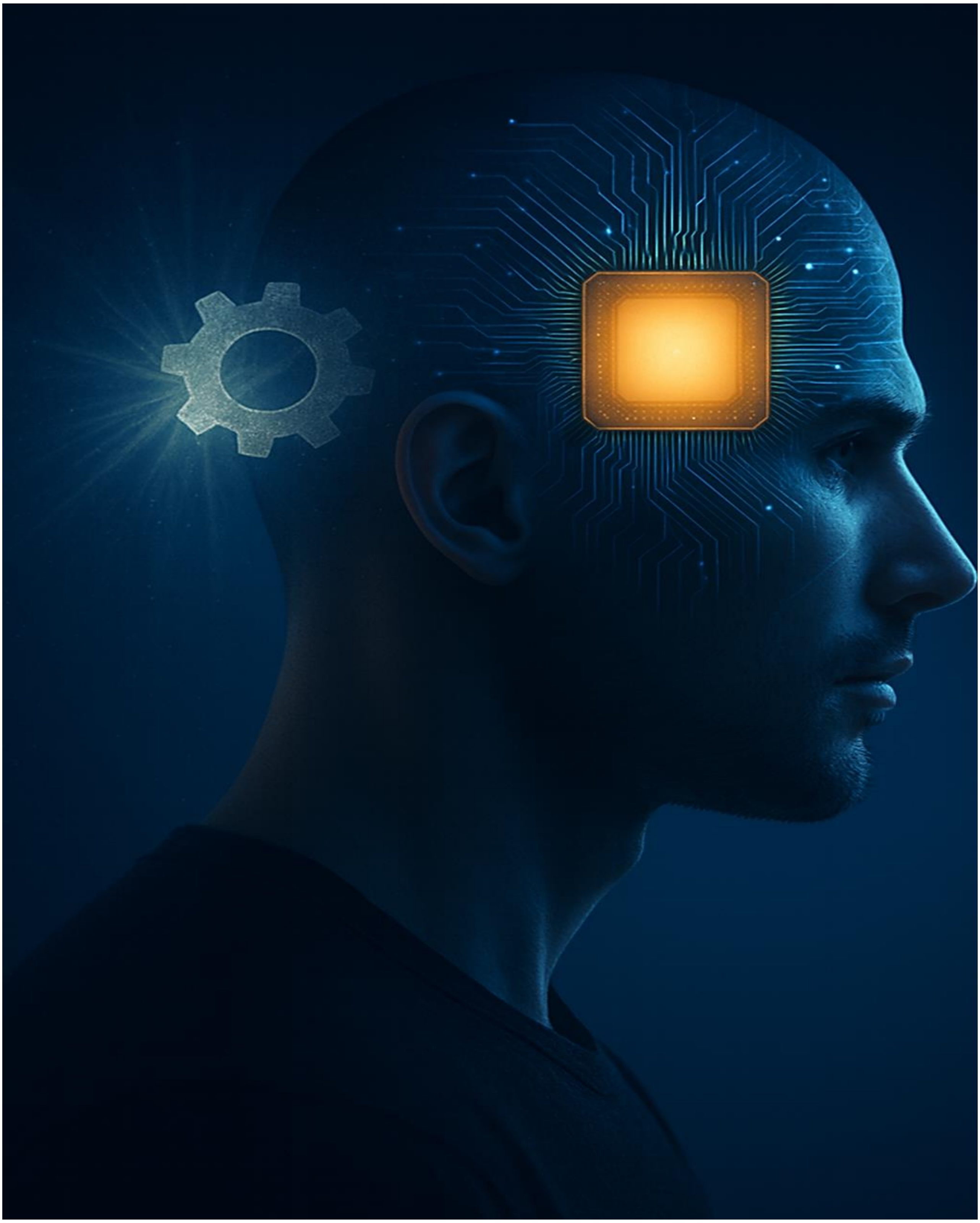

# Redefining Unions for the Age of AI:

## Beyond Industrial Legacies to a Future Ready Workforce

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## 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.

### AI Disclosure Statement

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

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

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## Preamble

I never expected to find myself questioning the very foundations of why unions exist. For generations, my family in Ireland and Wales, and later on the docks of London, poured their energy into building early unions and standing firm for workers' dignity. Their struggles were not distant history; they are woven into my family's story, shaping the opportunities that have reached me today.

Still, when I consider the realities of work shaped by AI, I can't help but wonder: are unions today truly meeting the needs of all workers, or are they anchored to an outdated industrial model? The achievements of earlier generations were significant and hard-won, but holding onto that history too tightly could limit the future. In an economy where worth is determined by human capabilities such as critical thinking, adaptability, empathy, creativity, and collaboration, unions must evolve. They need to move beyond outdated job categories and strictly defined skill sets, or risk becoming caretakers of a system that is already fading into irrelevance.

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## Introduction

Every government wants to be seen as driving economic growth and securing the prosperity of working Australians. For federal Labour, this instinct often translates into defending wages, protecting jobs, and reinforcing industrial safeguards. The intent is noble.

For more than a century, unions have stood at the centre of this mission, countering employer power and bargaining for wages, hours, and safer conditions. They became the guardians of fairness in an industrial era built on stable jobs, rigid demarcations, and long-term memberships.

But here lies the shadow. In defending workers, we risk preserving industrial-age approaches that no longer fit the realities of the twenty-first century. What Australians now need is not more advocacy for old jobs and skills, but investment in the capabilities that make people employable in emerging roles and careers.

## AI & Productivity

Nowhere is this shift clearer than in the debate on productivity. For too long, productivity has been measured with industrial-era instruments: output per hour, unit labour costs, task efficiency per worker. These measures are relics of a factory model of work, and in the age of AI they do not just fail to capture value; they distort it. They risk entrenching a new form of digital Taylorism, squeezing ever more out of people while ignoring the deeper dividend that comes from capability, innovation, and resilience.[1]

We can already see the effects. Workers and managers alike feel overloaded, their wellbeing stretched thin. AI is too often deployed as a quick fix for symptoms rather than as a tool for renewal. Organisations mirror the pattern, with shadow AI use creating unseen risks and downstream costs. What looks like efficiency is, in truth, masking decline, a façade of progress that hides the erosion of capacity beneath.

True productivity does not run in a straight line; it follows a J-curve. The early investment always feels heavy, even costly. But the real returns come later, once people learn, adapt, and weave new capabilities into the culture of their work. It is these compounding returns — the Human Dividend — that matter. If we stay trapped in industrial definitions of productivity, we will keep mistaking efficiency for progress and hollowing out the very capacity we need to thrive.

## Unions at a Crossroads

For much of their history, unions stood as the counterweight to employer power. They fought for wages, hours, and conditions. That legacy is not lost on me. It is part of my own story, carried in the hands of family who knew both the hardship and the dignity that came with standing together. Those struggles mattered. They gave voice to the voiceless and drew a line under exploitation.

But the landscape has shifted. Automation and AI are not only displacing routine jobs; they are beginning to erode roles once considered secure. The hard question I find myself asking, and it is not an easy one, is whether today's unions are widening opportunity, or by clinging to the structures of the industrial era, unintentionally narrowing it. Too often, energy is spent protecting yesterday's entitlements rather than designing tomorrow's bridges into meaningful careers. Meanwhile, whole categories of industrialised work are vanishing faster than new ones appear.[2]

The facts speak for themselves. Traditional entry-level roles in retail, hospitality, and routine services, which once served as gateways into the workforce, are vanishing. Youth unemployment remains persistently high at about 9%, more than twice the overall national rate.[3] Beneath this statistic lies a generation finding it difficult to translate education into meaningful employment. If we do not establish new pathways from school to work, and if we fail to weave adaptable skills such as problem-solving, collaboration, and creativity throughout our education and training systems, we risk excluding the very young people who are expected to drive the future economy.

What young people need most is not a narrow set of technical skills tied to obsolete occupations, but portable capabilities that allow them to move, to aspire, and to adapt. The unions my forebears built fought for better wages, worker safety, and standard hours. The unions we need now must fight for something just as vital: the capability to thrive in a disrupted economy — one where industrial division of occupations and skills no longer define the boundaries of work.

As the table on the following page illustrates the pivot from narrow industrial measures to human capability value. More detailed on this framework is included in Appendix 1.

*Table 1 – Augmenting Traditional Industrial Productivity with Human Capability Value Metrics*

| Industrial-Age Metrics | Human Capability Value Metrics |
|---|---|
| **HUMAN CAPITAL** | |
| **Output per hour worked** | **Engagement and mindsets** (connection to purpose, motivation, commitment) |
| **Unit labour costs** | **Cycle time to competence** (speed new hires/redeployments become effective) |
| **Task efficiency per worker** | **Career mobility and progression** (movement up the J-curve of contribution) |
| **Headcount & turnover ratios** | **Retention and loyalty** (keeping and compounding talent investment) |
| **Wage share / hours worked** | **Equity of access and opportunity** (first-job pathways, diversity in progression) |
| **INNOVATION CAPITAL** | |
| **Cost of production inputs** | **Innovation and adaptive capacity** (speed to implement new ideas, resilience after disruption) |
| **Change Velocity** | **Readiness Index / Organisational Agility** (leadership, maturity index, workforce flexibility, learning culture as markers of adaptive capacity) |
| **SOCIAL CAPITAL** | |
| **Structural/ Infrastructure costs** | **Customer loyalty and relational capital** (how people shape trust, retention, and co-creation with customers/suppliers<br>**Culture and alignment** (values/ behaviours lived, cultural cohesion scores) |

## The Measures That Matter Most

What matters is whether people and organisations are compounding the *Human Dividend* — the lasting return from investing in human capability. The Human Dividend reflects growth in adaptability, resilience, and shared opportunity. For unions, this shift in measures is critical: to stay relevant, they must fight for recognition that workers create value beyond industrial metrics that only count outputs.

- **Engagement and energy** — how deeply people connect to purpose and sustain motivation.
- **Equity and access** — whether people can access learning and work on fair terms, free of systemic barriers.
- **Cycle time to competence** — how quickly new hires or redeployed staff become effective contributors.
- **Career mobility and progression** — the speed and breadth with which people move up the J-curve of learning and contribution.
- **Retention and loyalty** — whether organisations keep and compound the talent they invest in.
- **Capability depth and breadth** — the durability of skills, and the cultivation of mindsets and behaviours that reinforce shared culture.
- **Wellbeing and resilience** — whether the system builds capacity to adapt, or slowly depletes it.

## A New role for Unions

I believe unions could take a very different path. By shifting from defending the entitlements of the past to co-creating future-ready careers with employers, they could ensure that opportunity is not eroded but expanded.

It is also fair to ask whether recent industrial reforms, though important, have risked becoming sandcastles in the tide. Labor's Secure Jobs, Better Pay and Closing the Loopholes packages represent substantive wins. Yet scholars caution that legal gains alone will not reverse decades of union decline; organisations must use these reforms to reshape strategy and rebuild workplace presence.[4] History shows the risk: the Accord once delivered industrial peace, but it also eroded union vitality over time. Today, the danger is reform without renewal, where legislative victories become comfortable defaults rather than springboards for deeper transformation.

Unions could instead reposition themselves as champions of human capability, insisting that investments in adaptability, reskilling, and fair access to development be recognised as capital formation rather than simply costs. By negotiating for measures tied to the Human Dividend, they could help ensure that the returns on capability growth are shared among workers, employers, and communities. Rather than fighting solely to preserve penalty rates, unions could advocate for a deeper change: recognition that workforce adaptability and capability development are key drivers of productivity and resilience. They could also push for new reporting frameworks that track adaptive capacity as a fundamental determinant of prosperity, such as cycle time to competence, career mobility, innovation uptake, and speed of response to disruption. These measures are just as important to long-term national strength as financial returns.

This would not only serve workers; it would serve business. Firms that invest in human capability consistently innovate faster, recover more effectively from disruption, and retain talent longer. Small and medium enterprises, often caught between compliance burdens and constant disruption, would benefit from a system that values adaptability over throughput. And it would give the Labour movement itself a way out of the industrial-age trap: still standing for fairness, but through forward-looking policies that reward investment in people, not just the protection of structures.

The challenge is most acute for young Australians. Traditional entry-level jobs across many sectors, especially the high-volume stepping stones in retail, hospitality, and clerical and administrative support roles, are vanishing under the weight of automation and AI. Youth unemployment remains persistently above the national average, and the gap is widening as these early footholds disappear. Without new school-to-work bridges, and without embedding transferable capabilities such as adaptability, problem-solving, collaboration, and creativity across the curriculum, we risk undermining efforts to build fair and open pathways into meaningful work.

This is where unions can choose a different path. By working with business to co-create new productivity measures and capability-focused transitions, they could help ensure young people are not excluded but empowered. Such a reframing would shift the productivity debate away from a zero-sum contest of wages versus profits and towards a shared project of future-readiness. It would allow unions to recover relevance not as custodians of the past, but as co-architects of a fairer, more resilient economy.

The choice before the Australian Labor Party and the union movement is not only to protect, but also to create. They can continue defending industrial-age institutions and taxing business to sustain an unsustainable model, at the risk of eroding fairness itself. Or they can take up the harder, more vital role: to help redefine productivity, embedding human capability at the heart of value creation.

Done right, this shift would raise business value, strengthen national adaptive capacity, and restore unions as advocates not only for fairness but for shared prosperity. It would also honour the tradition from which unions were born. The dignity of work in the age of AI will not be preserved by clinging to the past, it will be secured by investing in the capabilities that allow every Australian, and especially the next generation, to thrive in a world that is moving faster than ever before.

### Union Membership in Decline

Density of unionised labour has fallen from 40% in 1992 to just 13.1% (1.6 million workers) in 2024, with the sharpest losses in manufacturing and other traditional sectors. At the same time, union presence in new and fast-growth tech industries is negligible.[4] Professionals Australia, representing engineers, scientists, IT professionals, and managers, reported only 18,535 members in December 2023 — less than 2% of the roughly 980,000 Australians employed in technology-related occupations.

The paradox is stark: unions remain concentrated in shrinking sectors, while largely absent from the industries that will dominate the future workforce.[5]

## Conclusion

Unions matter more than ever. But in the age of AI, their relevance will not be secured by clinging to the instruments of the past. It will come from stepping forward as co-creators of bridges and by helping workers move from misaligned education and obsolete roles into meaningful careers. Their role can be more than bargaining for wages, training, and conditions; it can be about championing the human capabilities that make people employable, adaptable, and resilient across a working life.

The measures that count are no longer just hours worked or output per shift. Defined this way, productivity has always opened the door to automation: if people are valued only for cost and output, replacing them with machines becomes the logical step. The Human Dividend demands something different: measuring how quickly people become competent in new roles, how readily they can move into different roles, how capability deepens over time, and whether access to opportunity is shared fairly. It is about whether older Australians shifting careers and young people just starting out — particularly those already on the margins — find doors opening or closing as technology reshapes the world of work.

This is not an abstract argument for me. I honour the enduring need for employee representation. But the battles ahead will be different. Generative AI will not simply eliminate jobs; it will reorganise them. That challenge demands courage from union leaders to move beyond protection and reinvent their purpose for an economy where humans are too often treated as costs to be cut, rather than potential to be grown.

The future dignity of work will not be safeguarded by preserving industrial scaffolding. It will be secured by investing in people, in their adaptability, creativity, and capacity to learn anew, and by unions daring to lead that renewal with the same resolve their forebears once showed. If unions choose this path, they will not only restore their relevance, they will help redefine productivity itself, shifting the focus from cost and efficiency to people as the true drivers of value. It is a shift unions must lead, both for their own survival and to help employers recognise humans not as a capital cost but as an investment in future success. That redefinition would serve business, workers, and society alike, ensuring that fairness and prosperity are not forces in opposition, but partners in shaping a shared future.

## Appendix: Rethinking Productivity: Human Capability Value Metrics

Productivity must be redefined through human capability measures — such as adaptability, career mobility, and equity of opportunity — rather than narrow industrial metrics like output per hour. These indicators track how investments in people compound into long-term organisational and national value.

**1. Engagement and Wellbeing**

- Engagement and employee experience (employee surveys, pulse checks)
- Psychological safety and trust (particularly in leaders)
- Absenteeism and wellbeing indicators

*Why it matters*: Engaged, healthy employees sustain innovation, resilience, and customer value.

**2. Capability Growth and Mobility**

- Cycle time to competence (speed to effectiveness in a new role)
- Career mobility, speed to promotion, pool of available talent to succeed into a role (movement up the J-curve of contribution)
- Future potential and depth/ breadth of transferable skills (human capability standards availability, portability, durable skills and behaviours)

*Why it matters*: These measures track how quickly organisations can redeploy and reskill talent in response to disruption or in readiness for new roles being created.

**3. Retention and Social Capital**

- Attraction and cultural-fit (speed to hire right person)
- Retention and turnover by cohort
- Mentoring, coaching, and collaboration indices
- Networks and relationships (CSAT, NPS, Supplier satisfaction)

*Why it matters*: Retention protects investment in capability development. Strong social capital boosts relationships, access to new knowledge, loyalty of customers, and raises data-driven decision making, problem-solving capacity and adaptability.

**4. Innovation and Adaptive Capacity**

- Time to implement new ideas (cycle from idea to pilot, time-to-market, R&D investment, % of revenue or margin generated from new products)
- Proportion of workforce engaged in innovation or improvement
- Adaptation resilience (speed to recover performance after mistakes/ shocks)

*Why it matters*: Captures the human side of productivity—an organisation's ability to adapt faster than competitors.

**5. Equity of Access and Opportunity**

- Access to first jobs and early career pathways
- Retention and promotion of new recruits over time to internal roles
- Diversity in progression (open access to reskilling and improved mobility)
- Access to development (training, micro-credentials, career mobility support)

*Why it matters*: Equity of opportunity is a national capability. Resilience is strongest when opportunity is broadly shared.

## Endnotes

[1] Bowles, M., & O'Hanlon, F. (August 18, 2025). *Escaping digital Taylorism: Designing AI for human capability and real productivity*. Future Ready 2025:4. The Institute for Working Futures & Capability.Co. https://doi.org/10.13140/RG.2.2.20249.74080
[2] Nissim, G., & Simon, C. (2021). Trade unions and technological change in the workplace: A review of the literature. *Technology in Society, 67*, 101741. https://doi.org/10.1016/j.techsoc.2021.101741.
[3] Jobs and Skills Australia. (2025). *Recruitment Experiences and Outlook Survey (REOS): Trends in youth employment*. Canberra: JSA.
[4] Australian Bureau of Statistics (ABS). (2024). *Trade union membership, August 2024* (Catalogue No. 6333.0). Canberra: ABS. Retrieved from https://www.abs.gov.au/statistics/labour/earnings-and-working-conditions/trade-union-membership; Reserve Bank of Australia (RBA). (2019). *The labour market for IT workers* (RDP 2019-02). Sydney: RBA. Retrieved from https://www.rba.gov.au/publications/rdp/2019/2019-02.html
[5] Professionals Australia. (2024, December 31). *Membership figures*. Retrieved from https://en.wikipedia.org/wiki/Professionals_Australia (Note: membership data as at 31 December 2023)
[4] ACTU. (2024). *Secure Jobs, Better Pay: Implementation and Renewal*. Australian Council of Trade Unions; Cooper, R., Ellem, B., & Lansbury, R. D. (2020). *The state of Australian unions: Strategies for renewal in a changing economy*. Monash University, Department of Management; & Peetz, D. (1998). *Unions in a Contrary World: The Future of the Australian Trade Union Movement*. Cambridge University Press.