

Non-technical summary for ‘An AI-powered Tool for Central Bank Business Liaisons: Quantitative Indicators and On-demand Insights from Firms’

By Nicholas Gray, Finn Lattimore, Kate McLoughlin and Callan Windsor

What did we set out to do?

The RBA’s liaison program plays an important role in informing monetary policy decisions by providing timely, on-the-ground insights on what topics are front-of-mind for firms as well as why and how they respond to unexpected events.

These valuable insights come from intelligence gathered by RBA staff over a 25-year period and complement other statistics and data used to inform the RBA’s assessment of economic conditions.

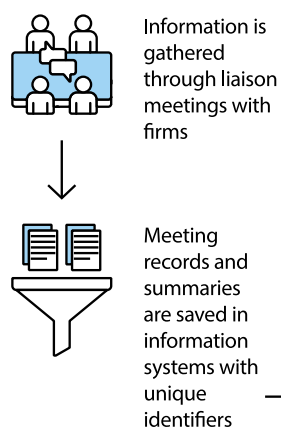
As the economic environment gets more complex and uncertain, we need new and improved ways to quickly and reliably organise, search and learn from this ever-growing collection of business intelligence.

To address these demands, we built a new artificial intelligence (AI)-powered text analytics and retrieval tool (details in the figure) that can:

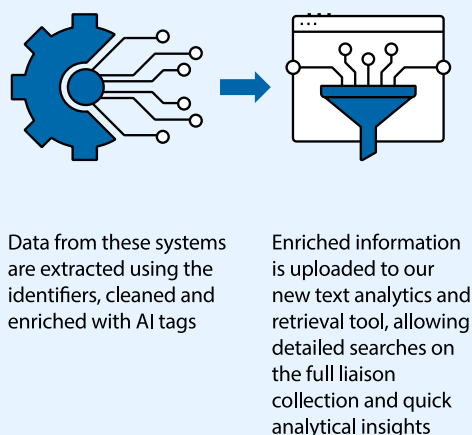
- rapidly search, process and analyse our vast collection of liaison meeting notes
- integrate daily updates from other systems
- use automated tagging of topics, tone and uncertainty
- extract numerical data
- provide visualisations on trends over time.

Analysing and Retrieving Business Liaisons Using the RBA’s New AI-powered Tool

Existing systems



New architecture



Benefits

- ✓ Quick searches
- ✓ Filter by topic and tone
- ✓ Measures uncertainty
- ✓ Extracts numerical data from text
- ✓ Provides aggregated text-based indicators
- ✓ User-friendly and accessible
- ✓ Continuously refreshes with new information

What did we learn?

Our new tool has significantly improved how the RBA's liaison team analyses business intelligence to support economic analysis and policy. It has enabled:

- faster insights
- better use of existing data
- timely decision-making
- greater transparency and contestability
- scalability and security.

We also found that incorporating new liaison-based textual indicators into model-based nowcasts using machine learning methods significantly improved the accuracy of 'nowcasting' of wages growth compared with best-in-class benchmarks.

What was our key takeaway

An interdisciplinary effort involving data scientists and economists was critical to ensuring the new tool's relevance, accuracy and practical utility. But realising the full productivity benefits of our new tool also requires a shift in liaison processes, workflows and expertise.