Technology and the Future of Central Banking at the RBA

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Governor

Address to the 60th Shann Memorial Lecture
Perth – 3 September 2025

16:49

Good afternoon.

I'd like to begin by acknowledging the Whadjuk people, the Traditional Custodians of the land on which we meet today. I pay my respects to their Elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples joining us today.

It's a privilege to be here to deliver the 60th Shann Memorial Lecture.

Edward Shann was a pioneer of economics in Australia. He's remembered not just for his deep knowledge and wide-ranging interests, but also for his curiosity, intellectual energy and strong sense of social responsibility.[1]

In May 1963, the RBA's first Governor, HC Coombs, delivered this lecture. Coombs – who was both a student and friend of Shann – remarked humbly that 'others more capable have assessed the

significance of his work, both for economic history and economics in Australia, and for the conduct of public affairs'. A worthy acknowledgement.

The lecture delivered by Coombs focused on the drivers of productivity growth and his message still resonates today. Coombs spoke about the vital role of trade, research and development, private investment, access to credit, entrepreneurship and education – core pillars of a strong economy then, and still relevant today.

In that speech, Coombs said:

'Economic progress relies on the capacity of creative humans but that, with the changes in the character and complexity of society, this creativeness cannot be realised merely by an absence of restraint but requires a total environment, both favourable and geared to take advantage of it.'

Coombs' words – and his reflections on the work and influence of Shann – remind us that economic progress doesn't happen in isolation. It depends on how well we shape the environment around innovation and creativity. That's why it feels especially timely to be speaking with you today about a major structural shift reshaping Australia's economy – one that, if harnessed effectively, could unlock new waves of innovation, creativity and future productivity growth.

New technologies – including artificial intelligence (AI) and digitalisation – are evolving rapidly. They're already transforming industries and changing how we work. It's an exciting time, full of promise. But with opportunity comes complexity. At the RBA, we're thinking deeply about how to respond, not just as policymakers but as an institution.

As a central banker, two questions are front of mind when it comes to technology.

1. What do these technological shifts mean for the economy, and for our financial and payment systems as policy makers?
2. How can we harness technology to strengthen the way we operate as a central bank?

These questions matter to us because while our mission to promote the economic prosperity and welfare of the Australian people remains constant, the environment in which we pursue it is evolving rapidly. Technology is reshaping how businesses operate, how Australians interact and transact with one another, and how government and public institutions like ours adapt and adjust policies. Everyone is navigating this change.

Today, I will first discuss the impact of technological change on our economy, including what we are hearing from businesses through our liaison program (including here in Western Australia). Then I'll cover how we at the RBA are adapting to this changing landscape. As a central bank, we need to find the right balance between innovation, resilience and reliability. I'll talk through some of our meaningful technology-related innovations – past and present – as well as how we're equipping the RBA for tomorrow's challenges. And then I'll conclude with how we are further building our capability to inform policy with data and technology, as well thinking ahead to broader policy questions such as the future of money.

Technology and the economy

There is a lot we don't understand about how the current technological change will affect our economy, both in Australia and globally. That doesn't stop a variety of very firm opinions on what the future will look like. But I think most people would agree that there is a great deal of opportunity for innovation and productivity growth – key drivers of economic growth and people's living standards. By nature I am

optimistic about this but it does remain to be seen how developments in technology will impact not only the economy as a whole but individuals within the economy.

Some view AI as the next general-purpose technology, much like electricity. When such transformative technologies emerge, they often generate waves of innovation as they become integrated across industries and transform the wider economy. Recent analysis from the Australian Government suggests that generative AI alone could contribute between $45 billion and $115 billion annually to the Australian economy by 2030.[2]

Beyond AI, the Productivity Commission estimates that data sharing and access in a mature digital environment could add an additional $10 billion to Australia's annual economic output.[3] Evidence suggests firms' profitability is boosted by technology. Firms with directors who have tech expertise tend to see a greater impact on their profitability from technology adoption.[4]

But this transformation is not just about profits – it is part of a much larger societal shift. Technological change has always reshaped the labour market, and AI is no exception. As AI continues to reshape industries and economies, it is not just the tools and processes that are evolving – it is the very nature of work. While many experts anticipate a net increase in jobs, it is likely to be more nuanced: some roles will be redefined, others might be displaced, and entirely new ones will be created.[5]

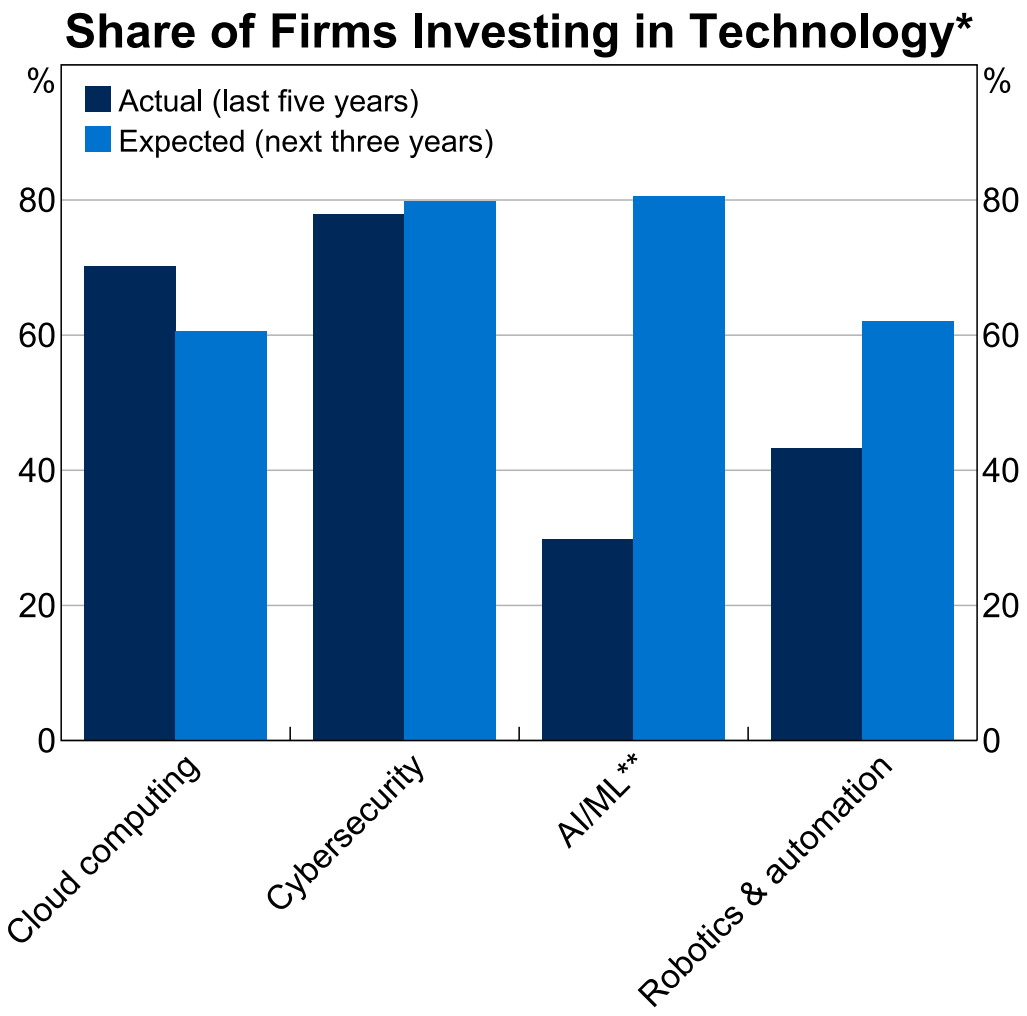
Adjustments like this can be challenging for individuals. That's why it is so important that we have a resilient and adaptable workforce. But some individuals are likely to need support through these disruptions and there will be a need for investment in training and education. These fall outside of the scope of monetary policy.

As a central bank, our most effective contribution is to maintain low and stable inflation, keep the economy in aggregate close to full employment and support financial stability. These are the foundations that help the Australian people navigate these structural changes.

That said, we recognise that behind every data point are people, households, businesses and communities. We keep that front of mind when setting monetary policy. An important way we stay connected to these lived experiences is through our liaison program, where we engage directly with businesses and other groups to understand how these shifts are playing out on the ground.

We recently surveyed the businesses in our liaison program about technology adoption (Figure 1). It painted a nuanced picture. A large share of businesses told us they have invested in technology over the past five years and intend to invest further over the next three years. These firms are increasingly investing in AI and technology to automate processes.

Figure 1



* Share of firms reporting moderate and significant investment in selected categories.

** Refers to Artificial Intelligence/Machine Learning.

Source: RBA.

Businesses told us that they are cautiously optimistic that they can lift their productive capacity from investment in technologies. Most firms viewed technology investment as having been a key driver of efficiency gains over the past five years. Yet not all investments had or were expected to yield immediate or direct returns. We also heard from firms that significant spending on cyber resilience, system upgrades and compliance-related technologies, while essential, have added to operational costs and may continue to boost headcount without a corresponding rise in revenue, especially in the short term.

Looking ahead, firms told us that they are hopeful that further investment in technological developments will drive an improvement in labour productivity growth. Yet, they also recognise that technology alone will not be a panacea. Gains will depend on complementary changes in skills, workflows and organisational culture.

As I mentioned, AI and robotics are emerging as an increasing focus for firms' forward investment plans. Firms mainly expect these tools to augment labour, automating repetitive tasks and redesigning the composition of roles. Firms thought they may initially see an increase in their headcount as they design and embed new technologies, though this may be followed by a small decline as they mature in

their adoption of new technologies. Lower skilled roles may decline, while demand for higher skilled roles is expected to grow, continuing (and perhaps even fast-tracking) a decades-long trend away from routine manual work.[6] While AI may eventually automate even some higher skilled tasks, firms tell us that it is too early to fully understand what this means for their workforce beyond the next few years. Some roles may change and the demand for different or new skills may in turn increase.

As policymakers, we are closely monitoring the impact of technological change on the economy. And like these firms, the RBA is also actively exploring how technology can enhance efficiency and reshape the way we operate across our broad range of responsibilities.

A changing landscape: The RBA's response to technological change

Like other organisations, central banks are grappling with technological transformation. It is one of our key challenges and a frequent topic of discussion with international colleagues.

Before I turn to the RBA's response to technological change, I want to emphasise one important point: while the environment in which we operate continues to evolve rapidly, the RBA's core mandate remains unchanged (Figure 2).

Figure 2: Key Functions of the RBA

As Australia's central bank, we play a vital role in the financial system and the economy. As you know, we conduct monetary policy with the aims of maintaining low and stable inflation and full employment, and we also support the stability of the financial system. But we do more than this and our responsibilities touch many aspects of everyday life. We regulate the payments system and issue Australia's banknotes. We operate critical payment settlement services, provide banking and registry services to government agencies and international institutions, and manage Australia's foreign exchange reserves. Through all of these functions, we serve the public interest.

As I mentioned, technological innovation – both inside and outside the RBA – continues to reshape the landscape within which we perform these functions.

Cloud computing, mobile apps, biometrics and tokenisation, and the exponential growth in data are redefining how financial services are delivered by firms. Payments are faster, credit decisions are potentially smarter and services are more accessible for many.

Like other organisations, these advances are transforming every aspect of our work – from how we operate, to how we inform monetary policy decisions, support financial stability, and promote efficiency

and resilience of the payments system.

We are exploring the future of money through digital currencies, and investigating how we can leverage new technologies to evolve the payments and settlement system. We are applying AI to deepen our understanding of economic conditions and enhance the ways we work.

To make the most of these opportunities, we are investing in and modernising our systems and building new capabilities. We are recruiting people with diverse expertise across economics, finance, data science, computer science and public policy, and leveraging the intellectual curiosity and versatility of all our people to tackle complex problems.

But we can't do this in our own bubble.

One of my priorities as Governor is to open the RBA more to outside views and perspectives. I am keen to strengthen collaboration with universities and external experts. By engaging more broadly, we can enrich our thinking, challenge our assumptions, and ensure our work remains relevant and can adapt to the evolving economic landscape.

I am confident that these changes – both in innovative technology and our approach to research – will help us to improve our services. But innovation also brings challenges. Cyber threats, data privacy risks, scams and the rise of non-traditional players, including technology firms offering financial products – just to mention a few – mean we need to be thoughtful about how we bring technology into our policy and operations.

Like our global counterparts, the RBA must strike a careful balance: fostering innovation and efficiency, both across the economy and within the institution to support growth and productivity, while safeguarding financial stability and resilience. When technological innovation intersects with our core responsibilities, we play a critical role in monitoring and stewardship.

Meaningful innovation: From past to present

Before turning to the future, it's worth pausing to reflect on the RBA's contribution to innovation in the past and some of the advancements that have tangibly improved the lives of Australians and strengthened our financial system. Often, this was done cooperatively with the private sector. These are not just stories from the past; they are examples of how we have drawn on disciplines including scientific research, data science, economics and engineering to solve real-world problems. They are also examples of external collaboration.

Let's start with money, specifically banknotes.

In the late 1980s, the RBA pioneered the use of polymer as the material for banknotes, making them more durable and secure than traditional paper banknotes. The polymer material was jointly developed by the RBA and the CSIRO. Australia's first polymer banknote, released in 1988, featured a clear window with a hologram – a security feature that was groundbreaking at the time. Between 1992 and 1996, we introduced the world's first full set of polymer banknotes, leading to over $1 billion in savings through reduced counterfeiting and replacement costs compared with paper banknotes.[7]

Between 2016 and 2020, we upgraded the security features of Australia's banknotes, an initiative underpinned by our scientific research and development program.[8]

While cash use for payments has declined significantly since the 1990s, it remains essential for many Australians and is a reliable backup to electronic payments. That is why maintaining cash as a resilient and secure means of exchange remains a key priority for the RBA.

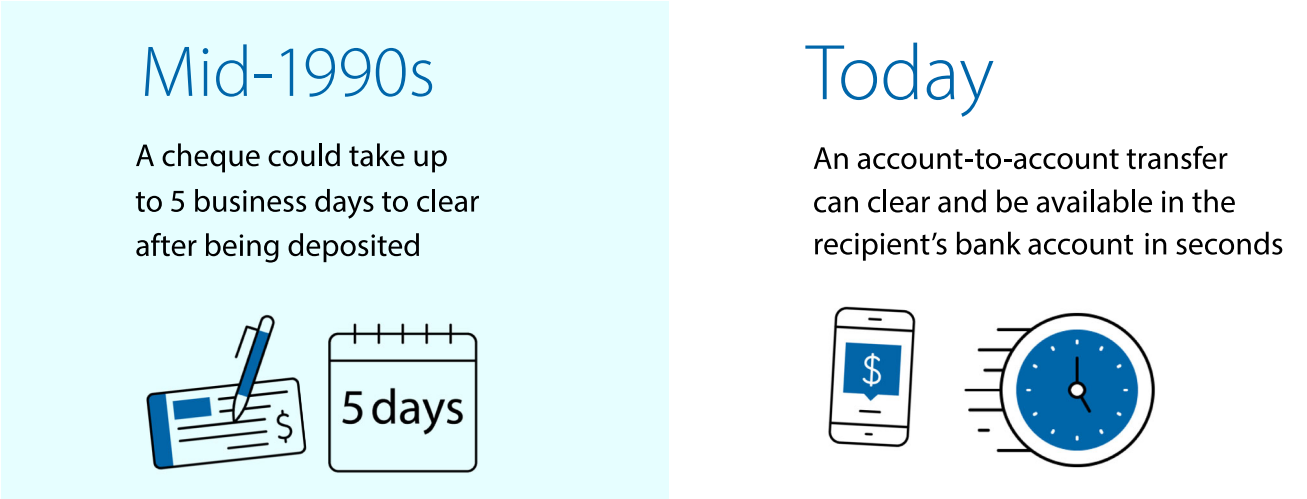
As Australians increasingly shift to electronic payments, we have expanded the RBA's capabilities to support this transformation. For example, we supported the industry in their collaborative innovation toward the development of the New Payments Platform (NPP), launched in 2018. The NPP has revolutionised how Australians move money, enabling real-time payments, 24 hours a day, seven days a week.[9] This was an example of how we as the regulator could promote the public interest (efficiency, competitiveness and safety) and to help with the coordination of industry efforts to innovate collaboratively.

This modernisation has been important in supporting the RBA to deliver payments from Australian government agencies to households during economic shocks. During the pandemic, for example, on Sunday 15 August 2021, nearly 700,000 COVID-19 support payments were processed and received by Australians, demonstrating our ability to respond rapidly during national emergencies.

To support industry's development of the NPP, we developed the Fast Settlement Service, which provides near-instant interbank settlement, typically in less than one second. This ensures that when Australians make NPP payments, the bank-to-bank component is settled almost immediately.

To put these developments into perspective: in the mid-1990s, Australians wrote millions of cheques each year, and a cheque in 1998 could take up to five business days to clear after being deposited. It also involved moving a lot of paper around between banks. Today, an electronic transfer sent from one bank account to another can clear and be available in seconds (Figure 3).

Figure 3: Speed of Transactions



So, how is the RBA preparing for what is next?

Let me take you behind the scenes to show how we are building the capability that will shape the next chapter of central banking in Australia for the benefit of all Australians.

Equipping the RBA for tomorrow's challenges

Behind the scenes, we are undergoing a transformation to equip us to meet the challenges of a rapidly evolving financial landscape. Given our role as a central bank, we need to be careful about how we

bring technology into our policy and operations – we know we need to balance risks but also move with the times!

We are investing in modern systems, strengthening our data capabilities and bringing together cross-disciplinary teams to tackle complex problems with greater agility and insight.

We are exploring how technologies can enhance our understanding of economic conditions, improve forecasting and support more informed decision-making. We are also modernising the infrastructure that underpins Australia's payments and settlement systems, ensuring they remain secure, resilient and fit for purpose in a digital age.

Importantly, we are fostering a culture of innovation across the institution – encouraging experimentation, learning from failure and creating space for new ideas to emerge. We are also engaging more openly with external partners – universities, research institutions and industry experts – to bring in diverse perspectives and challenge our thinking.

None of this is easy. We have to do all of this at the same time as we continue to deliver on our various mandates. And I would not be honest if I didn't say that the staff are feeling the weight of the heavy change agenda. But the expected rapid technological change over coming years brings exciting opportunities. Among the most promising and complex are big data, data science and AI, which have the potential to transform the RBA – from how our people perform their day-to-day tasks to how we assess financial stability risks and the analysis that informs monetary policy. So we need to try to move as quickly as we can.

If we can apply them effectively, these tools will allow us to turn vast volumes of complex, structured and unstructured information into valuable insights.

So what are we doing? Our transformation rests on three pillars:

1. Knowledge in the digital age – using data and other information intelligently to generate deeper insights and support better decisions.
2. Resilient infrastructure – building secure, scalable platforms that enable efficient data management and strengthen the resilience of our operations.
3. Technical capability – securing the coding, data science and engineering expertise to build, adapt and apply tools and solutions that support our mission and help deepen our understanding of complex economic dynamics.

These pillars are not just technical upgrades to our skills and systems. We think of this as part of a broader cultural and strategic shift that we are undertaking. They support our goal to be more agile with our work, more transparent and to continue to be responsive to the needs of the Australian public.

Knowledge in the digital age

We are deepening our expertise in advanced analytical methods, including the application of data science and AI techniques, while investing in systems that enable secure and effective data use.

Together, this will position us to deliver faster, more insightful analysis, and remain a trusted, forward-looking institution in an increasingly complex landscape.

Management of knowledge is central to our legacy as a public institution. We invest heavily in how we manage information and data, and the insights they generate. The integrity of these assets underpins our accountability, the reliability of our policy delivery.

It also enables us to document the rationale behind our decisions and, where possible, make that information accessible, through publications and public records. This public access is a cornerstone of trust in the RBA.

We have a long tradition of managing both quantitative and qualitative data to build a robust knowledge base.

To give you a sense of scale:

1. We hold archival records that cover 200 years of Australia's economic and financial history – spanning 4.6 kilometres of shelf space!
2. Our digitisation program helps preserve the information content of our archival records, and enables advanced search and analysis, including through machine learning and AI.
3. Our broader analysis draws on over 125,000 data time series, with around 5,000 of these updated daily, adding approximately 100,000 new data points each day.
4. Altogether, the structured and unstructured data supporting our analysis and operations consumes around 7.5 petabytes of storage.

So you can see why investing in knowledge – its storage, management, integrity and use – is so important to us.

Resilient infrastructure

Infrastructure modernisation is a strategic investment in our ability to serve Australians reliably, securely, sustainably and at scale. As with everything we do, we take a risk-based approach. I'll talk more about this in a bit, but we need to make sure our infrastructure is reliable and resilient because of the importance of our policy and operations. It means that we – like many other central banks – may move a little slower than organisations with a different risk appetite that are at the cutting edge. It's a balance.

Our current infrastructure improvements span the entire organisation. From modernising our networks through to upgrading systems for AI-compatibility and strengthening operational resilience, we are laying the foundation for a more agile and efficient, but still highly resilient institution.

There is a lot to do and we are nowhere near finished. But a recent key milestone has been the migration of our banking activities to cloud platforms.

As the banker to Australian government agencies, we play a critical role in delivering payments such as pensions, JobSeeker, youth allowance and tax refunds, quickly and reliably. To support these critical functions, we have migrated to cloud platforms, enhancing resilience, scalability and security.

In the 2024/25 financial year, we processed:

- 348 million domestic payments and 1 million international payments for the Australian Government, totalling $846 billion and $20 billion respectively.
- 58 million collection-related transactions for the Australian Government, amounting to $876 billion.

You can see from these numbers why having a modern, resilient infrastructure is important.

Another key part of our transformation is how we manage, store and process data. Like many organisations, including other central banks, we are using code to manage and configure our

infrastructure so that we can improve security and reduce incidents as well as improve the productivity of our IT teams.

We recently acquired an enterprise-grade graphics processing unit (GPU). This has helped us to follow other firms in taking a step forward in our AI capabilities. It means we can develop and run advanced AI-driven analytical tools at scale. As you can see, the team are genuinely excited about the possibilities.

By combining this new local capability with our secure cloud environments, we are able to use a hybrid approach. As a central bank, we are careful about the security of our information (as you would expect us to be!). So we are moving in a measured way, utilising on-premises or cloud environment as we see appropriate.

Technical capability

An example that illustrates the RBA's evolving mindset is the transformation of our internal business coding community.

It began as a grassroots initiative quite a number of years ago, driven by a small group of technically proficient enthusiasts solving research and business problems through code. And quickly became a well-established part of how we operate. Today, around 450 staff – or one in four employees – use coding as a core part of their daily work.

From the outset, this community embraced an open-source mindset: sharing knowledge freely, collaborating actively and refining solutions together. It is now supported by a central function that connects staff to proactively solve problems and ensures that knowledge is preserved. And staff are increasingly using AI-powered coding tools to be more efficient and improve code quality. This means more people, including less-experienced coders, can use these techniques.

This is not just about writing better code. It is about building a culture that values experimentation, collaboration and continuous learning. I think this is what a modern, forward-looking central bank looks like. It is also about leveraging technology to explore information from multiple angles, challenge our assumptions and ensure we have considered a broad spectrum of perspectives in our policy decision-making.

Innovation with intention: A risk-based approach

Innovation brings opportunity but also risk. As you might expect from a central bank, our approach is not about disruption. It is about deliberate, well-managed evolution. This doesn't mean that we avoid risk – we aim to make informed choices to manage risks, by striking the right balance between innovation and stability.

We understand that the benefits of technology do not appear overnight. Productivity gains often lag behind adoption.[10] Real value comes from the complementary investments – in skills, processes and infrastructure – that allow us to use new tools effectively but without undue risks to critical operations.

One of the foundations of our approach to innovation has been a commitment to clear guardrails. In a world where change is accelerating, effective risk management is essential.

In every case, it is not the technology alone that delivered value, it is how we embedded it into our operations, aligned it with our policy goals and ensured it served the public interest.

We take a risk-informed approach across all areas of our work, recognising that digital technologies introduce new challenges, such as cybersecurity threats, and reshape existing ones, including operational or resilience risks. This has sometimes meant that we have moved a little slower than some would have liked. But given the importance of our policy and operations, I think that was appropriate.

That said, we do need to make sure that our risk management framework is fit for purpose as we innovate.

With this in mind, we are strengthening our risk governance. We are introducing a refreshed risk operating model and clarifying accountabilities. Risk will be better embedded in our strategy setting and prioritisation, allowing us to make more informed, timely decisions that align with our public mandate. The new Governance Board will also help us to think about how we best balance innovation and risk.

Informing policy with data and technology

Like many other central banks around the world, the RBA is actively exploring the implications of emerging technologies, particularly AI, and how they can support our mission. To be clear, we are not using AI to formulate or set monetary policy or any other policy. Instead, we are looking to leverage it to improve efficiency and amplify the impact of staff efforts in areas such as research and analysis.

Across the RBA, we are looking at ways to use digital innovation to strengthen our analytical capabilities, better inform policy decisions and build resilience. Whether through new tools, richer data or closer collaboration, technology is changing how we work – and will, I hope, ultimately help us deliver more effectively for the Australian public.

Like many others, in our economic research we are using advanced techniques, including machine learning and granular datasets to produce close to real-time indicators and deepen our understanding of key economic questions. These include understanding inflation trends, how the labour market is evolving, and where households may be financially vulnerable.

I want to highlight three different ways our researchers are leveraging technology to better inform monetary policy:

1. unlocking insights through microdata
2. unlocking institutional knowledge through AI
3. turning words into insights.

Unlocking insights through microdata

Advances in computing power are helping us to better analyse large-scale unit record data, offering deeper insights into household behaviour, retail trends and lending patterns. This granularity helps us build more sophisticated models to identify risks and monitor vulnerabilities in the financial system. For example, we can analyse data from securitised mortgages, large retailers and financial institutions more efficiently than before.

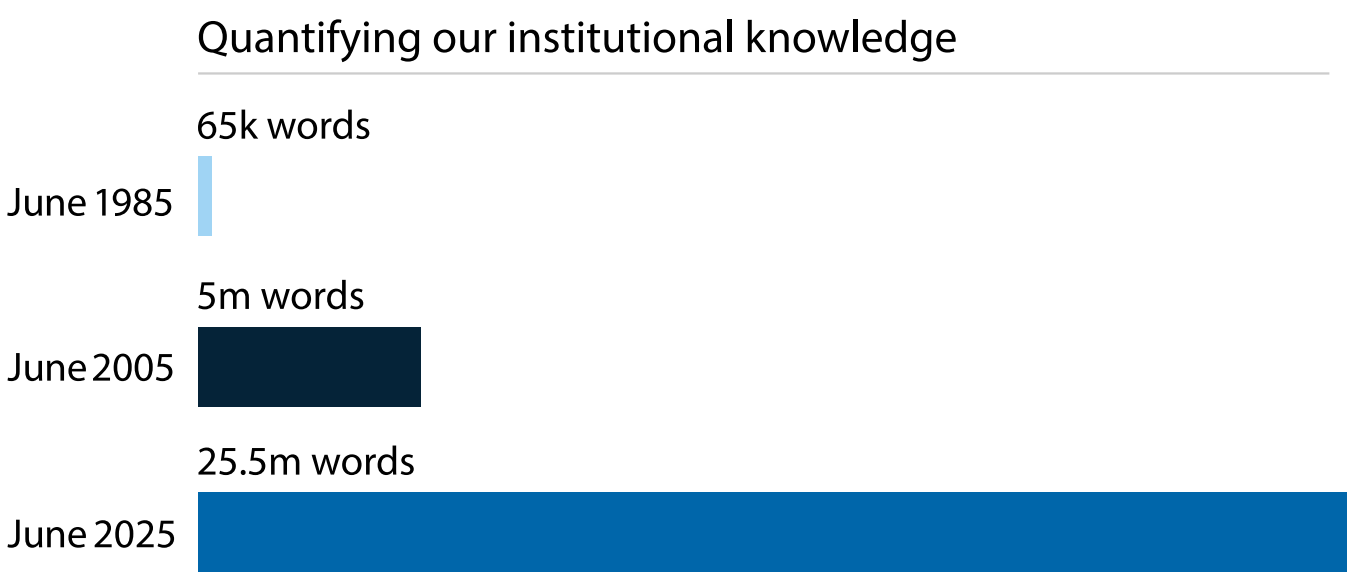
One recent initiative is helping us take a step forward in this space by improving our understanding of how economic shifts impact household dynamics and wealth: the Wealth, Housing and Asset Module (WHAM!) pilot. Developed with partner agencies, this pilot integrates data on housing, superannuation and firms' ownership in the ABS's secure ecosystem.[11]

This tool will enable deeper analysis. And deeper analysis leads to more informed policy. Over time, the pilot will expand in scope, supporting even more insights into Australia's evolving economic landscape.[12]

Unlocking institutional knowledge through AI

The RBA has generated a vast body of insights over the years. This institutional knowledge has been well documented. But as it has grown, people have increasingly found it hard to tap into this source of knowledge. As you can see in Figure 4, there's been a large increase in the number of internal and external RBA analytical documents produced since 1985.

Figure 4: Powering Policy with RBAPubChat



To make the most of this information, we have designed and begun testing a new AI-powered tool – RBAPubChat – a smart chatbot that stands for the 'Conversation Hub for Analysis and Thought'. It helps staff ask policy-relevant analytical questions and get useful summaries of our existing knowledge base spanning 40 years.

Tools like this are becoming essential. The growing volume of data and the accelerating pace of analysis have led to exponential growth in our internal knowledge. RBAPubChat draws on nearly 20,000 internal and external RBA analytical documents.

It is more than a search tool. It supports comprehensive reviews of past work, provides context for new analysis and the building blocks for new thinking, and constructively challenges existing insights. It also makes sure we don't reinvent the wheel!

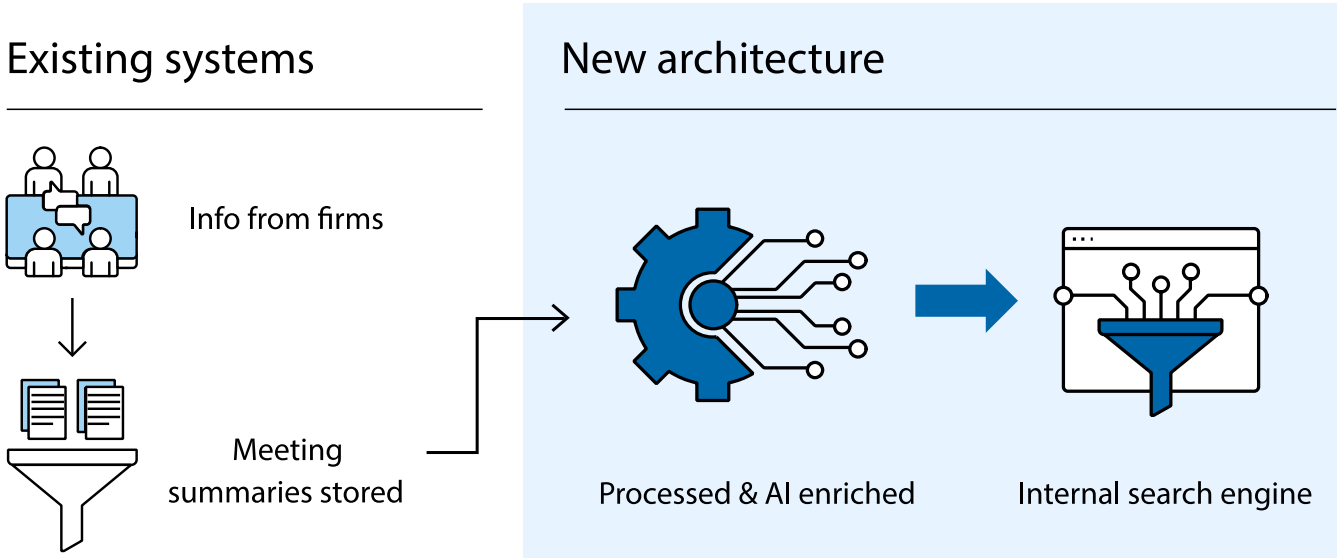
Turning words into insights

For the past 25 years as part of our liaison program, the RBA has held more than 22,000 conversations with firms from all industries. This information has been recorded in detailed summary notes. These discussions offer something that raw data alone cannot – they are the real-life story behind the numbers, which gives us colour to better understand the economy.

What businesses tell us helps us to understand what is driving changes in prices, wages and investment decisions and why, and complements official statistics in shaping monetary policy.

As the volume of these notes grew, now exceeding 22 million words, we needed a better way to tap their full value. So, our researchers developed a secure text analytics tool using natural language processing.[13] Simply put, this tool turns text into data and helps us search, analyse and extract insights from this vast pool of qualitative information to assess its meaning (Figure 5).

Figure 5: Our AI Tool for Liaison



It allows us to:

- identify patterns and emerging themes
- track sentiment across industries
- detect signals on price pressures or firm-level uncertainty
- generate aggregated indicators, such as sentiment scores and topic trends.

By combining our existing analysis of structured statistics with data made from rich qualitative insights in text, we are building a more complete picture of the Australian economy.

Our new text analytics tools, developed using natural language processing, adds a powerful third lens to monitor shifts in business conditions in near-real time, while preserving confidentiality. It does not replace the 125,000 (and growing) time series statistics we rely on, rather it complements them.

Early work using this new tool is promising. For example, when we incorporate our new liaison-based textual indicators into model-based nowcasts using machine learning methods, we can improve the accuracy of wage growth forecasts, outperforming a traditional Phillips Curve model.

Importantly, this tool does not replace expert human judgement, rather it enhances it. It helps our analysts get to the heart of what businesses are saying, faster and more effectively. It also allows our teams to contextualise aggregated insights, across themes or firms, and compare them against historical patterns with speed and precision. All of this together feeds into our monetary policy decision-making processes.

Policy innovation: Thinking ahead

As policymakers, we are also thinking ahead – particularly about the future of money itself.

Innovation in payments and digital currency is a key part of that journey.

One of our strategic priorities is shaping the future of money in Australia, particularly in wholesale markets. We are actively exploring how emerging forms of digital money and supporting infrastructure could make payments and settlements more efficient and resilient.

This work reflects a growing imperative: to think ahead strategically, not just react, in a rapidly evolving payments and technology landscape.

In recent years, the RBA has led or contributed to several research initiatives, domestic and multi-jurisdictional, examining the potential role, benefits and risks of central bank digital currencies (CBDCs).

One of the most significant, to date, was the CBDC Pilot Project in 2022–2023, conducted in collaboration with the Digital Finance Cooperative Research Centre (DFCRC). This project marked an important first step in engaging industry to explore potential use cases for a CBDC in a live transactional environment with 'real money, real assets'.

What set this pilot apart compared with much of the existing research on CBDCs at that time was that the CBDC was issued as a real legal claim on the RBA. This allowed us to uncover a wide range of legal, regulatory, technical and operational considerations that would come with issuing a CBDC in practice.

One key insight from the pilot was the strong industry interest in the tokenisation of financial and other (real) assets using distributed ledger technology (DLT).[14] Building on this, we launched Project Acacia, again in partnership with the DFCRC. This experimental research initiative is exploring how different forms of digital money and supporting infrastructure could enable the development of wholesale tokenised asset markets.

Project Acacia is testing a diverse set of settlement assets, including stablecoins, bank-issued deposit tokens and a pilot CBDC, as well as new applications of banks' existing Exchange Settlement Accounts at the RBA.

A novel aspect of this project is its use of multiple distributed ledger platforms, both private and one public-permissioned platform, rather than relying solely on an RBA-operated platform. This approach allows us to explore how innovation can be supported while maintaining appropriate risk controls.

The build-and-test-phase of Project Acacia is now underway. The insights we gain will deepen our understanding of tokenisation, especially how opportunities and risks vary across different asset types and settlement models.

Ultimately, initiatives like the CBDC pilot and Project Acacia are more than technical experiments. They are policy-relevant explorations that help us consider how trust, efficiency and resilience can be preserved in the financial system of the future.

Conclusion

As we look ahead, one thing is clear: the future of central banking will be shaped by how we choose to engage with new technologies in a meaningful way.

At the RBA, we are actively exploring how emerging technologies, including AI and digitalisation, could influence the economy and reshape the environment in which we pursue our monetary policy mandate.

What might these shifts mean for productivity, potential growth and inflation dynamics? Could they alter the labour market or expand the economy's supply capacity without generating inflationary pressure? How will investment in their enabling capital, such as data centres and energy infrastructure, spillover to the economy?

These are open questions, and we need to be alert to different possible impacts.

We are also considering the implications for financial stability. Our latest *Financial Stability Review* included a focus on digitalisation, and we continue to work closely with our peer agencies in the Council of Financial Regulators to assess both the risks and opportunities that come with rapid technological change.[15]

In parallel, we are modernising the infrastructure that underpins Australia's payments and settlement systems, ensuring they remain secure, resilient and fit for purpose in a digital age.

But technology alone does not deliver value. It is how we integrate it into our systems, manage its risks and empower people, within and beyond our institution, that truly drives progress. That is why we are fostering a culture of innovation at the RBA: encouraging experimentation, learning from failure, and engaging more openly with external partners to bring in diverse perspectives and challenge our thinking.

As I shared earlier, this last point is especially important to me. Tapping into diversity of thought, strengthening academic partnerships and deepening the policy impact of our research ensures our work remains relevant, rigorous and aligned with the evolving needs of the Australian economy.

Getting this right will position us strongly for future waves of technological change – changes that are not only accelerating in pace but growing in scale and impact. There is much to be optimistic about.

Thank you.

Endnotes

* This has truly been a team effort. I would like to thank Claude Lopez, Kate McLoughlin, Callan Windsor and Sue Black for excellent assistance in preparing this speech, as well as Samuel Evangelinos, Ravi Ratnayake, Jenny Lui, Jasmine McEvoy, Finn Lattimore, Joel Fernando, Nic Gray, Grant Turner, Kylie Stewart, David Emery, Alison Clark, Alastair Bor, Jeanne Atkinson, Martin Carlisle, Jacqui Dwyer, Martin Western, Nick Mitchell, Chay Fisher, Matt Boge, Julian Wakim, Greg Dicinoski, Lachlan McCahon, Patrick Elkington, Stephen Smith for their input. Thanks also to many of my colleagues for their comments and contributions on an earlier draft.

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14 Tokenisation refers to the digital representations of real-world assets as tokens that can be stored, traded and transferred on programmable platforms, such as those based on DLT.

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