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**Occasional
Paper Series**

Understanding Artificial Intelligence in Financial Services

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Foreword by Stuart Johnson, Chief Economist

Artificial Intelligence (AI), particularly generative AI (GenAI) or Large Language Models (LLMs), have the potential to improve customer outcomes in financial services. And beyond customer services, AI has the potential to lower costs, increase efficiency and drive innovation. However, AI brings new risks that need to be carefully managed.

Our research focused on understanding how some of our larger regulated firms are currently using or planning to use AI and how they are managing risks. We surveyed a small sample of the firms that we regulate to get a broad, preliminary view of AI's use in financial services.

Some firms spoke to us about how they are using third party AI solutions which are increasing efficiency. These tools deliver efficiency gains especially through automation and increased productivity in coding.

As an economist, but also a regulator, I was very keen to hear how firms are managing the risks around these activities. Two stories come to mind. One firm spoke about the importance of their risk management framework, especially technology risk and third-party provider risk management. The risk framework provided the bedrock of the risk oversight although new controls and committees have been developed. Another firm spoke about the outputs of GenAI, for example the customer communications initially drafted by AI and then subjected to human oversight through traditional risk and compliance processors. Both stories seem like a sensible approach as they allow for the integration of AI into well-established risk and compliance process. It's important to remember that these processes exist because humans have been making mistakes for far longer than AI. This approach even overcomes 'hallucination bias' the much-discussed habit of AI to make up information which isn't based in fact.

It's when AI produces results that cannot be verified – 'black box' outputs, if you like – that the potential for harm increases. As well as human oversight, many firms are developing new strategies to manage the risks specific to AI. Several firms are focused on identifying any potential bias in training data before this is used to train harder to verify models. As these solutions develop it highlights that it is a good time to continue our discussions with stakeholders.

The FMA is technology-neutral and pro-innovation. We believe that New Zealanders should have access to the same technological advancements as those in other countries. We want to see firms leverage AI to improve consumers' experiences in financial markets and services. Indeed, our discussions with stakeholders have revealed that firms are adopting AI with the goal of improving customer outcomes. We are committed to working with the industry to ensure that technological innovation delivers positive outcomes for New Zealanders. Later in 2024 we will host an industry roundtable to further explore how AI and GenAI is being used in New Zealand's financial services and how firms are managing risks.

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Executive Summary

This report looks at current and future use of artificial intelligence (AI) within the financial services sector. The report draws on responses from 13 finance representatives in asset management, banking, financial advice, and insurance. Their consensus was clear: AI is a pivotal technology that holds significant promise. All participants either have integrated generative AI into their operations or plan to do so soon. They report being driven by motivations such as enhanced customer outcomes, improved operational efficiency, and sophisticated fraud detection.

A notable finding is the sector-wide approach to AI which is focused on being cautious. Organisations are assessing and seeking to address the risks before adopting or actively using AI in business practices. This approach means organisations are prioritising security and risk management to how they use AI. Where already being used, organisations are utilising both off-the-shelf tools like CoPilot and GitHub and custom-built AI systems for tasks like decision-making and fraud prevention. Most respondents have already been able to realise the benefits of incorporating AI into their operations, with others expecting to see benefits within the next 12 months, underscoring the technology’s rapid impact.

Looking ahead, the commitment to AI is strong and increasing, with planned expansions in customer service, risk management, and fraud detection. However, there is a cautious approach to generative AI, with a strong emphasis on responsible and controlled deployment. Governance and accountability remain paramount, with firms investing in staff training and AI model validation to mitigate risks.



Most of those already using AI in their mahi (9) are already realising the benefits (6). Future use of AI is planned across many areas of providers’ businesses.



Providers are taking a conservative, risk assessment approach. Most respondents (12) recognise adequate staff training as a key to mitigating risks.



Most respondents (10) have started considering risks, unless they are in early stages and not yet ready to do so (3).



Most respondents (11) are confident in their ability to effectively manage the risks associated with AI. Those who were less confident (2), already know the steps they need to take to gain confidence.

1. Introduction

The Financial Markets Authority (FMA)'s purpose is to foster fair, efficient, and transparent financial markets and to promote the confident and informed participation of businesses, investors, and consumers in those financial markets. The application of AI technologies has the potential to change the risk landscape for financial services firms.

The FMA is a technology-neutral and pro-innovation regulator. We are keen to see firms harness the opportunities and to ensure firms utilising AI remain focused on achieving outcomes that will benefit and enhance consumer's experience of financial markets and services. This report provides findings from a survey of a sample of our regulated entities undertaken in June 2024. It sought to understand the current use and risk management planning of AI in financial services.

What do we mean by AI?

For this research AI is referring to the suite of tools and technologies that enable machines to mimic human intelligence and learning. We are specifically interested in the following applications:

- **Generative AI (GenAI):** Including general-purpose models and large language models (LLMs), capable of creating new content such as text and images based on input data. GenAI can draft customer communications, generate reports, and develop new financial products.
- **Machine Learning:** Algorithms that adapt through experience. Financial institutions can use machine learning for tasks like fraud detection, credit scoring, and providing personalised financial advice, making services more efficient and secure.
- **AI decision-making tools** are systems that use AI to analyse data and make informed decisions automatically. They can analyse vast amounts of data to predict and mitigate potential threats and can improve customer service through personalised financial advice and automated support, which can also improve operational efficiency.
- **Chatbots:** automated systems that use AI to interact with customers and provide real-time responses or support. They can improve user experience and operational efficiency while also processing transactions and offering personalised advice.

The growing importance of AI

AI, particularly GenAI, is rapidly transforming the global financial landscape. From automating back-office operations to enhancing customer engagement through chatbots, AI is being utilised in various innovative ways. Algorithmic trading, a practice that has been around for well over a decade, is now complemented by AI-driven strategies in insurance, allowing for personalised pricing at the customer level. These advancements highlight AI's potential to revolutionise financial services by improving efficiency and delivering tailored solutions.

GenAI offers significant benefits in financial services by enhancing data analysis, risk management and customer experience. It can rapidly process and analyse vast amounts of financial data, providing insights and predictive analytics that support more informed decision-making. This can help to identify potential risks and opportunities more accurately. GenAI can also automate routine tasks such as report generation and customer service inquiries, leading to increased efficiency and reduced operational costs. Furthermore, it enables

personalised financial planning and advisory services by tailoring recommendations to individuals based on real-time data, thus improving satisfaction and engagement.

Key issues and concerns

The use of AI in the financial sector has the potential to deliver important benefits to financial consumers and market participants, but it comes with great risks and challenges.

As the range of GenAI technologies are still maturing, their application in business settings is growing. There are a range of potential issues and limitations of GenAI tools as outlined by International Organization of Securities Commissions (IOSCO).¹ These include (but are not limited to):

- vulnerabilities to errors and algorithmic bias
- data privacy and protection
- cybersecurity
- accountability, governance, and transparency
- operational resilience
- an over-reliance on GenAI tools (e.g. model concentration risk)

The risk of algorithmic bias, where AI systems may produce unfair or discriminatory outcomes, is a critical issue. Decision-making is a necessary daily operation for firms, and the opportunity to automate this will undoubtedly streamline some processes. However, algorithms operate in binary, and are not equipped with the nuance required for all decisions. This requires a considered approach to prevent discriminatory decisions.

Data privacy and protection is also a concern as AI systems process vast amounts of sensitive information. Our regulated entities are entrusted with their customers' data. It is important that they do right by their customers in upholding the privacy and security of that data. We understand that trust, privacy, and security are already a top priority for firms, so we expect that they will already be scrutinising potential uses of AI with these in mind.

In cybersecurity, both public and private LLMs may be vulnerable to cyber threats (including novel threats) that could expose confidential and sensitive data. The underlying code may be manipulated leading to biased content, inaccurate data sets and phishing scams that prompt user responses.

Increasing automation of tasks raises questions about accountability, governance and transparency. This shift also necessitates a strong focus on operational resilience, as the reliance on AI systems can introduce new risks that may disrupt critical business functions if not properly managed. Generative AI offers opportunities for regulators as well as providers, which range from workplace efficiencies to timely analysis of large datasets. However, such usage can also lead to concerns, including data privacy risks, cyber and operational vulnerabilities, and introducing AI model bias in analysis of regulatory data and in enforcement investigations. As AI advances, there is also a question about it replacing the work undertaken by people and the risks associated with an over-reliance on GenAI tools. Technologies change the role humans play alongside AI as it develops, however human intervention and judgment will continue to play an important role.

¹ [FR06/2021 The use of artificial intelligence and machine learning by market intermediaries and asset managers \(iosco.org\)](https://www.iosco.org)

The FMA believes that firms can mitigate these risks through appropriate governance structures, risk management, remaining vigilant over operational resilience implications, and addressing data risks. All this should ensure firms utilising Gen AI remain focused on achieving positive and safe outcomes for consumers and markets. Over time we will assess whether our regulatory framework needs strengthening to support better deployment of Gen AI.

Use of AI in other jurisdictions

The use of AI around New Zealand and in the wider global economy is rapidly growing. The international conversation is consistent with this paper's research – the use of GenAI is innovative and changing quickly and there is strong focus on considering AI from an ethical and responsible lens right from the initial stages of adoption.

In July 2024, the New Zealand Treasury published an analytical note dedicated to an economic analysis on the impact of AI.² This paper introduces economic frameworks for assessing the impact of AI and provides a qualitative assessment of the implications of AI for New Zealand. The paper addresses three issues: 1) impacts of AI on productivity and investment; 2) impacts of AI on employment and the labour market; and 3) development of regulatory approaches for AI. The third, most relevant to the FMA, addresses how regulatory approaches to AI can broadly be divided between countries that have adopted comprehensive AI-specific legislation (in the EU and China) and countries that rely on existing regulatory frameworks (the UK, the US, Singapore, and Japan). For New Zealand, existing regulatory frameworks, like copyright laws, may need to be updated to address the challenges of AI. Over time, aligning our regulations with other countries, where it makes sense for New Zealand, will be important to support the diffusion of AI.

Globally, the OECD AI Principles³ (adopted in 2019) have been designed to guide efforts to develop trustworthy AI and provide policymakers with recommendations for effective AI policies. Many jurisdictions use the OECD AI Principles and related tools to shape policies and create AI risk frameworks, such as the EU, US and UK.

Several international standard setters have undertaken work on AI. IOSCO has provided guidance for intermediaries and asset managers on the use of AI and machine learning.⁴ This guidance recognises that the use of AI and machine learning may benefit market intermediaries and asset managers by increasing the efficiency of existing processes, reducing costs and freeing up resources. It also highlights that it could create or amplify risks, potentially undermining financial market efficiency and harming consumers and other market participants. IOSCO's guidance consists of measures that seek to ensure appropriate governance, controls and oversight frameworks, staff with adequate knowledge, robust and clearly defined testing processes and appropriate transparency and disclosures. IOSCO members are encouraged to consider the measures carefully in the context of their legal and regulatory framework. The International Association of Insurance Supervisors (IAIS) has also been monitoring AI developments and sharing insights and working to support supervisors in responding and keeping pace with these trends.⁵

² [New economic analysis on the impact of artificial intelligence | The Treasury New Zealand](#)

³ <https://oecd.ai/en/ai-principles>

⁴ [FR06/2021 The use of artificial intelligence and machine learning by market intermediaries and asset managers](#)

⁵ [Digital innovation - International Association of Insurance Supervisors \(iaisweb.org\)](#)

In Singapore the Monetary Authority of Singapore (MAS) has updated its implementation of the Fairness, Ethics, Accountability and Transparency (FEAT) principles to account for the use of AI and machine learning.⁶ This document provides guidance to firms offering financial products and services on the responsible use of AI and data analytics. In the UK, both the UK Government⁷ and the Financial Conduct Authority (FCA)^{8,9} also see the importance of their role in the continued success and competitiveness of the sector, which includes the role of technology and AI in the UK financial markets. The UK Government and the FCA are both actively engaged in developing approaches to AI and understanding its deployment within the financial services sector. The Australian Securities and Investments Commission (ASIC) recognises that AI presents both benefits and risks for the industry and consumers and are currently conducting a review of the use of AI by their regulated entities. Unlike here in New Zealand, this is done in a context in which the Australian government is considering the case for law reform¹⁰.

Continuing to ensure the safe and responsible deployment of AI in New Zealand's financial markets, in the interests of consumers and the markets we regulate, is of interest to the FMA. We would like to see providers paying attention to global developments, and we support the industry being at the cutting edge of innovative approaches. New Zealand consumers should have access to similar innovations to those available from firms in other countries. Keeping up to date on wider New Zealand and global trends in this space will ensure New Zealanders are getting the most benefit from AI use in the sector.

Relevance to the FMA

The FMA needs to stay on top of how AI is being used in the financial industry, especially as it changes the risk landscape. We know it is important to strike a balance between responsible AI use and fostering innovation, as firms increasingly use AI to improve existing services and develop new products and business models. This approach helps us continue to promote fair, efficient, and transparent markets while ensuring businesses, investors, and consumers can participate confidently.

For the FMA, understanding AI's impact is crucial. As AI becomes increasingly relevant in financial markets and services, we must ensure its safe and responsible use, consistent with the regulatory regimes we oversee. Many of the risks from AI adoption and use within financial services will likely be covered by our existing regulatory approach. However, where changes are required to support the delivery of our objectives, the FMA will evolve its regulatory and supervisory frameworks accordingly.

Internally, the FMA is exploring and trialling how the deployment of the latest AI toolkit can assist us in fulfilling our mandate. We have launched several pilot initiatives to explore AI applications, ensuring compliance and security through clear internal guidance and training. By testing GenAI tools in controlled environments and engaging with industry challenges, we can better understand and respond to the hurdles financial services face. The FMA will continue to work with peer international organisations to ensure awareness of the current state-of-play on AI adoption and use in financial services. AI is at the forefront of discussions across many international forums.

⁶[MAS Feat Principles.pdf](#)

⁷ [Implementing the UK's AI regulatory principles: initial guidance for regulators - GOV.UK \(www.gov.uk\)](#)

⁸ [Our emerging regulatory approach to Big Tech and Artificial Intelligence | FCA](#)

⁹ [Artificial Intelligence \(AI\) update – further to the Government's response to the AI White Paper | FCA](#)

¹⁰ [Select Committee on Adopting Artificial Intelligence \(AI\) – Parliament of Australia \(aph.gov.au\)](#)

2. Methodology

The FMA is currently thinking about how AI impacts customer outcomes and firms' risks. To understand AI use and risk management in New Zealand's financial services, the FMA conducted a survey targeting 30 regulated entities, including deposit takers, insurers, asset managers, and financial advice providers. The sample of entities we asked to participate were selected to provide a broad, but high-level response that would give us an indicative story of how AI is being used in financial services.

The survey was not compulsory and was intended to get a general understanding of the industry as it relates to the use of AI. Thirteen entities responded, providing an over 40% response rate. Responses were received from six deposit takers, three insurers, and four financial advice providers or asset management firms.

To see how firms are thinking about, and managing, the rewards of using AI as well as the associated risks we sought to understand the following:

- Current use of AI
- Future use of AI
- Governance and accountability
- Compliance

This research specifically covers the use of AI as it relates to the potential impact on consumer outcomes and how AI is being used in decision-making processes. We did not cover, for example, an assessment of AI trading strategies employed by providers. For this report we were interested in how financial service providers are using *any* tools that might be AI tools. This includes generative AI (generating text and images from prompts); machine learning; AI decision-making tools; chatbots; and anything else that providers viewed as in scope.

The survey aimed to capture current and planned AI usage and risk management practices. See appendix for a copy of the questions that were asked of respondents. The following sections summarise the key themes from the survey responses.

3. Research Results

We had a range of responses across sectors with 13 representatives from deposit takers, insurers, asset managers, and financial advice providers. Despite the varied sectors, the responses were similar on several fronts.

All responding providers acknowledged that if they aren’t doing anything with AI right now, they intend to do so soon. The technology is cutting-edge and holds significant promise. All respondents see the value that AI could bring to their organisations.

All responding providers reported taking a cautious approach to adoption and implementation of AI. They are focused on risk identification, assessment and mitigation before actively implementing AI in business practices. We recognise that security and risk management are fundamental to these organisations’ operations. In essence, it makes sense that providers are being cautious in their approach, and it is good that they are.

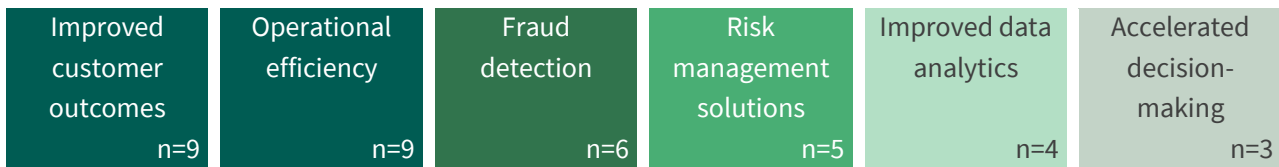
12 of 13 respondents expressed enthusiasm to attend future FMA-sponsored AI events, including round tables. This high level of interest demonstrates the industry’s eagerness to engage and collaborate with us on the path to effective AI regulation. The widespread adoption of AI among these entities underscores the necessity for the FMA to stay ahead and ensure we are well versed in its applications and implications.

3.1 Current use of AI

Of the respondents, nine are currently using AI technologies in one or more aspects of their operations. The majority of these are already seeing the benefits. Those who are not, expect to see the benefits within the next 12 months. This indicates that the benefits of AI utilisation are typically quickly realised.

Motivations for adopting AI most commonly include improved customer outcomes and operational efficiency. A respondent with one of the most advanced AI implementations reported that 90% of their use cases are focused on enhancing productivity, and other respondents echoed this sentiment particularly regarding making use of the AI-driven capability to analyse customer documents. This is unsurprising as AI can rapidly read and digest many documents simultaneously, providing an easier, faster, and more accurate experience for customers and staff alike. Given the focus on customer outcomes, it is also understandable that fraud detection was a common motivation. The two are naturally interrelated, with AI helping to identify possible fraud, keeping customers safe in real-time. While slightly less frequent, risk management solutions, improved data analytics and accelerated decision-making were also reported as drivers of adoption.

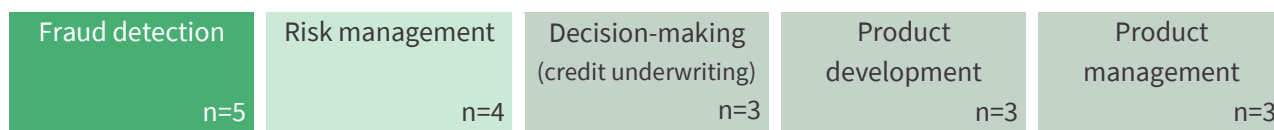
Figure 1. Motivations for adopting AI



Insurers and financial advice providers were primarily motivated by operational efficiency and improving customer outcomes. Deposit takers reported mostly using AI in risk management. This result was less evident among insurers or financial advice providers.

The business areas most commonly implementing AI technology and tools within responding organisations are in the following areas:

Figure 2. Business areas currently implementing AI technology



The customer is at the forefront in motivations for adopting AI, and this is reflected by the business areas that are adopting AI. For example, while the risk of fraud has negative implications for firms, it is also deeply entwined with the customer experience. Therefore, it makes sense that AI is being used to detect fraud by a collection of firms that list customer outcomes as a key motivation for adopting AI.

A variety of tools are being used by these business areas to realise the benefits of AI. Below are some examples of the tools that are being used according to respondents, and the ways in which they are being used.

- **Off the shelf tools** such as Microsoft CoPilot and GitHub are being trialled to assist teams with efficiency, documentation and knowledge and support in product development for engineering SDLC, for research, and alternative verification of coding reviews.
- **Machine learning tools** such as Darktrace, Databricks and HuggingFace are being used in security and fraud detection to identify patterns, monitor and track behaviours, for predictive modelling, to determine product pricing, and to support personalisation.
- **Web automation tools** such as Miro and Zapier are being used to understand customer behaviours, automate credit decision-making processes, document scraping, web automation of standard form documents, experimenting with GenAI code, and automated testing capabilities.
- **Security and detection tools** such as Darktrace, Egress and FRISS, that use self-learning AI, are being used to detect and respond to cyber threats using machine learning algorithms to understand normal behaviour and identify anomalies or deviations.
- **Customer service tools** such as chatbots are being used to summarise interactions and respond to consumer needs, provide chatbot search options, and draft documents in a customer friendly way.

This list highlights the extensive use of third-party AI tools across the industry. While there was initial interest in developing proprietary AI platforms, this approach has not materialised as anticipated. Instead, the focus has shifted towards procuring third-party solutions. Interestingly, one respondent did articulate a certain degree of success in developing their own web-based internal model like Chat GPT, motivated by an interest in keeping internal data away from third-party platforms of unknown risk. Another benefit is the model’s ability to learn from internal training data, with a bespoke tool being a better fit for them than an off-the-shelf one.

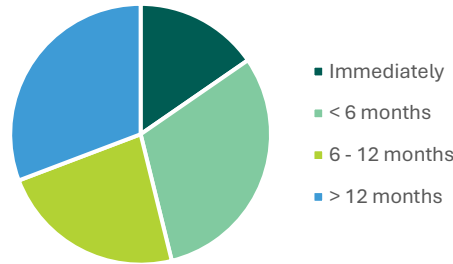
Given that most respondents only mentioned machine learning tools in their current use of AI, it is likely they are taking a cautious approach to generative AI. This was explicitly mentioned by some respondents that they are “focusing on how to do this safely”.

3.2 Future use of AI

All respondents are planning to use AI technologies in one or more aspects of their operations in the future. Most are already planning how they will implement them.

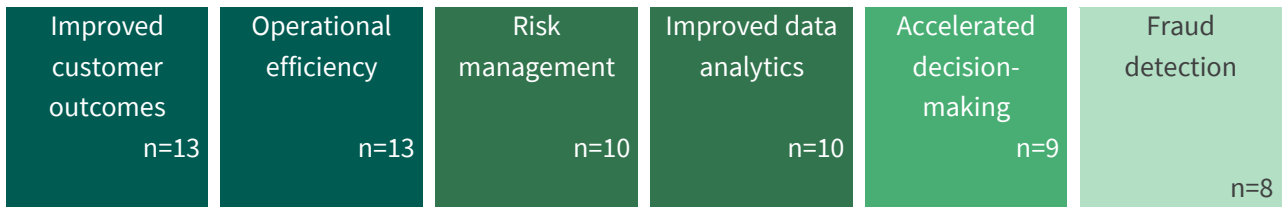
Unsurprisingly, there are diverse expectations of when benefits might be realised from future implementation. Some expect them immediately while others expect it could take longer than 12 months.

Figure 3. Expected timeframe to realise the benefits of AI



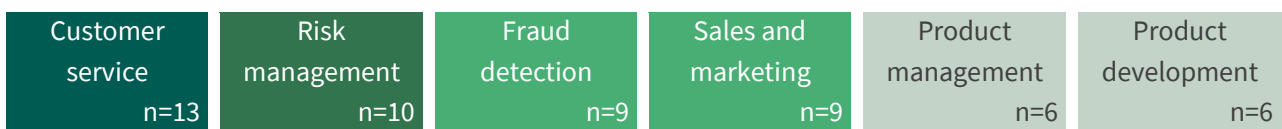
Primary motivations for adopting AI within financial services sector are diverse. For those currently using AI, improved customer outcomes and operational efficiency are common drivers. Risk management solutions and improved data analytics were also common. Fraud detection was less frequently considered as a future motivation given it is already being employed by responding organisations.

Figure 4. Motivations for future adoption of AI



The business areas most listed as planning to implement AI technology and tools within responding organisations are in the following areas:

Figure 5. Business areas planning to implement AI in the future



As with respondents’ current use of AI, their future use also seems to be motivated by the customer experience. All 13 respondents want to invest in their customer service.

Risk management was particularly prominent amongst non-insurance providers as an area of focus for the future. Three of five of the larger deposit takers also indicated a desire to use AI for credit underwriting and decision making. This is worth some further consideration due to the potential for algorithm use in these areas.



For further insights on the risks associated with algorithmic bias in decision making tools check out this Case Study on Amazon's automated recruitment system: [Insight - Amazon scraps secret AI recruiting tool that showed bias against women | Reuters](#)

When asked about their future strategies for implementing these tools and technologies there were several themes coming through:

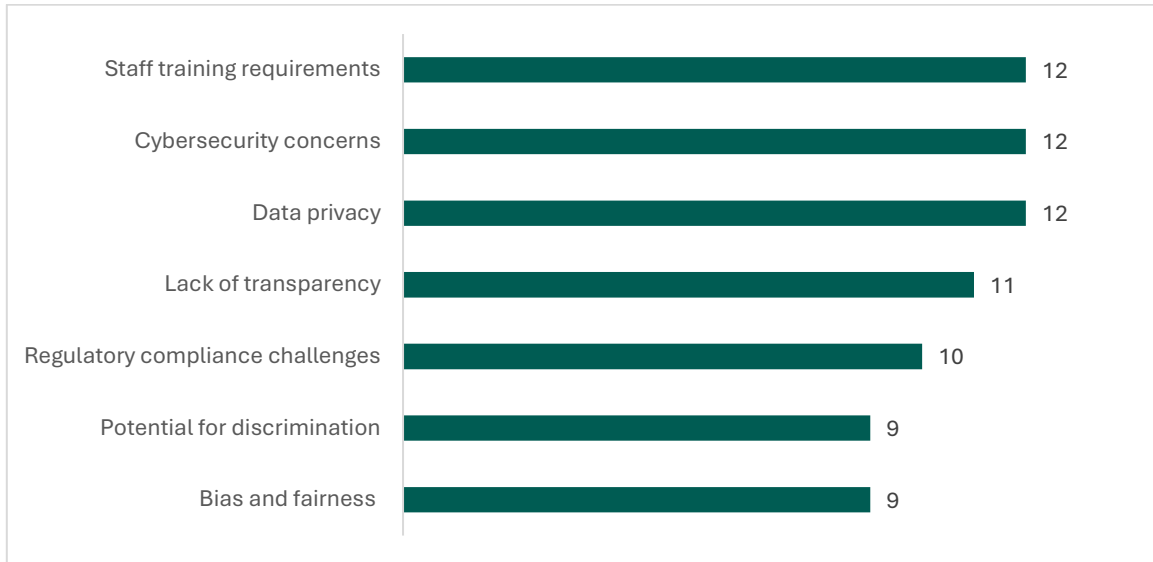
- **Defining a specific AI data governance and risk framework.** There is a general commitment to implementing robust policies and controls to manage risks and ensure the use of AI is transparent, ethical, and aligned with core organisational values.
- **Making use of pilots and proof of concept** to identify use cases, scalability, and risk mitigations before rolling it out, to manage risks before consumer data is exposed on a large scale.
- **Establishing education, training and guardrails** for end users to reduce the risk of user error.
- **Clearly defining the business problem** that is to be solved and the expected benefits first, rather than quickly adopting AI just because everyone else is.
- **Making use of AI scraping tools** to integrate content into existing systems to reduce human error and increase efficiency.
- **Striking a balance between off-the-shelf AI products and tailored GenAI solutions** and understanding that this balance will support capability for responsible AI.

“[Making use of AI scraping tools] will help us make better decisions on loan applications where the human element might not necessarily make the right decision.”

3.3 Governance and accountability

Respondents were asked which financial and non-financial risks they had already identified around the use of AI technology and tools. Data privacy, cyber security concerns, and staff training requirements were the primary risks identified.

Figure 6. Identified risks (financial and non-financial)



Most respondents have already started formally considering financial and non-financial risks. More advanced firms have also begun adjusting existing governance structures, with some opting to repurpose their existing frameworks, and one larger firm even creating an AI-specific subcommittee to vet third-party AI solutions. Those who have not yet started are still in the early days of uptake and have not yet reached a point where they feel they need to consider risks.

Providers have already considered strategies and controls to proactively identify and mitigate risks associated with AI implementation. These fall within three main categories:

Using quality and qualified AI only

Maintaining robust cybersecurity protocols

Limiting AI access to specific people

“We employ a comprehensive and proactive approach to identify and mitigate potential risks associated with AI implementation. This approach is underpinned by our long-established data, model and solution policies, standards, and approvals, which are governed by multiple groups including Enterprise Information Management (Data Governance), Compliance, Technology, Procurement, and Operational Risk.”

Most respondents have taken measures to ensure staff are trained adequately on the proper use and interpretation of AI-driven insights. This usually looks like training courses and modules, but some respondents have created webinars, planned “in the know” type meetings for all staff, or created learning frameworks.

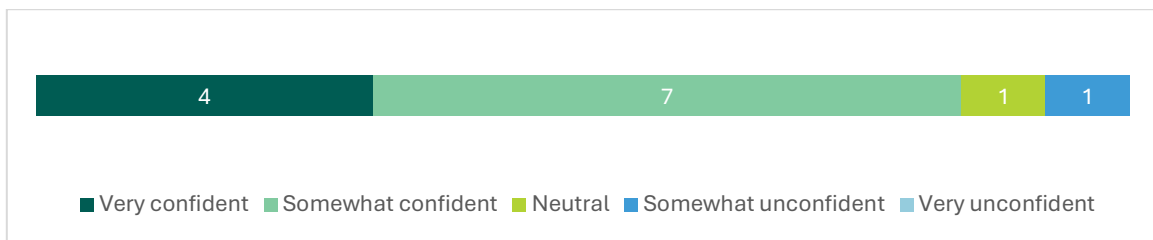
Most respondents anticipate the use of AI in decision-making processes. Methods considered to mitigate inherent biases in AI-driven decision-making processes are varied, but several touch on the idea of using peer-reviews as a guardrail. Larger deposit takers have more developed plans which include systematic processes for AI model review and risk grading. Interestingly, some firms have outlined that they plan on using AI to identify potential AI mistakes. Some banks are also taking the approach of not considering AI as an option to fully automate complicated risk decisioning.

The industry should continue paying attention to what is happening internationally in the use of AI including the benefits and risks associated with using AI in decision-making processes. The consideration of transparency in decision-making processes is also of importance. The cautious approach of considering and addressing the risks first, that providers have identified as being prudent will continue to support any developing uses of AI in decision-making processes. Keeping up to date on wider New Zealand and global trends in this space will ensure New Zealanders are getting the most benefit from AI use in the sector.

Most respondents are confident in their ability to effectively manage the risks associated with AI.

For respondents who self-rated less than “very confident”, specialised training and skill development for staff were identified as the main ways their confidence could improve.

Figure 7. Confidence in ability to effectively manage associated risks

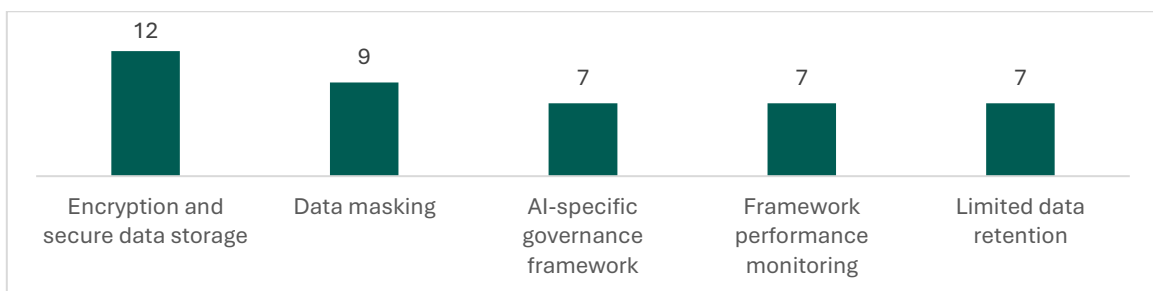


All respondents agree that governance and oversight play a significant role in and are integral to a functional AI risk management framework.

As a bare minimum, all but one respondent has encryption and secure data storage in place already. This is unsurprising given data privacy was one of the main safety concerns for this group of respondents.

As noted earlier, improving customer outcomes was a key motivating factor for both the current and future adoption of AI. This focus is evident in the risk mitigation strategies (see Figure 8), where the top two approaches are intrinsically linked to ensuring positive customer outcomes. Customers expect their data to be handled with the utmost sensitivity – failure to implement these critical risk mitigation measures can lead to data breaches, which undermines customer trust and results in poor customer outcomes.

Figure 8. Risk mitigation strategies



3.4 Compliance

Respondents were asked how they were considering or already approaching compliance with regulations, disclosures, and keeping up with industry standards.

Most respondents have not started thinking about what disclosures they will make to their customers.

Respondents reported that they are exploring opportunities at this point before moving to disclosures. However, a common theme was that all AI approaches are focused on customer outcomes and the safety of customers.

Many respondents have not started the process of understanding compliance with regulations and industry standards yet. Others are following “existing policies, processes, systems and controls that require consideration of regulatory obligations and relevant industry standards before deploying new technologies.” This includes:

- a) independent audit on AI models.
- b) AI-specific governance and education frameworks.
- c) updating existing ethics principles to clearly incorporate AI related risk, including specific Gen AI questions within processes and data impact assessments.

4. Other insights shared by providers

Respondents were asked to share any lessons learned or insights gained from their experience with AI adoption so far. Financial providers indicated seeing substantial demand for AI use cases across many areas of their business. The key themes from this include:

- Being aware that AI is in its infancy and a lot of products available are not true AI. The technology is at a **relatively early stage** and as such it represents potential risks to both customers and to financial service providers. The pace of innovation in AI models, infrastructure and potential use cases is fast. Agreement on how they can be used ethically is evolving at a much slower pace.
- **Data** is a fundamental requirement for building new AI services. Data can be presented as though it is accurate when that may not be the case, which would affect any AI models built on that data. Time will need to be spent to ensure the correct data is being used while training an AI model.
- There are many different applications for machine learning. Picking **the right AI solution** for the business problem (e.g. machine learning vs GenAI) is important right from the start.
- **Documentation** is crucial. Regardless of the pace of innovation, some expectations, such as the need for transparency and accountability, will not change.
- Most organisations explicitly stated they are taking a **conservative and cautious risk-focused approach** to the use of AI to allow a more controlled, responsible, well-managed introduction of AI into the organisation.

The use of a roundtable type conversation is likely to yield some useful examples to add depth to these insights and lessons learned that were shared by respondents.

5. Next steps

Artificial intelligence is undeniably a growing technology, offering significant value and holding promise for more advancements soon. Its rapid evolution, however, means that identifying and regulating the conduct risks can be challenging. As financial services increasingly integrate AI into their operations, it is essential to stay vigilant and proactive in understanding and addressing these risks.

The FMA is an engagement led regulator and recognises the importance of collaboration with industry stakeholders in navigating this dynamic landscape effectively. In this spirit, we proposed conducting an industry roundtable dedicated to discussing the current and future applications of AI in financial services.

The roundtable will serve as a platform for comprehensive dialogue with various perspectives. We will use the current research to start the discussion. We hope the discussion will build an even greater understanding and continue to develop our engagement with the industry using this approach. A collaborative approach will enhance our understanding of AI’s role in the financial sector and help shape a regulatory framework that balances innovation with the need for robust conduct oversight.

	<p>So, what is the right approach?</p> <p>To help meet our regulatory objectives, and to effectively administer our regulatory approach we need to remain abreast of the challenges and risks faced by the industry. This requires a balance between the need for responsible use of AI while facilitating innovation in a way that promotes our objectives (to foster fair, efficient, and transparent financial markets and to promote the confident and informed participation of businesses, investors, and consumers in the financial markets).</p> <p>At the FMA we are interested in helping firms to innovate while balancing the risks. We agree that staying focused on customer outcomes and the safety of customers is the right start, and we are pleased to see the responding firms doing just that.</p>
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Appendix: Questionnaire

Introduction: What do we mean when we say "AI"?

We are interested in how you are using any tools that might be considered to be AI tools. This includes generative AI (generating text and images from prompts); machine learning; AI decision-making tools; chatbots; and anything else that you feel is in scope.

The FMA is currently thinking about how AI impacts customer outcomes and firms risks. We want to better understand how financial service providers are making use of AI. We are keen to see how firms are thinking about, and managing, the rewards of using AI as well as the associated risks.

We would like to better understand two areas:

- Existing and planned use of AI in your products and services
- Governance and accountability – risk management in AI

Thank you for agreeing to participate in this survey, we look forward to receiving your response.

1. Following your completion of this survey we may have follow-up questions to some of your responses. Would you be happy for someone from the FMA to contact you with any further questions?

- Yes
- No

2. Are you interested in attending FMA sponsored AI events in the future?

- Sector-specific small round table discussions
- General financial services AI conference
- Not interested at this time

Personal Information

Please note - any personal information collected in this section is for future communication use only and will not be shared beyond the FMA.

3. Which sector does your organisation belong to?

Please select all that apply.

- Asset management
- Banking
- Financial advisory
- Insurance
- Outsourced financial services
- Securities
- Other

4. What is the name of the firm you are providing a response for?

5. Your name

6. Your email address

Current Use of AI

The next set of questions ask about what AI tools and technology you are currently using at your organisation.

7. Is your organisation currently using AI technologies in any aspect of your operations?

- Yes
- No

8. What were the primary motivations for adopting AI in your organisation?

- Improved customer outcomes
- Operational efficiency
- Risk management solutions
- Fraud detection
- Cost reduction initiatives
- Gain a competitive edge
- Keep up with competitors
- Improved data analytics
- Regulatory compliance support and automation
- New product development
- Accelerated decision-making
- Other

9. When do you expect to realise the benefits of the AI tools and technology you are currently using?

- We are already seeing the benefits
- < 6 months
- 6 - 12 months
- > 12 months

10 Which areas of your organisation currently use AI technology or tools?

Please select all that apply

- Sales and marketing
- Fraud detection
- Product development
- Decision-making (credit underwriting)
- Product management
- Decision-making (insurance underwriting)
- Risk management
- Investment analysis
- Customer service
- Other

11. Considering your answer to the previous question, briefly describe how AI is being used by these business areas.

12. Which specific AI tools are you currently using?

13. Do the staff at your organisation currently have access to AI technology and tools in their day-to-day work? eg, Microsoft CoPilot or Amazon CodeWhisperer.

- Yes
- No
- Unsure

Forward Looking Use of AI

The next set of questions ask about what AI tools and technology you may use in the future at your organisation.

14. Are you considering using AI technologies and tools within your organisation in the next few years?

- Yes
- No
- Unsure

15. If yes, have you started planning how to implement AI technologies within your organisation?

- Yes
- Progressing soon (<6 months)
- Progressing in 6-12 months
- Progressing later (> 12 months)

16. In what areas of your business do you anticipate using AI?

Please select all that apply

- Product development
- Decision-making (credit underwriting)
- Fraud detection
- Sales and marketing
- Investment analysis
- Risk management
- Decision-making (insurance underwriting)
- Product management
- Customer service
- Other

17 Briefly outline your future plans or strategies for implementing AI

18. What are the primary motivations for adopting AI in your organisation in the future?

- Improved customer outcomes
- Operational efficiency
- Risk management solutions
- Fraud detection
- Cost reduction initiatives
- Gain a competitive edge
- Keep up with competitors
- Improved data analytics
- Regulatory compliance support and automation
- New product development
- Accelerated decision-making
- Other

19. How long do you expect it will take for you to realise the benefits of the AI tools and technology you implement in the future?

- Immediately
- < 6 months
- 6 - 12 months
- > 12 months

Governance and Accountability

This section asks about how you are identifying and managing risk around the use of AI and existing governance and accountability structures in place to support this.

20. When it comes to the use of AI technology and tools, what financial and non-financial risks have you identified in your organisation?

Please select all that apply

- Data privacy
- Cybersecurity concerns
- Bias and fairness in decision-making
- Lack of transparency in AI algorithms
- Potential for discrimination
- Regulatory compliance challenges
- Staff training and education requirements
- Other

21. Has your organisation started formally considering financial and non-financial risks associated with AI utilisation?

- Yes
- No

22. What barriers prevent you from considering and mitigating financial and non-financial risks associated with AI utilisation within your organisation?

23. What strategies and controls does your firm employ to proactively identify and mitigate potential risks associated with AI implementation?

24. What measures are in place to educate and train staff members about the proper use and interpretation of AI-driven insights and recommendations?

25. Do you anticipate using AI for decision-making processes within your organisation?

Yes

No

26. How do you plan to address and mitigate inherent biases in AI-driven decision-making processes?

27. How confident are you in your organisation's ability to effectively manage the risks associated with AI utilisation?

Very confident

Somewhat confident

Neutral

Somewhat unconfident

Very unconfident

28. Are there any areas you can identify that would improve your confidence in effectively managing the risks associated with using AI in your organisation (or industry)?

29. What role does governance and oversight play in the risk management framework for AI initiatives within your organisation?

30. What data governance and privacy measures do you have in place to ensure the responsible use of AI?

Encryption and secure data storage

Data masking

AI-specific governance framework

Framework performance monitoring

Limited data retention

Other

31. How are you ensuring compliance with regulatory regulations and industry standards when deploying AI technologies?

Final thoughts

Just a couple of final questions for you now.

32. Can you share any lessons learned or insights gained from your experience with AI adoption?

33. Is there anything else you would like to share with us in relation to the use of, and risk mitigation of AI in your organisation?