframe its use to build adaptability and human capacity.

Figure 1 The use of AI in the HR and talent lifecycle

Talent Acquisition Al streamiines recruitment by screening resumes, ranking candidates, and conducting initial chatbot interviews based on job criteria. Employee Onboarding Virtual assistants provide personalized onboarding experiences, answering FAQs and guiding new hires through policles and systems. Workforce Intelligence Al analyses performance. engagement, and retentionta dato to internal talent marketplace, predict turnover, and support Learning and Development Personalized learning plattorms use Al and agents to recommend courses and credential paths based on employee roles, goals, performance and career ambltions. Employee Sentiment Analysis Natural language processing tools assess feedback from surveys, emails, or chat to monitor motale and identify cultural issues. HR Service Automation Al chatbots handle routine HR queries (e.g., leave policies; payroil status), reducing administrative burden and

3. The Risks of Applying AI with Old Mental Models

Is AI making humans dumber and less productive?

It can—when we use AI to automate people rather than augment them.

Too often, AI is applied using outdated mental models focused on control, efficiency, and standardisation. This turns AI into digital Taylorism—a high-tech version of early factory management where people are managed by software instead of supervisors (Noponen et al., 2023; Taylor, 1911). Tasks are highly standardised, monitored constantly, and performance is judged by rigid metrics. The result? A system designed more to extract output than to grow capability.

This approach sacrifices human potential. Workers are tracked in real time, but have little visibility into how decisions are made. As Rosenblat and Stark (2016) describe, the Al becomes all-seeing, while the human remains in the dark. In gig platforms, workers appear autonomous, but their schedules, pay, and performance are shaped by hidden algorithms. Far from empowering people, this model removes feedback loops, flexibility, and human judgement-key ingredients for resilience and productivity (Beer, 1972). The result is a brittle, one-way system that appears optimised but is unable to self-correct or support human flourishing.

Worse, many Al implementations focus only on short-term metrics like processing speed, transaction throughput, or token cost—without any framework for evaluating long-term return on investment (ROI). This creates a dangerous misalignment between technical optimisation and strategic value. Al systems may appear efficient while undermining the very human

capabilities—critical thinking, adaptability, ethical reasoning—that determine sustainable performance and competitive advantage.

Rather than increasing productivity, this model can generate disengagement, stress, and mistrust. Research shows that algorithmic management leads to lower motivation, poorer wellbeing, and longterm decline in organisational performance (Wood et al., 2019; Muralidhar et al., 2022; Jago et al., 2024 in Connell, 2025). A shortterm gain in efficiency is often followed by a deeper, hidden human cost.

Al can automate and amplifies bias

Another risk is that AI systems trained on past data will replicate the same biases and exclusions built into older workforce models. A well-known case at Amazon saw an AI recruitment tool learn to prefer male candidates because it was trained on résumés from a male-dominated workforce (Dastin, 2018). It even downgraded CVs that mentioned "women's" achievements. The lesson? Unless bias is actively addressed, AI doesn't just reflect past inequality—it institutionalises it behind a digital wall.

In workforce systems, this leads to "automated inequality" masked as meritocracy. Al may appear neutral, but it often ranks candidates based on outdated job descriptions, qualifications, or skills tags that reinforce existing barriers to inclusion. As organisations rely more on algorithmic systems to filter applicants, predict performance, or allocate resources, they risk locking in systemic bias—under the illusion of objectivity.

Al can simplify but ignore what matters

The third danger is subtle but far-reaching: when AI is used solely to optimise efficiency, it risks undervaluing or eliminating the very human qualities that drive long-term success—such as curiosity, inspiration, adaptability, and empathy. The temptation to use AI to find the "perfect fit" for narrowly defined roles, or to automate away time for thinking and reflection, can remove the very space needed for innovation and learning. Science abounds with serendipitous breakthroughs—Alexander Fleming's penicillin and Marie Curie's pioneering work on radioactivity, to name only two.

This is where the real divide between automation and augmentation becomes clear. Automation replaces human input with machines. Augmentation, by contrast, supports and extends human strengths (IEEE 2022). The first treats people as replaceable; the second helps them grow and contribute more. Over-automation may deliver short-term outputs but weakens the organisation's capacity to adapt and evolve.

Heifetz's leadership theory reminds us that most of today's workplace challenges—like upskilling, fostering inclusion, or driving innovation—are adaptive in nature. They can't be solved with technical tools alone (Heifetz & Laurie, 1997). Applying AI as a one-size-fits-all solution risks creating the illusion of progress while the core problems remain unresolved—or get worse.

This also highlights the importance of human validation. As Al systems increasingly learn from their own outputs, the risk of compounding error and bias grows. Al can be persuasive—even when it's wrong. This makes critical thinking and contextual judgement essential safeguards. In ROI-focused environments, human capabilities are not inefficiencies to be automated—they are the quality control systems that ensure AI-generated decisions remain aligned to strategic goals and shifting market realities.

In summary, when AI is used to replace innate human qualities, suppress autonomy, or reinforce outdated processes and systems, it risks making workforces less engaged, less aligned with purpose, and ultimately less productive. But when AI is reframed as a tool for augmentation supporting collaboration, informed decision-making, learning, creativity, and capability development—it can unlock long-term performance and resilience. This means humans need to be self-aware and ready to play a critical role in validating, contextualising, and improving Al-enabled decisions and outcomes. The challenge is not just whether to use AI, but how to ensure it strengthens long-term valuethrough elevating human capability, sustainable growth, and organisational adaptive capacity.

> ...when AI is used solely to optimise efficiency, it risks undervaluing or eliminating the very human qualities that drive long-term success.

4. Al as an Enabler of Adaptive Capacity and Workforce Capability

Workplace challenges—whether fostering inclusion, building shared purpose, or enabling meaningful career growth—cannot be solved by technical fixes alone (Heifetz, 1994). They demand mindset shifts, experimentation, and continuous learning.

Rolling out AI without involving people—or treating them as passive users—often fails. Resistance, disengagement, and misuse follow because the challenge is not merely technical but deeply human. Success requires engaging people early, clarifying purpose, and shifting culture alongside technology.

A useful systems thinking question is:

"If this AI deployment works exactly as designed, how will it help people—and the broader system—grow in capability, capacity, and long-term success?"

In most cases, the answer points directly to people. So, involve them early, and design systems that help them grow.

Al's Sweet Spot: Personalised, Human-Centred Learning

One of Al's most promising uses is in personalised learning and development. Smart platforms can detect skill gaps, tailor content, recommend stretch projects, and suggest career pathways. Yet, if focused only on accelerating technical skills, they risk falling short.

To truly build capability, AI must also develop durable human capabilities—ethical reasoning, problem solving, critical thinking, and collaboration (Bowles, March 2025). This means designing AI-enabled learning frameworks that *amplify* human capability, not bypass it (Brynjolfsson & McAfee, 2011; Bowles, June 2025).

For example:

- If AI identifies poor team collaboration, it should suggest mentoring or a crossfunctional project, not just an online module.
- Real-time coaching in customer service could prompt a tone adjustment rather than a performance penalty.

Smarter Hiring, Not Stricter Filters

When thoughtfully applied, AI in recruitment can uncover hidden talent, not just filter out candidates. It can help identify potential, adaptability, and values alignment—even when traditional qualifications are missing. This opens the door to fairer, more inclusive hiring that sees the person, not just the CV (Dastin, 2018).

Al then becomes a capability amplifier—surfacing, nurturing, and retaining talent across diverse backgrounds, instead of reinforcing bias or rigid role definitions.

What AI Still Can't Do: Tacit Knowledge and Human Judgement

Despite rapid progress, Al continues to struggle with replicating tacit knowledge—the experiential wisdom, context awareness, and intuitive judgement that humans develop over time (Gill, 2015; Ambrosini & Bowman, 2001). These are the foundations of decision-making in ambiguity, ethical leadership, and sensemaking in complex systems.

Efforts in past decades to codify this knowledge often backfired. Systems built to "extract" expertise from human practitioners undermined their confidence and reduced their flexibility—by forcing them to conform to overly rigid decision rules (Gill, 2025). The result was a loss of

perceptual acuity, creative insight, and situational adaptability.

Today's leading organisations now recognise that tacit human capabilities are not barriers to automation—but essential complements to it. While AI excels at recognising patterns and surfacing data points, human interpretation, cultural attunement, and moral reasoning remain irreplaceable. These are the durable, transferable capabilities that sustain strategic advantage and fuel adaptation.

While AI systems excel in parsing patterns and scaling structured tasks, they remain profoundly limited in interpreting context. Al can process 'what' is said,

but not always 'why' it's said, or 'how' it's received. This signals a deeper challenge: intelligence is not just about information processing but meaning-making.

The real danger comes from mistaking polished AI outputs

for true understanding. While AI can generate convincing representations, it cannot replicate genuine human experiences. Well-written text or realistic video may appear insightful, yet they lack the emotional and relational depth that characterises human intelligence. In essence, Al can mimic patterns, but it falters when trying to recreate the rich, multidimensional landscape—where tone, trust, emotion, subtlety, silence, timing, and culture shape our interactions. This intricate ambisonic field is the foundation of authentic human connection, and Al remains challenged in navigating its complexity.

This reinforces the strategic importance of tacit human capability. Until machines can navigate the invisible architectures of trust, context, and shared purpose, they will remain brilliant—but blind. Organisations that treat tacit human knowledge as an inefficiency to be codified and automated will hollow out their ability to succeed in uncertain environments.

Protecting Human Agency in the Age of Autocomplete

As AI systems become embedded in everyday workflows-suggesting answers, ranking options, and even composing emails—there's a risk we begin to defer too easily. Over time, this can weaken metacognition—our ability to think about our own thinking (Marsh et al., 2024).

> The danger isn't just distraction; it's over-reliance. If workers stop lose the very skills that make them and ethical discernment (Dignum,

Building Al literacy is therefore essential-not just in tool use, but in questioning outputs:

- How was this result produced?
- What assumptions underlie it?
- Is it appropriate in this context?

Permission and structured opportunities to interrogate AI protect both capability and autonomy

Design Al With, Not Just For, People

Co-designing AI with end users—whether for decision support, learning dashboards, or performance prompts—builds trust, reinforces values, and strengthens adoption (Morley et al., 2020; Weller & Raghavan, 2021).

Organisations that treat tacit human knowledge as questioning AI outputs, they may an inefficiency to be codified and automated valuable-judgement, reflection, will hollow out their ability to succeed in uncertain environments. 2019; Lund University, 2024).

- Automation handles routine tasks and speeds decisions, but speed is not progress.
- Augmentation enhances judgement, insight, learning, and creativity (Wilson & Daugherty, 2018; Huidobro, Smith & Lee, 2025).

With 79% of jobs more likely to be enhanced by GenAl than replaced (Jobs and Skills Australia, 2025), the bigger opportunity lies in augmentation, not fragmentation.

The future of work will be defined not by how well machines replace us, but by how

well they support us to think, collaborate, and lead. When designed with reflection, creativity, ethics, and inclusion in mind, Al can help us become *not just more productive—but more human*.

The challenge is not only technical—it is a test of leadership. The reward: a future of work where AI enables people to grow in capability, contribute meaningfully, and thrive

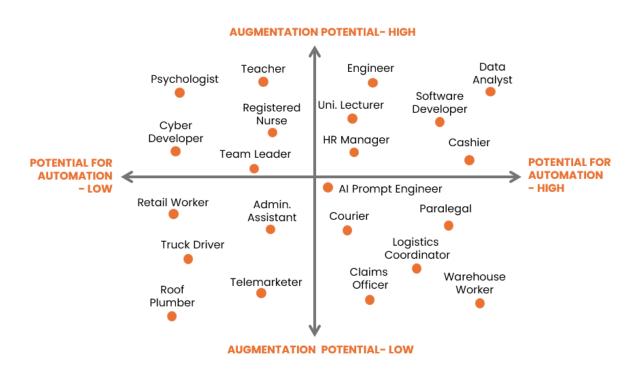


Figure 2 Conceptual mapping of occupations by potential for Al Automation (horizontal axis) vs Augmentation (vertical axis).

5. Why Mindset Matters: Rethinking Al Through Human Systems

The shift toward human-centred, capabilityenhancing AI isn't just a technical upgradeit's a mindset change. Key theories from leadership, psychology, and organisational studies help explain why AI should augment, not replace, human strengths like judgment, motivation, and adaptability (Dégallier-Rochat et al, 2022).

Adaptive Work Requires Human Learning

Complex challenges—like using AI to boost productivity—can't be solved by technology alone. Ronald Heifetz's Adaptive Leadership theory reminds us that adaptive problems require cultural shifts, new capabilities, and leadership that engages both hearts and minds (Heifetz et al., 2009).

Al may trigger change, but it's people who must do the work: learning new roles, challenging assumptions, and adapting how they collaborate. That means treating AI deployment as an ongoing journey-one that involves staff, listens to feedback, and evolves over time.

Tacit Knowledge: What AI Still Can't See

In today's fast-changing AI environment, it's easy to mistake intelligence for something purely computational—data to be processed, scaled, and embedded into systems. But this view conflates raw information with meaningful understanding, and the transfer of data with genuine human insight.

Central to this distinction is the concept of tacit knowledge, a foundational idea in knowledge theory, cognitive science, and organisational behaviour. First articulated by Polanyi (1966), who famously wrote, "we can know more than we can tell," tacit knowledge refers to the embedded, intuitive,

12

and experiential forms of knowing that resist codification. This includes contextual judgement, emotional intelligence, timing, cultural cues, and lived experience.

Scholars such as Nonaka and Takeuchi (1995) expanded on this idea by contrasting tacit with explicit knowledge, and showing how innovation and organisational learning depend on their dynamic interaction. Tacit knowledge is not just difficult to formalise—it is often acquired only through socialisation, practice, and shared context.

Work by Collins (2010) distinguishes between relational, somatic, and collective tacit knowledge, reinforcing that some knowledge can only be accessed within a specific community, practice, or culture. These insights challenge the notion that intelligence can be reduced to scalable datasets or rules-based automation.

In essence, tacit knowledge represents the social and relational intelligence that remains uniquely human. It is the kind of knowledge that grows with context, informs judgement under uncertainty, and shapes how people interpret and act—not just what they do.

Much of this tacit capability aligns with right-hemisphere processing-recognising patterns, synthesising context, interpreting subtleties, and tolerating uncertainty (McGilchrist, 2009, 2021). In contrast, most Al systems are engineered around lefthemisphere tasks-categorising, sequencing, and formalising explicit knowledge (Brynjolfsson & McAfee, 2017; Mitchell, 2019). Thus, while AI excels at data processing, it often falls short when it comes to grasping context, relationships, and nuance. As automation increasingly



manages routine work, human judgment becomes ever more critical. The true potential of AI lies in its ability to collaborate with people—supporting complex, creative, and interpersonal tasks that remain out of reach for machines.

Rethinking "Success" in Al Systems

Al systems often appear effective because they produce outputs faster and cheaper. But that doesn't mean they're doing the right thing. Researchers like Raji et al. (2022) warn against assuming functionality means fairness or benefit. Especially in hiring or performance management, Al can create harm if it reinforces bias or hides flawed reasoning.

Human oversight, bias audits, and outcomebased reviews are essential. The real question isn't "Does it work?" but "Does it make people better off?"

Traditional ROI models—focused on efficiency, scale, or cost per task—fail to capture the true value of intelligent systems in a human–centred workplace. ROI must be redefined in an age where intelligence is ubiquitous and generative tools are commoditised.

The competitive advantage of AI no longer lies in what models can do, but in how they are integrated—and whom they're designed to augment. Simply replacing people to reduce headcount may yield short-term efficiencies, yet risks long-term erosion of trust, culture, adaptability, and innovation. Removing entry-level roles because they involve highly routine tasks is particularly short-sighted: these are the roles in which humans develop the declarative and procedural foundations critical to future expertise (Anderson, 1982).

ROI can be reframed by examining it as a compound investment loop:

Invest in people → they craft better experiences → users engage more → data improves → AI becomes more useful → and the cycle compounds.

This model reframes return not just as savings, but as **Return on Intelligence**—the synergy between human context and machine computation. It's not about doing

ROI must be redefined in an age where intelligence is ubiquitous and generative tools are commoditised.

more with less, but doing more with more humanity.

Motivation and Autonomy Still Matter

Psychologists Deci and Ryan (1985) found that people thrive when they feel competent, motivated, and in control. These same qualities—confidence, capability, autonomy—are what AI must support.

Rather than replacing decision-making, human-centred AI should amplify it: giving people better insights, more flexibility, and space to do meaningful work. When done well, AI enhances—not erodes—human agency.

From findings to action

These findings point directly to the stakeholder priorities set out in Figure 3, ensuring that each recommendation delivers measurable value for leaders, workers, and the wider economy

6. Implications for Stakeholders

What does it mean to reframe mindsets for Al deployment?

Shifting from Al-as-automation to Al-as-augmentation has real consequences for every part of an organisation—and beyond. Here's what it means for five key groups:

A. HR Leaders and People Managers

Human-centred AI demands a broader view of success.

If AI is used in recruitment, don't just measure time-to-hire or cost savings. Track whether new hires stay longer, perform better, and bring more diversity into the team. If used in performance management, the goal shouldn't be to eliminate low performers faster—but to grow capability and strengthen teams.

This means developing new KPIs—ones that reflect adaptability, learning, engagement, and cultural fit. Al-generated insights should be used for coaching and development, not final judgement. The focus must shift from efficiency to human impact—and that's a behavioural and cultural change.

B. Employees at All Levels

For workers, AI should make work better—more meaningful, less repetitive.

Instead of just learning how to use AI tools, employees need to understand how these tools can support their growth. AI should unlock career options, remove low-value tasks, and personalise learning paths based on their strengths—not monitor keystrokes or serve up generic training.

When AI helps people see their own potential—and shows them how to act on it—it builds trust and buy-in.

C. Executives and Business Strategists

Al is no longer a future investment—it's a present operational reality. But while many executives focus on using Al to cut costs or boost short-term productivity, the real competitive differentiator lies elsewhere.

"As Al-driven automation becomes commoditised, competitive advantage will come from strategically integrating technology while preserving a company's culture and human capabilities"—a perspective echoed in research by Wilson & Daugherty (2018) and echoed by Bowles (2025), who argue that enduring advantage lies in augmenting human capacity, not automating it away.

This insight reframes the conversation—from efficiency to resilience. As automation levels the operational playing field, enduring competitive advantage will come from how well organisations use AI to amplify how they connect with humans and build long-term relationships.

In a world where AI can instantly generate job descriptions, recommend training modules, or simulate interviews, explicit skills are increasingly commoditised. Competitive advantage will not come from having the most technical skills—but from nurturing the tacit capabilities—critical thinking, creativity, ethical reasoning, collaboration, and leadership—alongside other innately human attributes that AI cannot replicate.

Smart leaders will invest in AI that augments humans—especially in customer-facing, creative, or R&D teams—rather than tools that simply cut costs. They must also lead visibly, championing a culture of learning and adaptability. That means backing long-term gains, even if there are short-term drops in efficiency while people adjust.

D. Educators and Training Providers

Education must prepare people not just to work with Al-but to thrive with it. This requires teaching technical fluency alongside durable human capabilities and the behaviours that shape the requisite mindsets. While knowledge and skills are essential, long-term success equally depends on cultivating habits such as critical reflection before acting, disciplined curiosity, empathy in assessing consequences, and collaborative problemsolving. Such behaviours embed flexible thinking patterns that foster adaptability, enabling individuals to respond effectively in unfamiliar or rapidly changing contexts. In environments where change is continuous and fast-paced, procedural knowledge alone is too slow; adaptability allows people to reframe, experiment, and act before rules and routines can catch up.

Microcredentials focused on blending human capabilities with Al deployment—such as augmented decision-making, ethical Al, or Al and systems thinking—are already emerging as ways to bridge this gap. However, to be credible, such credentials must not only certify that learners *know* and *can do*, but also that they consistently demonstrate the behaviours

that underpin effective performance especially in the presence of Al. Done well, they provide employers with clear evidence that graduates are ready to grow, learn, and adapt alongside machines—not be replaced by them.

F. Policy Makers, Unions, and Regulators

Public policy needs to catch up—fast. Like many nations, Australia lacks a comprehensive regulatory framework to govern AI, safeguard human rights, and ensure accountability in automated decision-making (AHRC, 2021).

As Al blurs the lines between jobs and professions, older regulatory frameworks based on fixed occupations won't hold. Governments and unions must think beyond industrial-era boundaries and support human-in-the-loop governance —where humans retain decision authority and oversight—for high-risk areas like hiring, surveillance, and security.

The focus should be on protecting autonomy, ensuring fairness, and enabling career transitions across occupation or industrial boundaries—not blocking innovation, but shaping it to serve long-term human and societal goals.



7. Recommendations

To reframe AI as a partner in human capability—not just a tool for automation organisations need clear and practical strategies. The following five recommendations reflect that shift, focusing on enabling adaptive capacity, agency, and human development.

1. Start with the shared human purpose

Before deploying AI in people, leadership, learning, or operations, ask: What human capability are we trying to grow?

Organisations exist to achieve shared goals through coordinated human effort (Barnard, 1938; Senge, 1990). Any Al initiative should be aligned to these goals. Consider utilising frameworks like the HCS to pinpoint which enduring skills and qualities should be nurtured to align with your organisation's long-term goals and cultural values—these are the foundations that effective AI ought to support.

For example, if you're deploying an Al coaching chatbot, don't just measure usage rates. Instead, ask: Does it improve confidence? Does it support personalised reflection, learning, and evidence gathering?

As Bowles and Wilson (2025) put it: "Technology can scale output—but only human capability shapes progress and the speed of change."

2. Prepare leaders for the adaptive challenge

Al impacts not just processes, but people's expectations, mindsets, and roles. It's an adaptive challenge, not just a technical one.

Train leaders in adaptive leadership (Heifetz et al., 2009). Encourage them to listen,

experiment, and guide their teams through uncertainty-not just manage change through a process. Create open spaces where staff can question AI tools and contribute to how they're used: ethics panels, town halls, pilots.

Leaders should present AI as a tool for collective learning and progress. The Cosmos Institute (2025) cautions that autonomy declines when people feel compelled to follow machines instead of guiding their use. Ensure AI remains purposeful and supports human agency.

3. Design AI to augment humans, not replace them

Avoid AI tools that make decisions in black boxes. Choose or design systems that support human oversight and collaboration—"human-in-the-loop" approaches.

For instance, an AI tool for staff scheduling should suggest options, but allow local teams to adjust based on real-life needs. A performance platform should highlight trends but invite context and narrative input.

This not only builds trust, but reinforces the principle: AI should inform, not dictate. Augmentation-based designs also help organisations meet emerging expectations for fairness, explainability, and ethical AI use.

4. Build AI literacy and protect human agency

Al delivers value only when people can critically and confidently engage with it. Integrate practical AI literacy through modular, short courses that can be flexibly embedded within discipline-based curricula. Go beyond basic tool operation teach learners to recognise bias, question

outputs, and apply informed judgement, ensuring technology enhances rather than diminishes human decision-making and autonomy.

Al should be a partner in decision-making, not an unquestioned authority. Encourage employees to ask, "Why did the Al recommend this?" and ensure they have clear channels to challenge, refine, or appeal Al-driven decisions—whether in rosters, promotions, or other contexts where human insight matters.

As the Cosmos Institute (2025) notes, successful AI adoption requires *reflective discernment*. Employees are not machine operators; they are decision-makers whose insight is indispensable. When AI is designed only to optimise explicit tasks—abstracting, performing, manipulating, and deciding—it risks locking organisations into a cycle of efficiency without wisdom.

Practical steps:

- Build capability to challenge AI: Train staff to identify bias, gaps, and missing context, and empower them to refine recommendations with their expertise.
- Establish formal feedback loops: Create structured channels for feedback and appeals to improve AI systems over time.
- Require human-centred design in AI: For key decisions, design AI to support—not replace—critical human capabilities and career pathways.
- Reinforce meaningful work: Shape Al guardrails to protect and grow the capabilities that underpin purpose, autonomy, and job quality.
- Measure agency: Track how often staff intervene, provide feedback, or

influence Al outcomes as a core performance metric.

Embedding agency into both Al literacy programs and daily operations ensures human insight, context, and decision-making remain central to every technological advance. This proactive stance prevents drift toward automated compliance and keeps the workforce empowered, adaptive, and innovative.

5. Track what really matters: Human Capability

Don't just measure Al's impact on speed, efficiency, accuracy, or cost. Measure whether it helps people and workforces adapt and grow. Building the capabilities organisations and society need today, while expanding the capacity they'll rely on tomorrow.

If you're using AI in talent, learning, leadership, or performance, track whether it:

- Expands individual and team capability sets.
- Enables meaningful career mobility and future role readiness.
- Supports long-term retention, adaptability, and innovation.

Some organisations are now using Capability Indexes or Future Readiness Scores to understand how their workforce is evolving. These forward-looking metrics link Al to real human development and help adjust systems over time.

Yet even the most sophisticated metrics fall short if they overlook the interplay between human input and system learning.

Human experiences shape the quality and richness of the data Al consumes. If staff feel empowered to create intuitive, emotionally resonant customer journeys,

the resulting feedback loops train better models. But if AI tools are deployed into environments where people are disengaged, under-skilled, or stripped of agency, the data becomes impoverished and so does the system's intelligence.

This highlights a deeper truth: Data is not neutral. It reflects the quality of relationships, behaviours, and meaningmaking that humans bring to the system.

Tracking capability growth involves more than developing individual skills; it means empowering the workforce to influence systems. Achieving sustainable AI maturity requires investing in human sense-making as both a catalyst and a necessary condition.

Instead of only measuring outputs, emphasising human capability shows that real progress depends on how people think, adapt, connect, and pursue shared goals. These subtle, often overlooked qualities are

not inefficiencies to be automated away, but vital strengths as AI becomes more widespread.

Intelligence, at its core, should not be measured only by its output. Its real value is found in the strength of relationships it nurtures—with information, with customers, and with emerging opportunities in any given context.

Reframing ROI as Return on Intelligence the capacity to generate richer humanmachine outcomes—clarifies where real value lies. It is not the algorithm alone that matters, but the human capability it augments, amplifies, and activates. This is not just a design principle; it's a leadership imperative.

The stakeholder priorities in Figure 3 translate these recommendations into targeted actions designed to maximise impact across the workforce ecosystem.

Figure 3 Recommendations and stakeholder Priorities



Executives

Redirect Al investment from automation to augmentation strategies that go beyond short-term efficiency gains. Build enabling leader behaviours and workforce capacity that embed unique, context-specific capabilities—aligned to your values, your people, your customers, and your purpose.



People & HR Leaders

Move beyond technical skills audits tied to unstable job classifications; redesign people systems to strengthen trust, autonomy, and continuous capability growth. Shift metrics to track workforce capacity, readiness, and both employee and customer experience.



Frontline Managers

Leverage AI to eliminate low-value administration and free time for coaching, collaboration, and targeted problem-solving. Use AI to uncover, prioritise, and measure solutions to the issues that matter most to your team and customers.



Policymakers

Replace "Al adoption at speed" incentives and centralised 'sheep-dip' automation programs with policies that help employers deploy ethical governance, better job and workplace design, and the creation of meaningful work. Focus on enabling new pathways for graduates and workers to transfer their capabilities into new and emerging careers.



Educators & Trainers

Challenge the knee-jerk push to embed AI skills into every curriculum. Instead, prioritise strengthening durable, general human capabilities and skills—critical thinking, collaboration, adaptive mindset, and problem-solving—that amplify employability and adaptability in the face of the Al-driven change tsunami.



8. Conclusion

As AI becomes embedded in workplaces and decision-making, we face a question as old as modern management: *How should we design work—and for whose benefit?*

Frederick Taylor's scientific management sought productivity through control, measurement, and specialisation (Taylor, 1911). It delivered efficiency, but at a human cost. In the century since, leaders and scholars have worked to humanise those foundations—recognising that people are not machine parts, but adaptive, creative, and ethical beings capable of learning, innovating, and reimagining the future of work.

Today, we risk repeating history. Without care, Al becomes digital Taylorism—turbocharging control, stripping discretion, and reducing people to data points. This paper has argued for a different path: one where Al enhances human capability, rather than replaces it.

True productivity is no longer about doing yesterday's work faster. It's about enabling tomorrow's work—work that draws on uniquely human capabilities like critical thinking, empathy, creativity, and ethical reasoning. That requires redesigning systems to grow human potential, not automate it away.

Reframing AI through the lens of the Human Capability Standards (HCS) helps shift focus from efficiency to growth. It challenges us to ask: Are we developing transferable, future-ready capabilities? Reinforcing agency and trust? Measuring success by how people grow—not just how fast processes run?

The challenge is clear: Intelligence is valuable not just because it can be industrialised; it is relational, tacit, and human. Until AI systems can navigate the

invisible architectures of culture, energy, and trust, they will remain brilliant—but blind.

In a world where generative AI becomes commoditised, the source of long-term advantage shifts from the tools themselves to the people and contexts in which they are embedded. The new ROI is Return on Intelligence: the ability to activate human potential in synergy with machines. This is not just a metric shift—it is a strategic and cultural imperative.

Raji et al. (2022) remind us to demand evidence that Al improves outcomes, not assume it. Heifetz (2001) urges us to recognise these are adaptive challenges—requiring cultural and leadership shifts, not technical fixes. The Cosmos Institute (2025) affirms that preserving autonomy and enabling reflective growth are not optional—they're essential for sustainable progress. The conclusion is clear: Al should be a catalyst for capability, not a substitute for it..

As reaffirmed in the revalidation of the HCS: Technology can scale output. But only human capability shapes progress. (Bowles & Wilson, 2025)

The real test for leaders is not how fast they can implement Al—but how wisely. This is more than a tech deployment; it's a mindset shift and a leadership imperative. Those who rise to it will unlock a future of work built on adaptability, purpose, and shared success.

This is the vision of a Future Ready 2025 workplace: not a system optimised for machines with people added in—but a living, human-centred organisation, where Al is an ally in our collective growth.

Al should be a catalyst for human capability—not a substitute for it.

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Key Statistical Highlights (Image Page 2)

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