THE SOCIAL POLICY GROUP

Artificial Intelligence and the Great Retrenchment

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FORWARD GUIDANCE SERIES

Acknowledgement of Country

The Social Policy Group acknowledges the Traditional Owners and Custodians of the land on which we live and work. We pay our respects to Elders past and present, who hold the knowledge, traditions, and customs of their peoples.

We also extend our respect to emerging leaders and to all Aboriginal and Torres Strait Islander peoples, acknowledging their enduring connection to the lands, waters, skies, and communities across this nation. We honour the resilience, strength, and diversity of First Nations cultures and celebrate their ongoing contributions to society.

About The Social Policy Group

The Social Policy Group (SPG) is Australia's foremost policy organisation. We provide integrated, end-to-end solutions that combine policy and programme design, economic modelling, community development, digital and multilingual communications, and strategic cross-sector connections. Our approach aligns with the priorities of governments and partners to develop policies and systems that respond effectively to the diverse needs of Australia's people and communities. By bridging sectors and fostering collaboration, we enable practical solutions that address complex challenges and improve outcomes for all Australians.

This report marks the inaugural edition of our Forward Guidance series, a strategic initiative designed to provide clear, evidence-based insights into emerging trends and challenges shaping Australia's policy landscape. The series aims to support decision-makers by delivering timely analyses and actionable recommendations that address critical economic, social, and community issues. By offering a forward-looking perspective, this report establishes a foundation for ongoing dialogue and collaboration, equipping stakeholders with the tools to anticipate change, adapt strategies, and drive meaningful outcomes in a rapidly evolving environment.

Key Findings

Artificial Intelligence (AI) is reshaping the global economy at a pace unlike all previous technological revolutions. What makes AI uniquely disruptive is not simply the ability to automate routine work but its capacity to replace entire categories of labour. The potential of AI to advance knowledge and increase the efficiency of our use of natural resources will define a new era of progress. In doing so, the structural changes will be tectonic.

SPG modelling finds that over the next five years, Australia will face significant layoffs across most sectors of our economy. If the adoption of AI maintains its current pace, a third (33.18 percent) of the workforce could experience a period of unemployment by 2030. In the event of a slowdown in the adoption of AI this figure could reduce to 1 in 5 working adults facing job loss (21.82 percent).

Figure 1: Unemployment exposure (5-year total)

Unemployment rate at five years incorporates aggregate sector displacement rates, secondary layoffs from reduced demand, the calculated bankruptcy rate for small firms and the existing unemployment rate. It accounts for population growth and a rate of re-employment in sectors with significant shortages. It does not factor in potential government intervention.

While the first layoffs begin in routine data entry, admin and retail, AI will proceed to replace many high-income, knowledge-based positions traditionally considered aspirational and secure. We already see this starting to unfold. The model finds that Australia will be one of the worst-hit OECD countries. Australia's economy is a composite of raw primary exports, low-yield domestic consumption services and high-income professional services constructed for an Australian market. As a developed economy, Australia ranks among the lowest on the industrial complexity index, leaving us dependent on the knowledge economy and on retail and hospitality services to fuel employment.

Without immediate intervention, Australia is at risk of large-scale redundancies within the next five years, spreading from low-income jobs to high-income and high-skilled positions. The shock will lead to a reduction in demand as downshifts in labour dynamics reduce consumer spending. The ripple effect will be secondary job losses in larger enterprises and escalating failures in small and medium-sized enterprises (SMEs).

In an open economy with a limited export sector, the decline in domestic spending will lead to a contraction across service industries. Without a considered industrial strategy, the Australian economy has fragmented, reducing our options for diversification and leaving us vulnerable to global shocks or structural shifts. In the absence of sustained capital investments and strategic coordination, most of Australia's private sector growth has emerged from the proliferation of small and medium-sized businesses, many operating close to the margin. Australia's larger enterprises have dominated in services and primary industries.

Our unique economic profile and reliance on the import of technology enables rapid AI take-up throughout the Australian economy. However the benefit will not be even. Small and medium-sized business holds a less favourable dynamic position. Forced to adopt labour-cutting measures to remain competitive, but with limited scaling agility, fewer non-essential staff and constrained by rigid wage structures, many will face unsustainable trajectories. For larger businesses, a substitution for labour with little expenditure is a straight increase in profit. In essence, workforce displacement is a consequence of AI triggering a sudden debasement in the value of selective labour.

Australia's large government-funded care and community economy will be a stabilising factor. Yet, as state and federal budgets come under pressure, services funded by the government but operated independently are incentivised to shrink administrative and routine positions, particularly in areas such as healthcare and the community sector. Short-term there is an opportunity to re-skill workers to fill critical vacancies in aged care, childcare and disability services. At the same time, the development of a comprehensive skills and re-training plan must be matched by an investment in complex manufacturing and the digital supply chain. Australia currently sits outside the emerging tech economies and is an importer of international innovations. Countries like Australia, without control over the creation, deployment and integration of advanced AI models, will be subjects rather than actors in the restructuring of their economic base.

Modelling

SPG employed a dynamic sector-specific macroeconomic model informed by a granular approach to each industry. The impact of AI was determined using cross-mapping of the core tasks of each position against current and predicted applications and emerging patterns of displacement globally. The model tracked continual adjustments and covariant effects across sectors, accounting for the character and structure of all 19 sectors defined by the Australian Bureau of Statistics (ABS), including behavioural patterns of firm size, profit margin, technology adoption and demand exposure. The forecasts project the outcome to 2030, accounting for a five-year projection against a partial S-curve. The aggregate unemployment rate accounts for the current baseline at the time of analysis, population trends and re-employment rates. The sector impacts include initial layoffs and secondary effects from changing income and consumption patterns. While this model offers a comprehensive analysis of the pattern of sectoral adjustments, the macroeconomic impacts could be drawn out further.

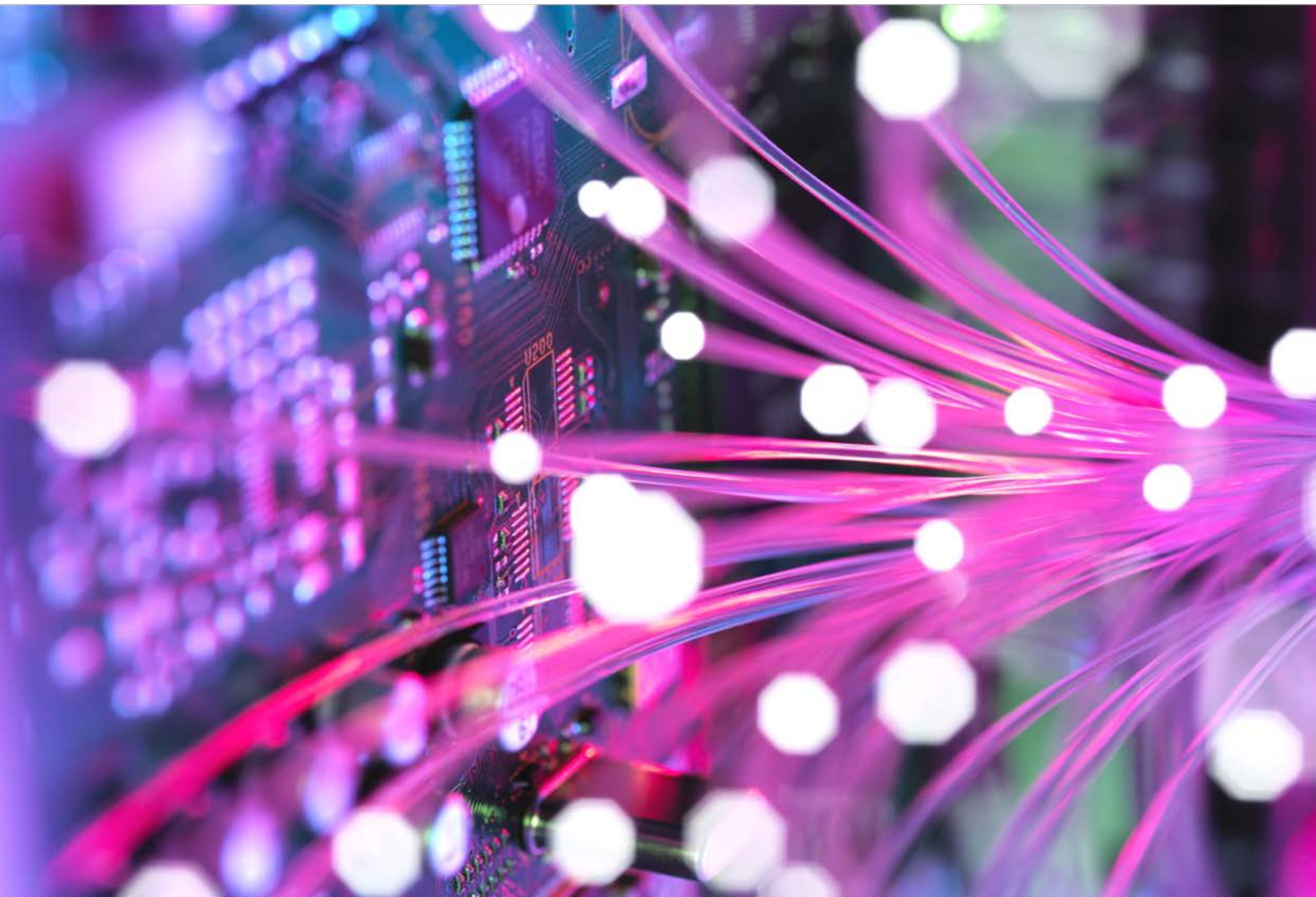
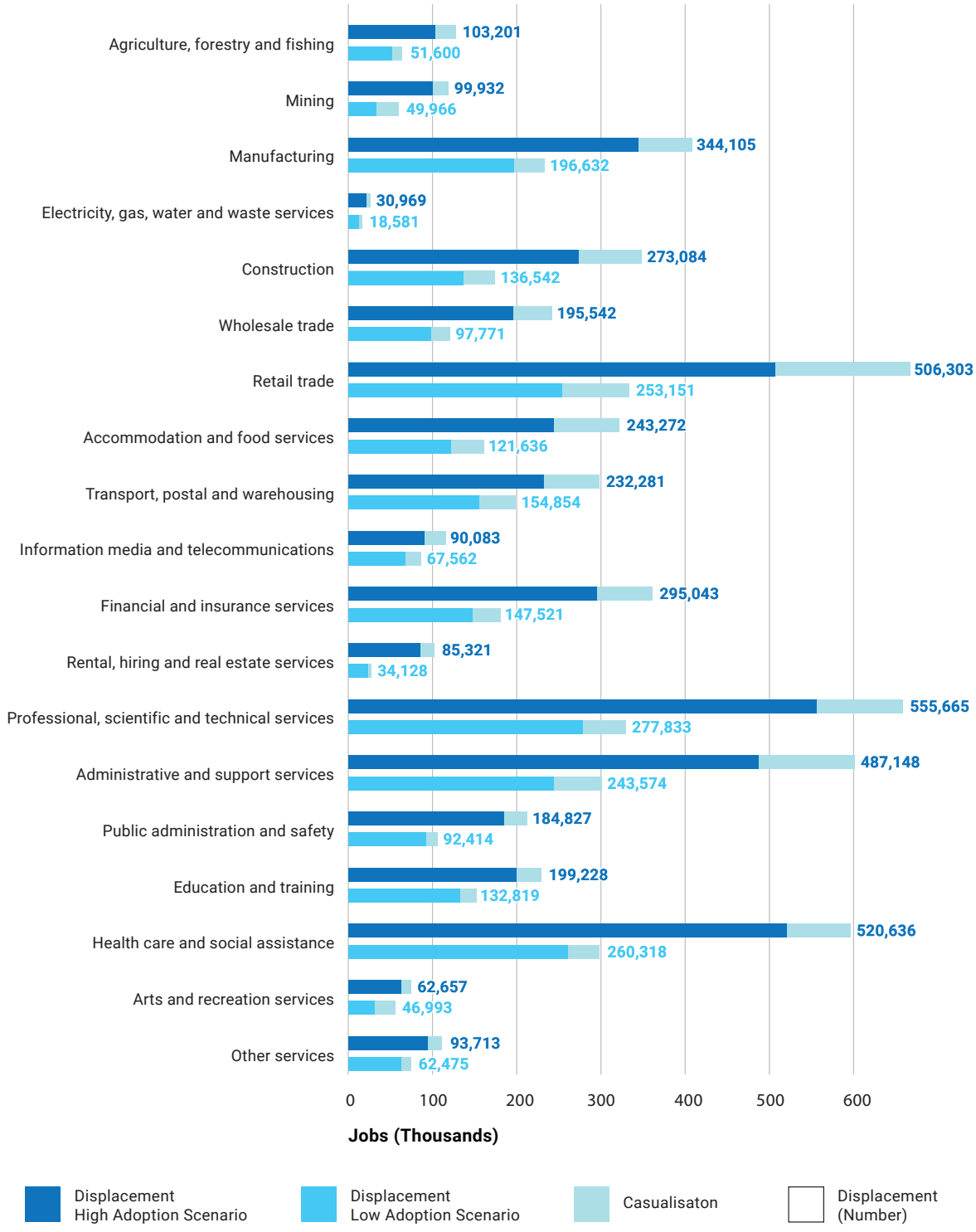
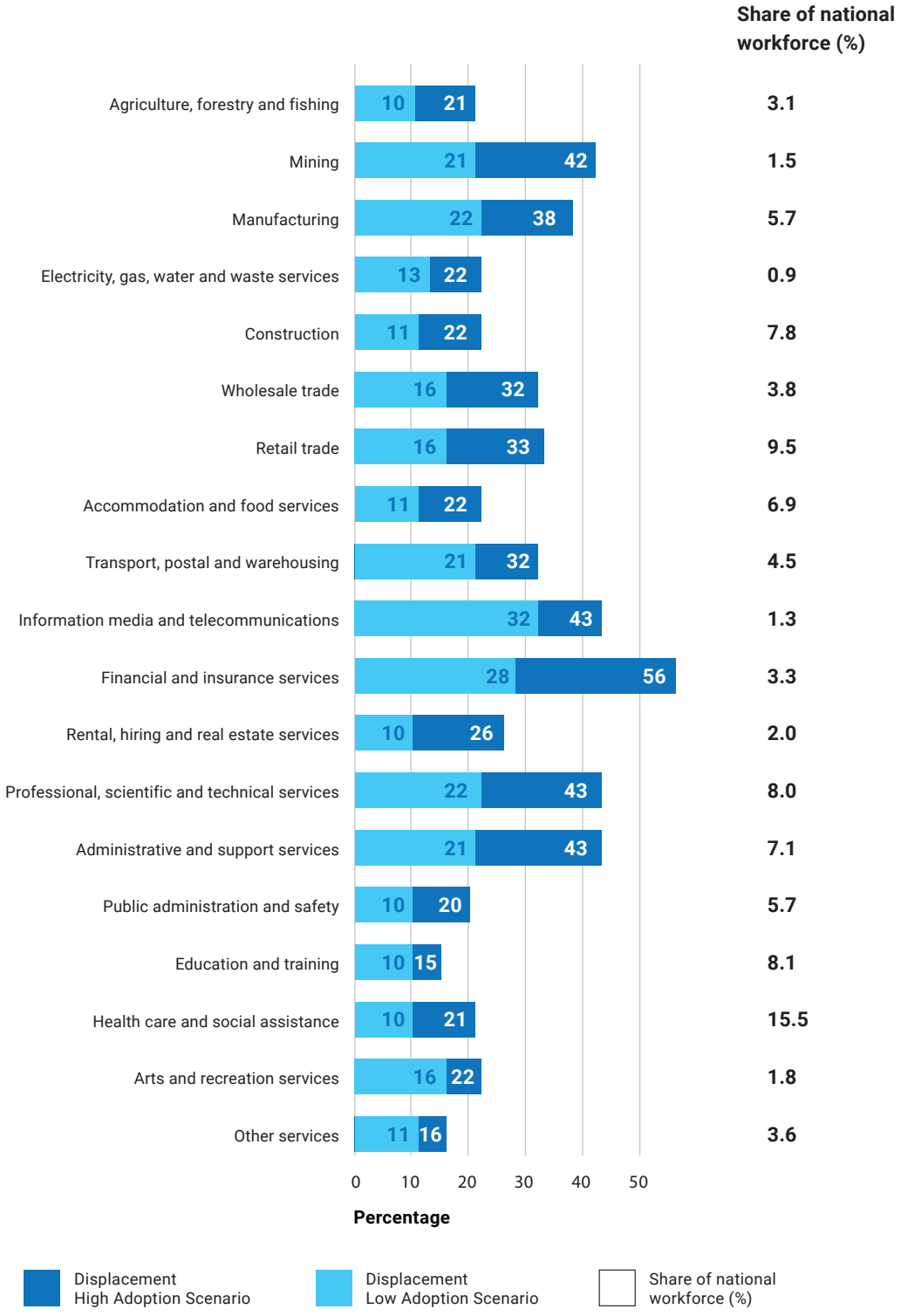


Figure 2: Displacement and casualisation (5-year total)



Job displacement by industry sector is derived from ABS workforce data as of June 2024. Calculations exclude impacts from the existing unemployment rate, the forward unemployment trend, and workforce entrant and re-entrant rates. Casualisation is determined by historical industry trends, the character of firm sizes and the percentage of tasks that can be fully automated versus partially automated.

Figure 3: Displacement relative to workforce size (2024)



The microdynamics - driving an unprecedented pace of transformation

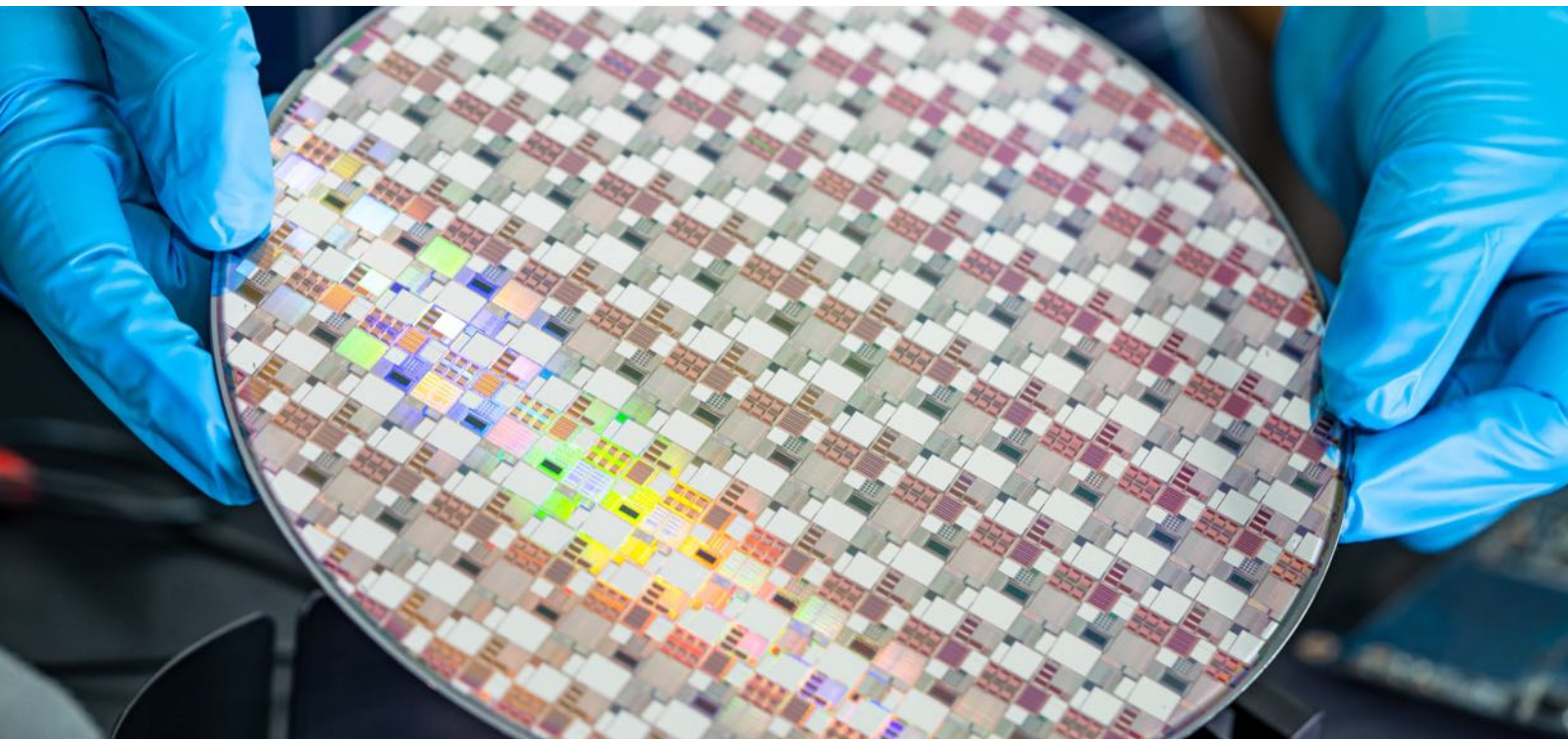
Understanding the unprecedented acceleration of AI adoption is critical to comprehending its transformative potential and economic ramifications. Historically, the diffusion of technological advancements was governed by physical capital investment, which created a drag on adoption. The production, transportation, and integration of machinery required extensive supply chain coordination and significant financial outlay, while employees needed training to operate new systems. These constraints imposed delays that allowed labour markets and institutions to adjust incrementally. AI obliterates this paradigm. With its intrinsic scalability, real-time digital distribution, and ability to integrate into pre-existing workflows, AI accelerates adoption to a pace never before seen, leaving little room for traditional adjustment mechanisms.

The decades-long build-out of digital infrastructure has created the conditions for adoption compression. Global high-capacity data networks, distributed computational nodes, advanced chip architecture, and ubiquitous interfacing devices form a seamless technological ecosystem that allows AI to function as a service rather than a physical product. Firms no longer require bespoke systems or costly hardware. Instead, AI is delivered as software, often accessed through cloud-based platforms that eliminate the logistical and financial complexities associated with previous technological transitions. The entry cost has been dramatically lowered, enabling businesses of all sizes to adopt AI with minimal capital expenditure. This structural shift collapses the traditional S-curve of adoption, allowing rapid diffusion across markets without the traditional bottlenecks of physical production or retraining requirements.

While the rate of adoption of AI varies by sector, the promise of immediate efficiency and savings is driving increasing levels of adoption across the economy. By streamlining operations, automating tasks, and enabling data-driven decision-making, AI significantly boosts productivity with minimal human intervention. For businesses operating in competitive markets with tight margins, the financial incentives to adopt AI are overwhelming. Furthermore, the fear of falling behind in a competitive marketplace, where technological innovation often defines success, compels organisations to integrate AI to maintain their competitive edge.

Finance and professional services have already seen the integration of AI across key functions. Knowledge-based and middle-class jobs, once considered safe from automation, are now at the forefront of disruption. The replacement of these positions, which play a crucial role in driving consumption, has broad implications for the economy. As these jobs disappear, so too does the consumption power of the middle class, leading to reduced demand across various industries. This feedback loop between labour displacement and declining consumption presents a critical threat for service economies like Australia which are heavily dependent on consumer spending to power growth. This leads to additional labour cost-cutting to maintain profits.

In modelling the impact of AI, the relationship between capital costs and productivity gains, it is necessary to reconsider conventional economic models of automation. In previous technological shifts, the capital investment to acquire automation, such as new plants or machinery, was substantive relative to labour costs. This slowed the pace of adoption and limited gains, giving the workforce time to adjust. Further, as tools, many innovations increased productivity, creating an initial downward pressure on wages followed by a long run readjustment. By contrast AI is a novel form of labour. AI technologies require minimal capital investment by businesses to effect immediate and substantive productivity gains in non-physical labour. The upfront cost for R&D and computation resources is carried by global tech companies with high levels of liquidity. Venture capital and large technology firms have absorbed the bulk of the development overheads, allowing businesses to adopt AI with little exposure.



The cascade of job displacement and casualisation

In our modelling, a two-step market reflex catalyses the mechanism of large-scale unemployment. Initially, AI adoption enables a rapid shift to a surplus production occurring across a wide subset of the labour market, facilitated by productivity gains or skilled automation. Following this, a supply-demand mismatch triggers profit maximisation, particularly among large firms. However, in a consumption economy built on domestic demand, the value of increased output is capped. In a profit incentive structure with high-cost labour, increased output and productivity gains from capital (AI) with minimal labour input leads to workforce reductions.

The Productivity Trap

AI adoption in complex economies generates wealth by enhancing export capabilities and driving global competitiveness. In Australia, where economic output is dominated by low-value exports and consumption-dependent services, AI merely reduces labour costs without creating equivalent demand for increased productivity. This productivity trap ensures that any gains from AI adoption remain capped, leading primarily to layoffs rather than economic growth. The lack of a diversified export base means there are few industries to absorb the displaced workforce, while the absence of adjacent high-value sectors limits opportunities to reinvest AI-driven efficiencies into national wealth creation.

A firm-level response then feeds a cascade, resulting in rising unemployment at scale and reducing consumption across the middle class. Small firms are disadvantaged by their staffing structures and scale of operations. Large firms move first and lay off staff, while small firms must compete against lower prices. In sectors where the full advantages of AI require higher capital expenditure, such as automatic cashiers, the impact on small firms is even greater. While AI increases back-of-house productivity for many SMEs, the overall impact in many sectors is negative. AI is likely to drive up bankruptcies and escalate unemployment. Concurrently, reduced consumer spending from layoffs in larger firms, fuelled by unemployment and consumer caution, triggers compounding economic contraction in sectors reliant on discretionary spending, particularly retail and hospitality.

Australia's economy and AI

While layoffs from AI will be global, Australia's economic structure is uniquely ill-suited to absorb the shock or to capitalise on the potential productivity gains of AI. In economies with robust industrial ecosystems and complex value chains, AI amplifies national wealth by increasing output and creating adjacent industries. By contrast, in an economy like Australia's dominated by raw material exports, limited value-added production, and consumption-driven services, AI productivity gains are capped, translating primarily into layoffs rather than growth. With no substantial high-value export base to absorb displaced labour or monetise the productivity improvements, AI will exacerbate structural vulnerabilities and accelerate economic stagnation.

AI's transformative potential lies in its ability to multiply efficiency across industries. In manufacturing-heavy economies, AI integration boosts productivity in sectors such as automotive production, robotics, and green technologies, generating wealth by exporting advanced goods into global markets. By contrast, Australia's economy lacks the industrial complexity to capture these benefits. Ranked 102nd globally on the Economic Complexity Index, Australia's position at the bottom of global value chains limits its ability to translate AI-driven productivity into increased national wealth. With no significant domestic production of semiconductors, AI hardware, or advanced machinery, the economic benefits of AI adoption accrue to countries higher up the value chain, leaving Australia as a consumer of foreign innovation.

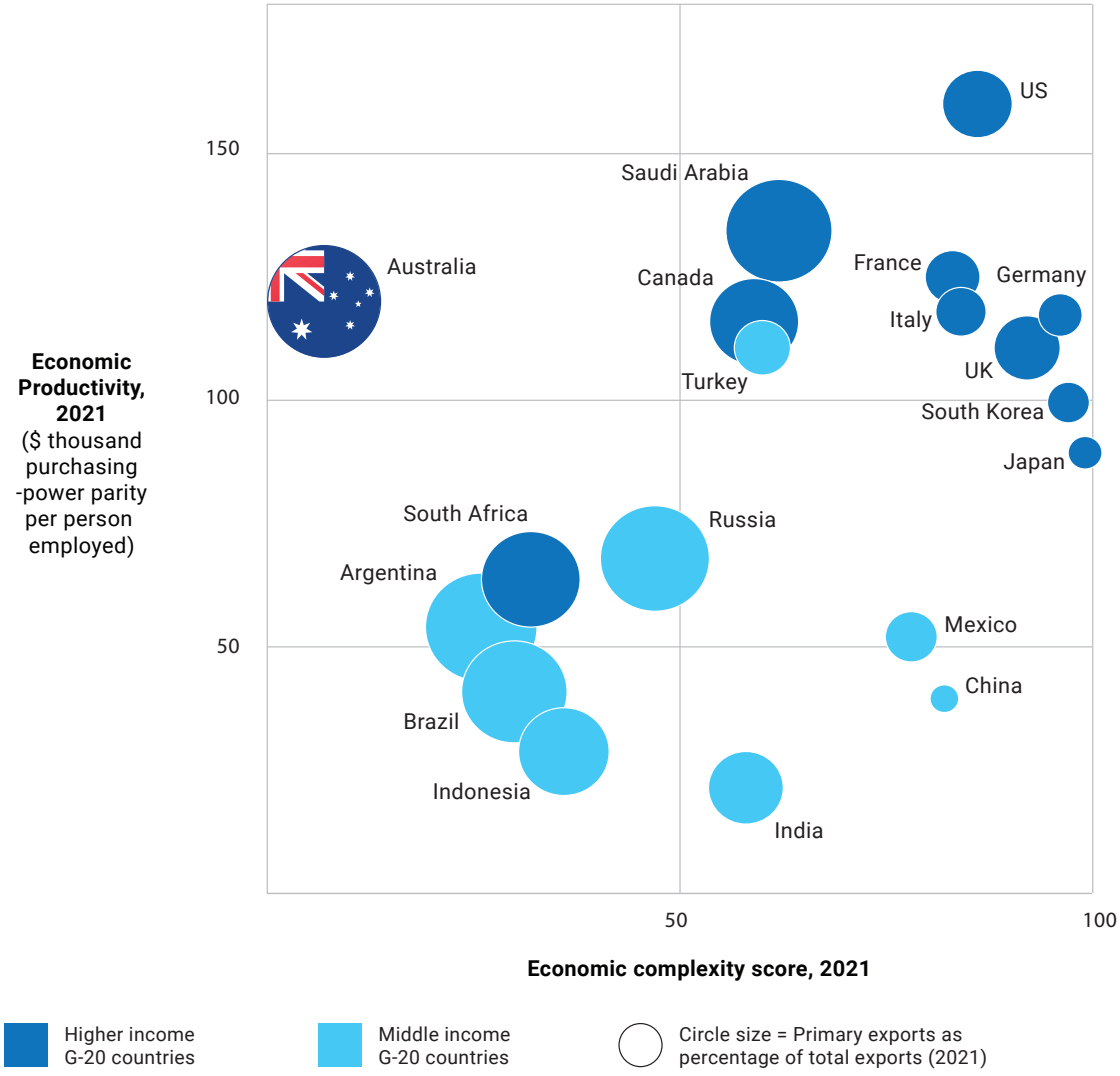
Further, while Australia is a critical supplier of AI-enabling resources, such as lithium and rare earth elements, this role entrenches dependency on raw material exports rather than fostering diversification. The global demand for critical minerals has surged, driven by the rapid adoption of renewable energy systems, electric vehicles, and advanced manufacturing. Yet, Australia captures only a fraction of the economic value generated by these resources. For example, while Australia produces over fifty-five percent of global lithium, it exports it almost exclusively as a raw material, forfeiting the opportunity to develop downstream industries such as battery manufacturing. The global battery market, projected to exceed $410 billion by 2030, highlights the scale of the lost opportunity. Domestic processing and production could multiply the value of these exports, but without these capabilities, Australia remains locked into a low-margin role.

This reliance becomes increasingly precarious as AI and material science advance. AI-driven efficiencies in recycling technologies and resource substitution will reduce the long-term demand for virgin resources. Countries like China and the United States are already developing vertically integrated

supply chains to reduce reliance on imports, further eroding Australia's market share. In this context, Australia risks being left with declining revenue streams from its most significant export sectors, exacerbating fiscal constraints and limiting its ability to invest in future-focused industries.

Approximately twenty percent of Australian jobs are government-funded, spanning healthcare, education, and public administration. These roles act as stabilisers during economic disruptions, but their expansion will be constrained by declining public revenues. Australia's fiscal system, reliant on consumption taxes and resource royalties, is particularly vulnerable to the economic contraction AI will trigger. As service-sector automation drives unemployment, reduced household income will suppress consumer spending, which accounts for nearly sixty percent of GDP. This demand-side shock will ripple across the economy, amplifying secondary layoffs in SMEs, retail supply chains, and discretionary industries. High levels of household debt and prohibitive house prices intensify these risks, creating a feedback loop where income shocks translate into mortgage stress, further curbing consumption and accelerating economic decline.

Figure 4: Where Australia sits on resource dependence and industrial complexity



Source: Economic Complexity, Harvard Growth Lab

Conclusion

Artificial intelligence is not just a disruptive technology, it is a profound force of structural change. Unlike past innovations, AI is infinitely scalable intellectual labour, already able to outpace and outperform human cognitive labour across most technical and professional roles. Its adoption compresses the natural cycles of economic adjustment, leaving businesses, workers, and governments with little time to adapt. This transformation arrives amid a period of extraordinary global instability, characterised by geopolitical tensions, de-globalisation, and mounting public debt, further limiting the capacity of governments to respond effectively. For Australia, these dynamics intersect with our uniquely vulnerable economic structure, amplifying the risks and challenges of AI's rapid proliferation.

Australia's reliance on primary exports, low-yield domestic consumption services, and professional services tailored to a local market creates a fragile foundation for weathering the disruptive impacts of AI. Unlike economies with deeply integrated industrial ecosystems, Australia lacks the advanced manufacturing base and complex supply chains necessary to pivot toward high-tech production and job creation. Large businesses in resource extraction, finance, and retail may see short-term gains from AI adoption, but these benefits will be unevenly distributed. Meanwhile, SMEs face existential threats as they struggle to absorb the effects of reduced consumer spending.

AI's scalability compounds these challenges. As a system capable of exponential output, AI enables unprecedented productivity gains for firms but erodes traditional labour structures in the process. The disappearance of jobs across the knowledge economy not only displaces workers but also removes options for redevelopment into other skilled roles and diminishes pathways for economic mobility. In an economy heavily reliant on consumption driven growth, this not only creates a feedback loop of rising unemployment, declining demand, and business failures, but undermines a national belief in higher education as a path to employment security and middle-class wealth.

The broader implications extend beyond the labour market. Regional disparities are likely to deepen, as the benefits of AI adoption concentrate in urban centres while rural and regional areas are left behind. At the same time, Australia's resource wealth presents a significant opportunity that we are currently poised to miss. The country possesses the raw materials vital to AI technologies but remains a low-margin supplier in global markets. Without an industrial strategy to develop onshore refinement and advanced manufacturing capabilities, Australia risks missing out on the high-value segments of the AI-driven economy.

Addressing these interconnected challenges requires a national conversation. Australia must recalibrate its economic strategy, focusing on industrial diversification, complex manufacturing and sovereign technological capabilities. We must move away from short-term stop gaps like roads and infrastructure and embark on a large-scale mass investment in the development of a complex industrial ecosystem and end-to-end production chains, creating new pathways for employment and ensuring resilience in an increasingly volatile global landscape. Simultaneously, we will need to support displaced workers, strengthen regional economies, and reimagine education and vocational training, all amid declining national income.

Appendix 1: Sector Analysis

The following provides a brief analysis of how AI or AI-driven automation will mechanise production or replace routine tasks and knowledge labour for each sector. A full analysis of positions and their susceptibility to layoffs based on key tasks and current and future trends sits behind these summaries. Each sector is analysed separately based on its unique characteristics, including traditional take up of technology and the nature and type of AI likely to be adopted.

What emerges from this analysis is a nuanced view of how AI adoption varies significantly across sectors, shaped by factors such as regulatory constraints, capital intensity, and the nature of work within each industry. In knowledge-based sectors like finance and professional services, the integration of AI is advancing rapidly, with technologies displacing complex analytical and advisory roles by automating tasks such as risk modelling, fraud detection, and portfolio management. By contrast, regulated sectors such as healthcare and education face a more intricate interplay between AI and human labour, as ethical considerations and operational complexities limit adoption to administrative tasks, while a cautionary approach is taken to high-risk settings.

This divergence underscores the dual nature of AI's impact: in unregulated, high-capital sectors, it accelerates efficiency and profitability, while in human-centric and regulated industries, it requires careful integration to support rather than disrupt. As AI continues to advance, it also converges with other technologies, amplifying its transformative effects across all industries. These dynamics highlight the need for proactive strategies, including policy interventions that address the disparities across firm size and sectors.

Sector 1: Agriculture, Forestry, and Fishing

The increasing use of AI in these sectors is beginning to pose risks for traditional roles, such as farm workers, forestry technicians, and fishing oversight personnel, as routine monitoring tasks become increasingly automated. AI-enhanced systems like precision farming techniques that monitor soil and crop health to automated irrigation systems that adjust water usage based on real-time data. Pest control is becoming more efficient with the use of drones that can identify and treat infested areas, reducing the reliance on manual labour for these tasks. In forestry, AI is being used to monitor forest health and growth patterns with aerial imagery and data analysis. Similarly, in the fishing industry, AI-driven systems are starting to transform how fish stocks are monitored and managed, using tracking and predictive analytics to promote sustainable practices.

Table 1: Agriculture, Forestry, and Fishing

		Displacement	
Employment		High-Adoption	Low-Adoption
493,500		103,201	51,600
		21%	10%
	Casualisation		
		24,675	12,338

Sector 2: Mining

AI is already starting to make significant impacts in the mining industry by automating some complex and hazardous operations. AI-driven machines are beginning to assist with high-precision drilling and ore processing tasks. Autonomous vehicles are gradually being introduced to transport materials within mines, reducing the need for human drivers. Additionally, the integration of predictive maintenance systems is improving real-time monitoring of equipment status, allowing for better scheduling of maintenance to prevent failures. These advancements are increasing efficiency and safety while also beginning to reduce the need for human labour in certain mining roles. Operators, drivers, and maintenance workers face increasing displacement risks as AI technologies continue to automate core aspects of their jobs.

Table 2: Mining

		Displacement	
Employment		High-Adoption	Low-Adoption
238,500		99,932 42%	49,966 21%
	Casualisation		
		19,080	9,540

Sector 3: Manufacturing

Assembly lines are increasingly being operated by robots that can assist with tasks such as assembling, packaging, and distribution. AI is starting to play a larger role in quality control, with advanced imaging and sensors being used to detect defects in products more quickly and accurately than human inspectors. AI is also making headway in inventory management, helping predict stock needs, manage orders, and streamline logistics. Roles such as assembly line workers, machine operators, quality inspectors, and inventory clerks face increasing displacement risks as AI technologies continue to advance and take over more routine and repetitive tasks.

Table 3: Manufacturing

Employment	Displacement	
	High-Adoption	Low-Adoption
910,500	344,105	196,632
	38%	22%
	Casualisation	
	63,735	36,420

Sector 4: Electricity, Gas, Water, and Waste Services

In utility services, AI is already beginning to improve efficiency and reliability across the board. Smart grid technologies are using AI to optimise electricity distribution and manage demand response dynamically. In the water sector, AI is helping to detect leaks and predict infrastructure failures, automating maintenance schedules and operations. Waste management is also benefiting from AI, with automated sorting processes and optimised recycling procedures, employing machines that are sorting waste more efficiently than human workers. Utility workers such as drivers, meter readers, maintenance technicians, and waste sorting personnel face increasing displacement risks as AI automates more routine tasks and operational monitoring.

Table 4: Electricity, Gas, Water, and Waste Services

Employment	Displacement	
	High-Adoption	Low-Adoption
143,400	30,969	18,581
	22%	13%
	Casualisation	
	8,604	5,162

Sector 5: Construction

Project management software, enhanced by AI algorithms, is optimising resource allocation and schedule management, improving efficiency and helping to reduce delays. Onsite, AI-driven machinery assists with tasks such as pouring concrete and ground surveying. Drones equipped with AI capabilities are used for aerial surveys and monitoring construction progress, providing data-driven insights that support, rather than fully replace, traditional surveyor roles. The growing use of AI in construction is starting to pose risks for roles such as drivers, managers, and surveyors as more tasks become partially automated and require fewer workers.

Table 5: Construction

	Displacement	
Employment	High-Adoption	Low-Adoption
1,251,300	273,084 22%	136,542 11%
	Casualisation	
	75,078	37,539

Sector 6: Wholesale Trade

In the wholesale trade sector, warehouses are already becoming increasingly automated with systems designed to assist in managing inventory and fulfilling orders with reduced human intervention. Advanced robotics and AI systems are now being used to control the storage, retrieval, and packing processes, streamlining operations and minimising errors. AI-powered software is beginning to analyse sales data, adjust inventory levels, order new stock, and predict future demand trends. These advancements are gradually reducing the need for workers in roles such as stock clerks, order pickers, and inventory managers.

Table 6: Wholesale Trade

Employment	Displacement	
	High-Adoption	Low-Adoption
615,000	195,542	97,771
	32%	16%
	Casualisation	
	46,125	23,063

Sector 7: Retail Trade

In the retail sector, AI is set to revolutionise both customer-facing and back-end operations. Automated checkout systems and self-service kiosks are already everywhere, gradually reducing the need for cashiers. Inventory management is also being enhanced by AI, with predictive analytics starting to forecast demand, manage stock levels, and automatically reorder products. In customer service, AI-powered chatbots are increasingly handling a wide range of queries, from product information to complaint resolution, reducing the need for human customer service representatives. Personalisation engines are also increasingly driving sales by recommending products to consumers based on their browsing and purchase history, tasks that were once managed by marketing analysts and sales associates.

Table 7: Retail Trade

	Employment	Displacement	
		High-Adoption	Low-Adoption
	1,534,600	506,303	253,151
		33%	16%
Casualisation		161,133	80,567

Sector 8: Accommodation and Food Services

The accommodation sector will experience a shift as AI continues to automate various customer service interactions, including reservations, inquiries, and personalised guest services through AI-powered systems that will remember guest preferences for amenities and room settings. In food services, AI already manages a substantial proportion of order entries and payments, and this is only expected to increase. Additionally, kitchen automation through AI-driven resource management and intelligent machines to assist with food preparation will optimise workflows, improve wastage, standardise output, and reduce the need for line cooks. Stock and waste management will become increasingly delegated to AI management systems. Service staff, cashiers and, to a lesser degree, kitchen staff will face increasing displacement risks as AI and robotics increasingly take over both management and customer interaction tasks.

Table 8: Accommodation and Food Services

		Displacement	
Employment		High-Adoption	Low-Adoption
1,114,700		243,272	121,636
		22%	11%
	Casualisation		
		78,029	39,015

Sector 9: Transport, Postal, and Warehousing

In transport, autonomous vehicles and AI-driven systems are beginning to assist with driving tasks on top of already high levels of AI integrations in route optimisation and fleet management. In postal services, automated sorting machines are handling packages and mail with greater speed and accuracy, minimising the need for manual sorting. Warehousing is also seeing a rise in automation, with robotic systems managing inventory, picking, packing, and organising shipments. AI-powered systems are being used to predict demand and optimise delivery routes, improving efficiency across logistics operations. As AI technologies continue to advance, workers such as drivers, warehouse staff, and postal clerks are facing the risk of job displacement.

Table 9: Transport, Postal, and Warehousing

Employment	Displacement	
	High-Adoption	Low-Adoption
724,700	232,281	154,854
	32%	21%
	Casualisation	
	65,223	43,482

Sector 10: Information Media and Telecommunications

In the media and telecommunications sectors, AI is already beginning to automate a range of content creation and distribution tasks, both forms of work highly suited work to generative AI processes. As algorithms become increasingly capable of rapidly writing news articles, financial reports, and creating video content, the already high workload for journalists and content creators will diminish. In telecommunications, customer service is being transformed by AI, with virtual agents handling tasks such as troubleshooting and account management, although human customer service agents are still required for more complex issues. Network management is another area where AI is excelling, optimising traffic and predicting system failures before they occur, though technicians and engineers still play a key role. Journalists, content creators, customer service representatives, and telecommunications engineers face increasing displacement risks as AI takes over more aspects of content production, customer interactions, and network management.

Table 10: Information Media and Telecommunications

	Employment	Displacement	
		High-Adoption	Low-Adoption
	209,300	90,083	67,562
		43%	32%
Casualisation		25,116	18,837

Sector 11: Financial and Insurance Services

Bank tellers, financial analysts, claims investigators, adjusters and underwriters, and financial advisors and managers face increasing displacement risks as AI takes over more complex analytical tasks and customer interaction systems are now handling high-volume transactions, customer risk assessments, and fraud detection, which were once core functions of bank tellers, risk analysts, and fraud investigators. In insurance, AI is automating claims processing and policy underwriting. Furthermore, personalised financial advice and management is being provided by AI-driven platforms, reducing the role of financial advisors.

Table 11: Financial and Insurance Services

Employment	Displacement	
	High-Adoption	Low-Adoption
529,700	295,043	147,521
	56%	28%
	Casualisation	
	66,213	33,106

Sector 12: Rental, Hiring, and Real Estate Services

In the real estate and rental sectors, AI is already starting to automate key property management functions such as listing properties, screening tenants, and managing leases. Virtual reality tours and AI-enhanced customer interaction platforms are reducing the need for in-person viewings and meetings, tasks that were traditionally managed by real estate agents. AI systems are capable of performing background checks and credit assessments. Real estate agents, property managers, and leasing agents face increasing displacement risks as AI automates more client interactions, property listings, tenant screenings and financial processes.

Table 12: Rental, Hiring, and Real Estate Services

Employment	Displacement	
	High-Adoption	Low-Adoption
326,400	85,321 26%	34,128 10%
	Casualisation	
	16,320	6,528

Sector 13: Professional, Scientific, and Technical Services

AI is already having a significant impact on professional services, particularly in areas involving data analysis and routine task automation. In legal services, AI will perform document review and legal research, tasks traditionally done by paralegals and junior lawyers. In technical consulting, AI tools are now being utilised to analyse large datasets and provide insights, reducing the need for data analysts and junior consultants. Similarly, accounting firms are using AI for transaction processing, payroll, and tax filing, automating many tasks previously handled by junior accountants. Paralegals, lawyers, data analysts, consultants, and accountants are already facing a growing risk of job displacement as AI automates these core functions.

Table 13: Professional, Scientific, and Technical Services

Employment	Displacement	
	High-Adoption	Low-Adoption
1,286,500	555,665	277,833
	43%	22%
	Casualisation	
	102,920	51,460

Sector 14: Administrative and Support Services

AI is already automating common administrative tasks such as data entry, scheduling, and record management across various industries. Virtual assistants are being used to manage calendars, handle communications, and book appointments, reducing the need for secretaries and administrative assistants in many cases. In customer support, AI chatbots are now handling inquiries and troubleshooting issues, reducing the reliance on human customer service representatives. Administrative assistants, secretaries, receptionists, and customer service representatives are already facing job displacement risks as AI takes over more administrative and support tasks.

Table 14: Administrative and Support Services

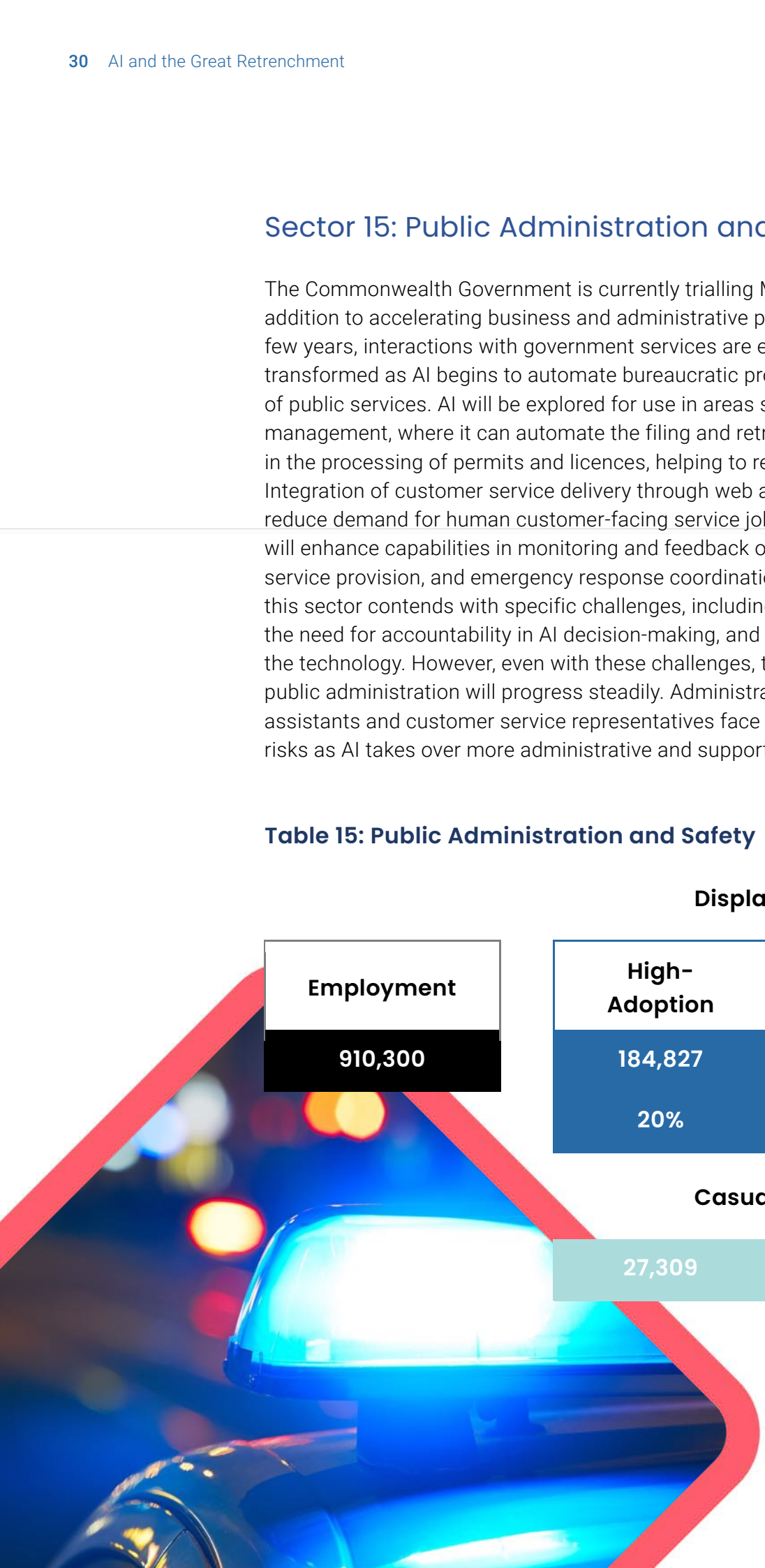
	Displacement	
Employment	High-Adoption	Low-Adoption
1,139,900	487,148 43%	243,574 21%
	Casualisation	
	113,990	56,995

Sector 15: Public Administration and Safety

The Commonwealth Government is currently trialling Microsoft 365 Copilot. In addition to accelerating business and administrative productivity, over the next few years, interactions with government services are expected to be transformed as AI begins to automate bureaucratic processes and the delivery of public services. AI will be explored for use in areas such as public records management, where it can automate the filing and retrieval of documents and in the processing of permits and licences, helping to reduce processing times. Integration of customer service delivery through web and phone chatbots will reduce demand for human customer-facing service jobs. In public safety, AI will enhance capabilities in monitoring and feedback of services, predictive service provision, and emergency response coordination. The adoption of AI in this sector contends with specific challenges, including concerns over privacy, the need for accountability in AI decision-making, and ensuring ethical use of the technology. However, even with these challenges, the adoption of AI in public administration will progress steadily. Administrative staff, office assistants and customer service representatives face increasing displacement risks as AI takes over more administrative and support tasks.

Table 15: Public Administration and Safety

		Displacement	
Employment		High-Adoption	Low-Adoption
910,300		184,827	92,414
		20%	10%
	Casualisation		
		27,309	13,655



Sector 16: Education and Training

The use of AI in education is already expanding, with schools increasingly adopting multiple learning platforms. AI is being introduced to reduce administrative staffing costs and streamline processes. Performance tracking and adaptive learning platforms are starting to tailor educational content to individual students and track teacher performance. Personalised AI tutors will see a growing uptake, while AI will be increasingly relied upon for the majority of grading tasks. Tertiary academics and educators face a compounded job displacement risk, as both educator and research aspects of their roles are subject to AI displacement. In addition, administrative staff and student advisors are at rising displacement risk as AI increasingly automates tasks such as student interactions, course administration, and personalised learning support.

Table 16: Education and Training

	Employment	Displacement	
		High-Adoption	Low-Adoption
	1,308,300	199,228	132,819
		15%	10%
Casualisation		29,437	19,625

Sector 17: Health Care and Social Assistance

AI is already being increasingly used for diagnostic testing, patient data analysis, and administrative tasks such as scheduling, communications, patient flow and record management. AI systems will be further applied to manage patient monitoring and provide diagnostic support, lessening the need for constant human engagement by clinical staff. We will also see increasing uptake of AI in triage processes, psychological services, and a wide range of resource and logistics management. Healthcare administrators and management, medical technicians, radiologists and some clinical roles face increasing displacement risks as AI automates more diagnostic, administrative and customer management tasks.

Table 17: Health Care and Social Assistance

Employment	Displacement	
	High-Adoption	Low-Adoption
2,503,300	520,636	260,318
	21%	10%
	Casualisation	
	75,099	37,550

Sector 18: Arts and Recreation Services

The automation of creative processes can already be seen in sales, content management and customer interactions in public and recreational spaces. AI is being used for scheduling, cataloguing and ticketing functions. In some museums and galleries, AI is beginning to guide visitors independently. Generative AI is increasingly able to produce high-quality creative outputs previously requiring human artistry. Musicians, artists and designers face increasing displacement risks as AI substitutes for a greater amount of creative processes and experiences, while customer-facing jobs are also at risk of automation.

Table 18: Arts and Recreation Services

		Displacement	
	Employment	High-Adoption	Low-Adoption
	287,100	62,657	46,993
		22%	16%
Casualisation		11,484	8,613

Sector 19: Other Services

In other service sectors, such as personal care and automotive maintenance, AI is already automating appointment scheduling, inventory, client management, and inquiry handling, tasks traditionally addressed by receptionists and administrative staff. Support personnel in small service businesses face increasing displacement risks as AI is adopted for administrative, client management and transaction processing functions.

Table 19: Other Services

Employment	Displacement	
	High-Adoption	Low-Adoption
583,200	93,713	62,475
	16%	11%
	Casualisation	
	17,496	11,664