

# The use of artificial intelligence by financial sector actors

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## The use of artificial intelligence by financial sector actors

### 1 Summary

#### 1.1 Use of AI in the financial sector in Finland

Based on the responses, companies operating in the financial sector are highly interested in utilising AI in their operations. All large and medium-sized entities reported either already using or intending to start using AI solutions within the next two years. The banking and insurance sectors are the main users of AI in the financial sector. The most frequently used types of AI are generative AI technologies and general-purpose AI models. In the future, the use of AI will grow even further. At present, the majority of AI solutions are used in internal processes, and their use in the customer interface is likely to increase over the following years.

According to the responses, the most frequently used areas of application among current use cases are translations, information search and summarising, generation of textual content, software coding and systems development, enhancing customer insight as well as chatbots and virtual assistants. Among large companies, the most popular use cases also included marketing and sales.

By using AI, the financial sector seeks in particular to develop internal processes, improve the customer experience and reduce costs. According to the responses, these objectives have already been achieved to some extent.

Other benefits sought according to the responses included focusing human work on more valuable, strategic, and inspiring tasks. Additionally, the effective utilisation of data should enable better decision-making and personalised customer experience.

The responses identify data quality and data protection issues as the main risks. Challenges identified in ensuring non-discrimination include the detection of biases, organisation of continuous monitoring and ensuring fair decision-making.

High-risk AI systems under the AI Act have already been deployed in the financial sector. According to the responses, their development and deployment will accelerate in the near future. The respondents reported preparing for meeting regulatory

requirements for example by establishing a governance model or policy that indicates prohibited practices and use cases. The companies also provide training to personnel on the use of AI. Some have specified their own risk assessment model for AI.

In conclusion, companies in the financial sector aim to use AI to improve their operations. Large entities employ more personnel to promote the use of AI as well as good policies and practices to minimise risks and meet the requirements of the Regulation. Small and medium-sized enterprises have more room for improvement in their practices as the use of AI increases.

## 1.2 Preparations for the supervision of AI

The government proposal for legislation complementing the AI Act was submitted before the Parliament on 8 May 2025. The proposal presents enacting the Act on the Supervision of Certain AI Systems and amending certain other acts. The FIN-FSA is proposed as the market supervision authority for certain high-risk AI systems in the financial sector.

The FIN-FSA prepares for these supervisory duties by, among other things, securing requisite personnel resources and developing competencies. The areas of competence necessary in the supervision are defined in the AI Act.

Information collected in the survey as well as the understanding of the current usage and related plans for AI formed during the analysis of the thematic review are used in preparing for the supervision. The supervisory duties begin in practice in 2026.

## 2 Objectives of the thematic review

The purpose of the thematic review was to examine the use of artificial intelligence (AI) by entities operating in the financial sector in Finland.

The Financial Supervisory Authority (FIN-FSA) uses the collected data as it prepares for the market surveillance tasks assigned to it under the EU Artificial Intelligence Act (2024/1689). This thematic review examined the scope, use cases, risks identified, benefits achieved and sought, as well as future plans regarding AI technologies currently used by entities supervised by the FIN-FSA. The survey was carried out as a risk-based sample.

The use of AI by companies in the financial sector has not been examined previously. Statistics Finland has compiled statistics on the use of information technology in enterprises starting from 2021. According to statistics published by Statistics Finland on 17 December 2024, AI technologies were being used by 24% of companies in spring 2024. The proportion of companies using AI technologies rose by nine percentage points from 2023. By industry, the statistics show that AI technologies were most frequently used in information and communication (66%) and in professional, scientific, and technical activities (48%). The most frequently used technologies were those analysing written text. These technologies were used by 15% of enterprises. Technologies generating written or spoken language were used by 13% of them. Robotic process automation, which automates work processes and decision making, was used by 11% of enterprises.<sup>1</sup> However, the statistics published by Statistics Finland's did not focus on the financial sector, so they do not provide insights into the use of AI in the financial sector or the AI technologies employed there.

## 3 Background: regulation of AI and systematics of the AI Act

The purpose of the AI Act is to create a uniform and clear legal framework for developing, placing on the market, putting into service and using AI systems in the EU, and thereby promote reliable and responsible AI in Europe and beyond.<sup>2</sup>

Furthermore, the AI Act seeks to ensure that AI systems introduced and deployed in the EU do not endanger human health, safety or fundamental rights. The systematics of the AI Act are based on a *risk-based approach*, meaning that the rules are

<sup>1</sup> <https://stat.fi/fi>

<sup>2</sup> AI Act (2024/1689), [European approach to artificial intelligence | Shaping Europe's digital future](#), government proposal 155/2024.

proportionate to the intensity and extent of the potential risks associated with each AI system. In accordance with the approach, the Regulation prohibits certain practices related to artificial intelligence, establishes the requirements for high-risk systems, harmonises the criteria for general-purpose<sup>3</sup> systems and lays down transparency requirements for so-called low-risk systems.<sup>4</sup>

Examples of prohibited practices related to AI include manipulative or deceptive (subliminal) practices, the exploitation of any vulnerabilities of a natural person or a specific group of persons (age, disability, or social or economic situation), the classification of natural persons or groups of persons based on their social behaviour or personal characteristics, leading to detrimental or unfavourable treatment in an unrelated context that is otherwise unjustified.<sup>5</sup> In some situations, a system that by default belongs to another category may, de facto, pose risks to fundamental rights, for instance, and thereby be a high-risk system.

The AI Act is directly applicable legislation in EU Member States, but it also requires the adoption of complementary and clarifying national regulations.

The AI Act entered into force on 1 August 2024, and its application has begun in phases. For example, prohibited AI practices have been in force since February 2025. Authorities' supervision and sanction powers will take effect on 2 August 2025.

## 3.1 High-risk systems and related regulation

In accordance with the risk-based approach, the AI Act regulates in particular the requirements for high-risk AI systems. The definition of an AI system as high-risk depends on its *use case and area of application*, as detailed in Chapter III, Article 6, and its complementary Annex III. The use case is considered high-risk when AI plays a key role in the decision-making and operates largely independently of human control in a high-risk area of application. High-risk areas of application specified in the AI Act include the evaluation of creditworthiness in the fields of finance, banking and insurance as well as risk assessment related to health and life insurance. In contrast, according to recital 58, AI systems provided for by Union law for the purpose of detecting fraud in the offering of financial services and for prudential purposes to

<sup>3</sup> Artificial Intelligence Act (2024/1689), Article 3(63): "general-purpose AI model" means an AI model, including where such an AI model is trained with a large amount of data using self-supervision at scale, that displays significant generality and is capable of competently performing a wide range of distinct tasks regardless of the way the model is placed on the market and that can be integrated into a variety of downstream systems or applications, except AI models that are used for research, development or prototyping activities before they are placed on the market. The most common example of a general-purpose AI model is probably ChatGPT. General-purpose systems are usually either limited-risk or low-risk systems, unless they are general-purpose systems involving systemic risk as referred to in Article 51.

<sup>4</sup> AI Act (2024/1689), Article 3(63), and government proposal 155/2024.

<sup>5</sup> Artificial Intelligence Act (2024/1689), chapter II, Article 5.

calculate credit institutions' and insurance undertakings' capital requirements should not be considered to be high-risk systems.<sup>6</sup>

Numerous requirements<sup>7</sup> are applied to high-risk systems before they may be introduced to market or deployed. These include:

- compliance with the requirements
- appropriate risk assessment and risk mitigation systems
- high quality of the data inputs used into the system to minimise the risk of discriminatory results
- logging of actions to ensure the traceability of results
- detailed documentation including all necessary information on the system and its purpose, allowing authorities to assess its compliance
- clear and sufficient information for the deployer
- appropriate human oversight measures to minimise risks
- a high level of reliability, security and accuracy as well as information security and robustness
- technical documentation
- quality management system
- storage of automatically generated logs

The AI Act provides specific requirements for the deployers and providers of high-risk AI applications, but responsibilities are also assigned to parties in different roles across whole value chain of the AI systems. Sanctions are also determined based on the roles.

## 3.2 FIN-FSA's role as a market supervisor for high-risk AI systems

According to a government proposal submitted before the Parliament on 8 May 2025, market supervision authorities for high-risk AI systems in Finland shall encompass, in addition to the FIN-FSA, the Ministry of Transport and Communications, the Finnish Safety and Chemicals Agency, state health and safety officials, the Finnish Medicines Agency, the Energy Authority, the Data Protection Ombudsman, the South Savo Centre for Economic Development, Transport and the Environment and the National Supervisory Authority for Welfare and Health. The FIN-FSA's role as a supervisor of the AI Act is determined under the Regulation as well as complementary national legislation<sup>8</sup>.

In accordance with the government proposal<sup>9</sup>, the FIN-FSA would supervise:

<sup>6</sup> AI Act (2024/1689), recital 58.

<sup>7</sup> AI Act (2024/1689), Chapter III.

<sup>8</sup> Act on the Supervision of Certain AI Systems.

<sup>9</sup> Government proposal 46/2025.

- High-risk AI systems under Annex III, point 5(c), intended to be used for risk assessment and pricing in relation to natural persons in the case of life and health insurance.
- In addition, it would supervise high-risk AI systems under said Annex, point 5(a), intended to be used by public authorities or on behalf of public authorities to evaluate the eligibility of natural persons for essential public assistance benefits and services, including healthcare services, as well as to grant, reduce, revoke, or reclaim such benefits and services.
- Moreover, the FIN-FSA would supervise high-risk AI systems intended for use cases under said Annex, point 5(b), where being deployed by a supervised entity as referred to in section 4 of the FIN-FSA Act (878/2008), another financial market participant as referred to in section 5 or a foreign supervised entity as referred to in section 6, subsection 7.<sup>10</sup>

The Act on the Supervision of Certain AI systems is due to enter into force on 2 August 2025.

## 4 Background information on the survey

### 4.1 Target groups of the survey

The survey sample included all banking groups and amalgamations, branches of foreign banks operating in Finland and a couple of dozen consumer lenders. From insurance institutions and payment service providers (“PSPs”), entities assessed as having the capacity to develop and use AI were selected for the sample. Companies operating in the capital markets were selected using the risk-based approach, on the basis of company size and nature of business.

A total of 83 entities from the financial sector responded to the survey. These included 22 insurance companies, 10 Finnish banks, and 20 branches of foreign banks operating in Finland, as well as 11 companies operating in the financial sector (investment firms, fund management companies, the stock exchange, and the central securities depository), seven PSPs and 13 consumer lenders. The survey was conducted in February 2025

<sup>10</sup> Government proposal 46/2025, p. 100.

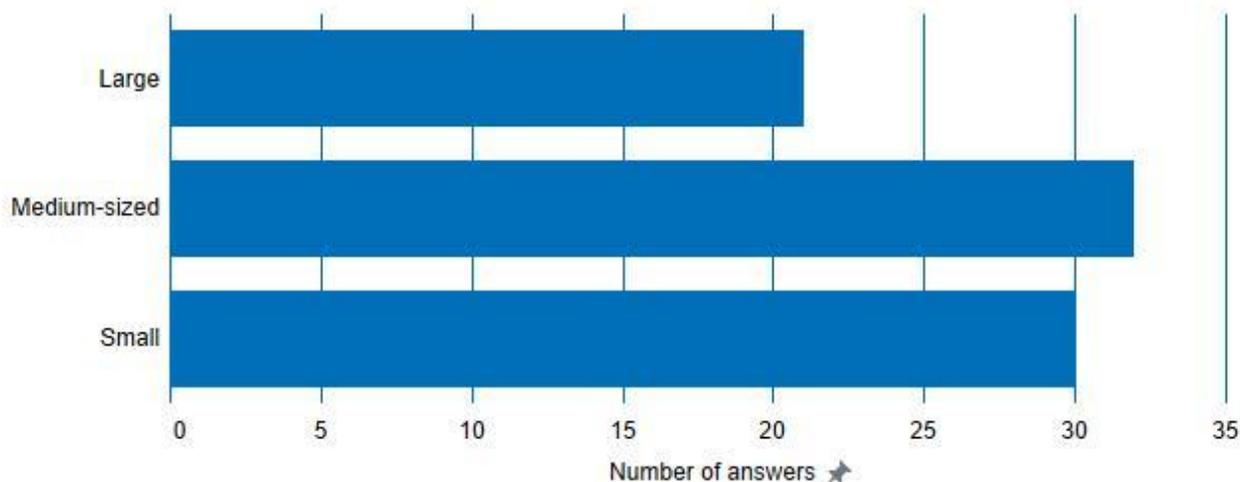
## 4.2 Breakdown of respondents by number of personnel

For the analysis, the the companies were classified into categories based on the number of personnel:

Small: 1–50 persons

Medium-sized: 51–500 persons

Large: 501 or more persons



Source: FIN-FSA

Chart 1: The companies were divided by number of personnel into three categories: small, medium-sized and large.

## 4.3 Branches

The survey also reached out to branches of foreign companies operating in Finland. Out of the foreign banks' branches, 29 responded to the survey, and they are treated as a distinct group in parts of the analysis. Usually AI development for foreign banks' branches is conducted by the parent company and funded through its budget. The

other sectors had individual branches, and their responses were analysed as part of the broader sector group.

## 4.4 Roles of the respondents to the survey

The AI Act provides specific requirements for the deployers and providers of high-risk AI applications, but responsibilities are also assigned to importers and other participants in the value chain of the AI system.

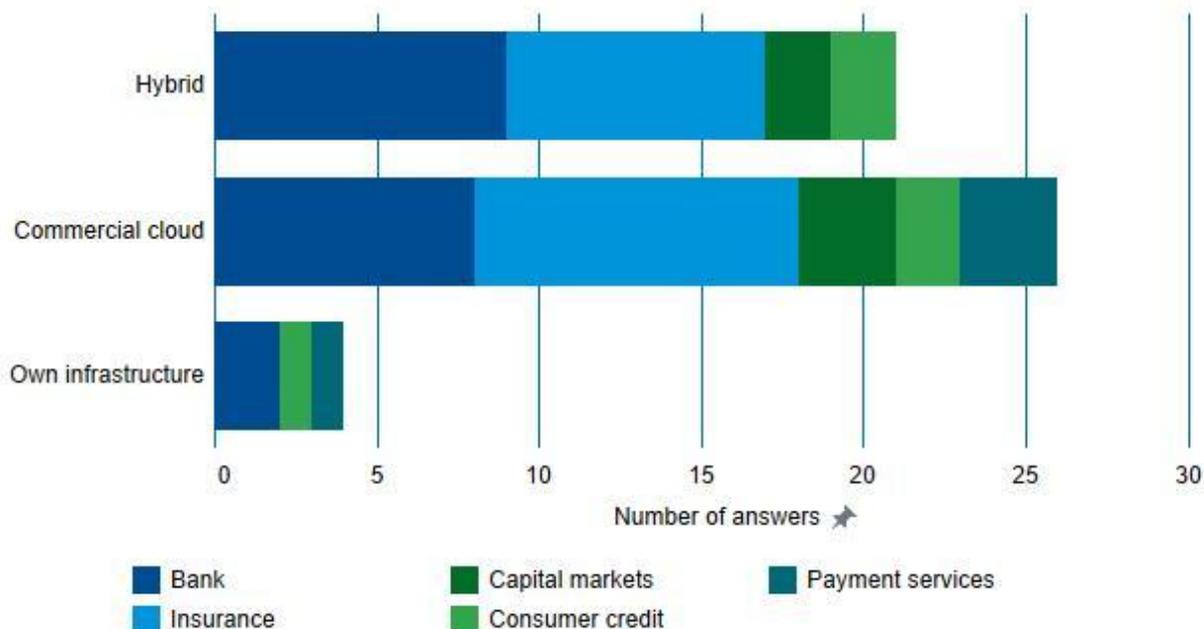
The majority of the companies identified themselves as users of AI (N=76, 81%) 26 of them identified as developers and 8 as importers. Half of the importers were foreign banks' Finnish branches. The developers include primarily companies operating in the banking and insurance sector.

## 4.5 AI development environments

When asking about the implementation environment for AI solution, the answer options were:

- Own infrastructure: **a technological environment managed and maintained by the organisation or developer itself**, used in AI systems designing, training, testing and/or production.
- Commercial cloud: **an infrastructure and service provided by an external cloud service provider**, used in the development, training, deployment and maintenance of AI
- Hybrid: combination of these two

The most common answer was a commercial cloud (51%). A hybrid model was also used widely (41%).



Source: FIN-FSA

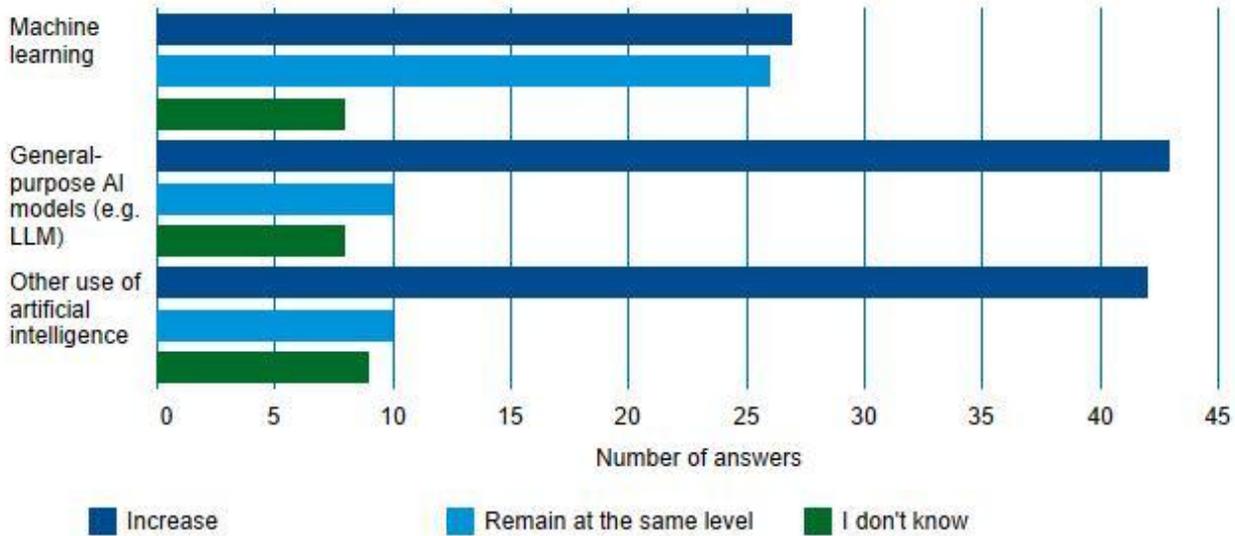
Chart 2: Development environments

## 5 AI resourcing

### 5.1 AI budget as a proportion of the IT budget

47% of companies responding to the survey have a separate AI budget. Half of them reported using 1–7% of their total IT budget in AI development in 2025. At most, 20–25% of IT budgets are spent on AI development. In this respect, there were no major differences across the sectors or size categories.

Over the next two years, the majority of the companies expected their AI investments to either grow or remain at the same level; none responded that investments would decrease.



Source: FIN-FSA

Chart 3: Estimated development of AI investments in 2026–2027.

*Machine learning:* A way of teaching a machine to make forecasts, decisions or classifications based on data and experience.

*General-purpose AI models (generative AI models):* Models learn from input (e.g. texts, images) and create similar content.

## 5.2 Number of personnel in AI development

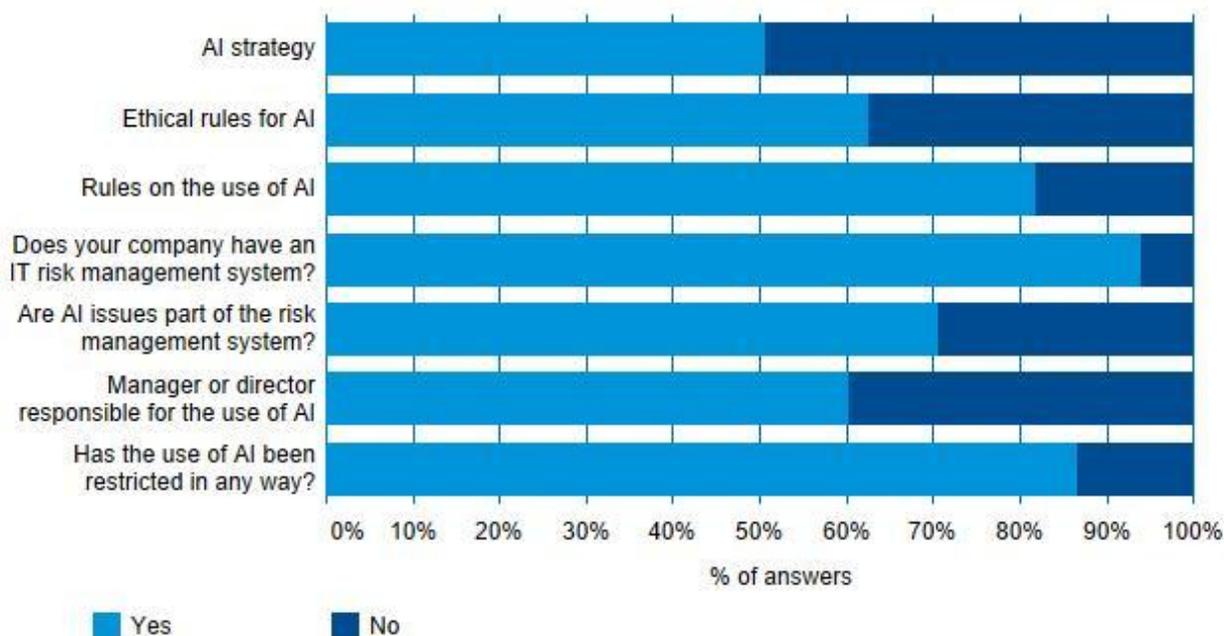
Among the responding companies, 52% had personnel working in AI development. In the category of small companies, AI personnel includes one person on average. Meanwhile, medium-sized companies have 1–5 employees and large ones have 3–20 employees. The three largest banks had a higher number of AI development personnel. Based on the survey, the total number of personnel working with AI development in the financial sector in 2025 is 320.

## 5.3 AI governance and training

According to the responses, financial sector entities have been building a robust governance for AI: 51% of respondents have an AI strategy, 63% have ethical rules for AI and 82% have a code of conduct for the use of AI.

94% of the respondents state they have an IT risk management system in place and 71% state AI is part of it. In addition, 61% of the companies have appointed a director or manager responsible for the use of AI.

87% of the respondents state the use of AI has been limited in some way. As an example, a company may designate areas where AI is not used. Cited examples include AI systems prohibited by the AI Act, use cases involving sensitive data, automatic decision-making, personal profiling and the use of customer data. Many companies have banned the use of generative AI solutions, such as ChatGPT. Many respondents stated that any AI solutions to be deployed will undergo the acceptance procedures established by the company.



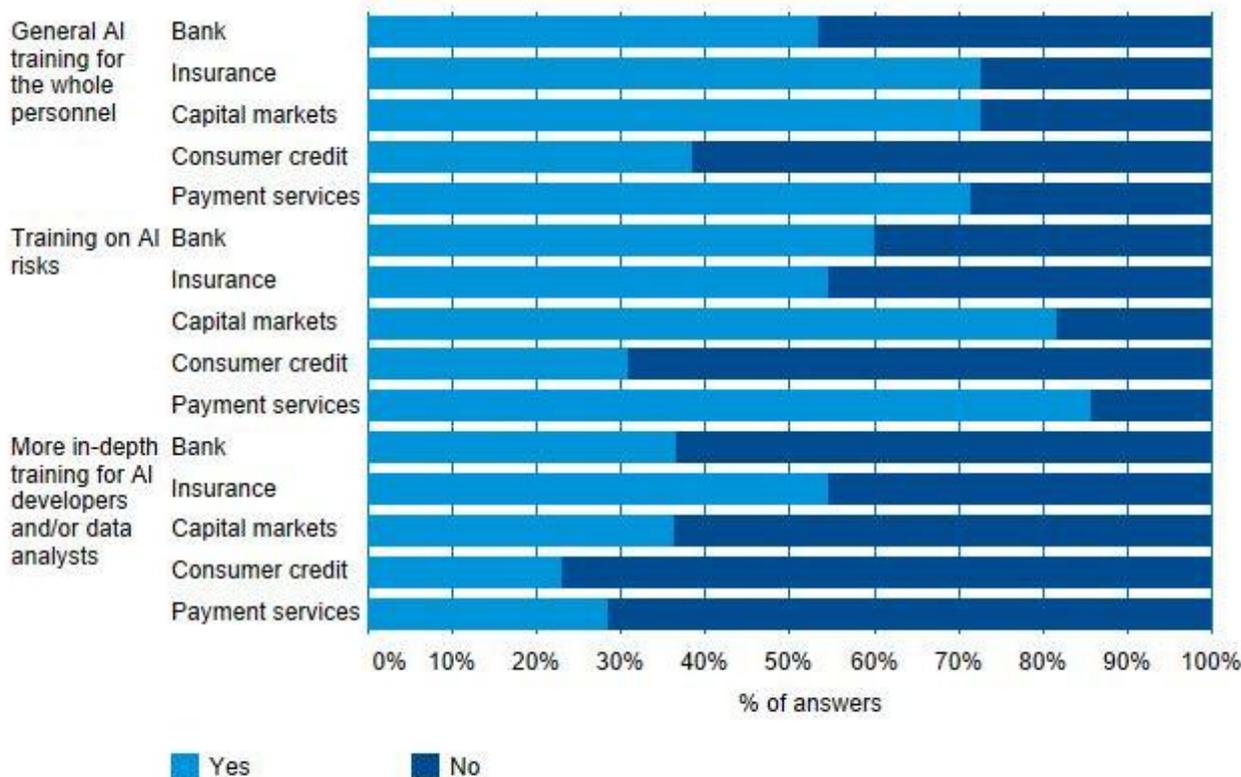
Source: FIN-FSA

Chart 4: IT and AI practices in place, all respondents, number of 'yes' responses.

Practices	Category Large	Category Medium-sized	Category Small
AI strategy	62 %	44 %	50 %
Ethical rules for AI	71 %	59 %	60 %
Rules on the use of AI	95 %	81 %	73 %
IT risk management system	100 %	97 %	87 %
AI issues part of the risk management system	81 %	63 %	60 %
Manager or director responsible for the use of AI	76 %	56 %	53 %
Restrictions for the use of AI	95 %	84 %	83 %

Table 1: IT and AI practices in place, percentage shares by size category

Based on the responses, many companies had provided training on AI to personnel. General AI training to the whole personnel was given by 60% of the companies, training on AI risks by 59% and more in-depth methodological training to AI developers and data analysts by 39% of the respondents.



Source: FIN-FSA

Chart 5: Industry-level view of AI training

## 6 Use of AI

## 6.1 General

73% of the respondents stated they either already use AI solutions or plan to use them within the next two years. All large and medium-sized entities belong to this group. Ten small entities reported neither using nor planning to use AI solutions in the near future. The largest sector in this group was consumer lenders.

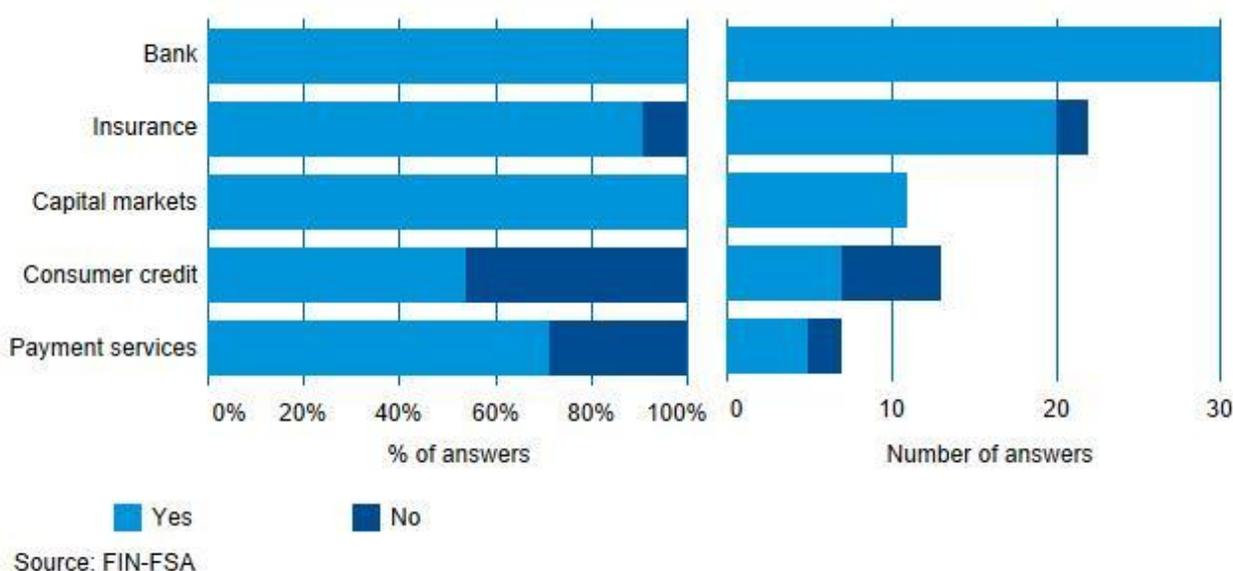
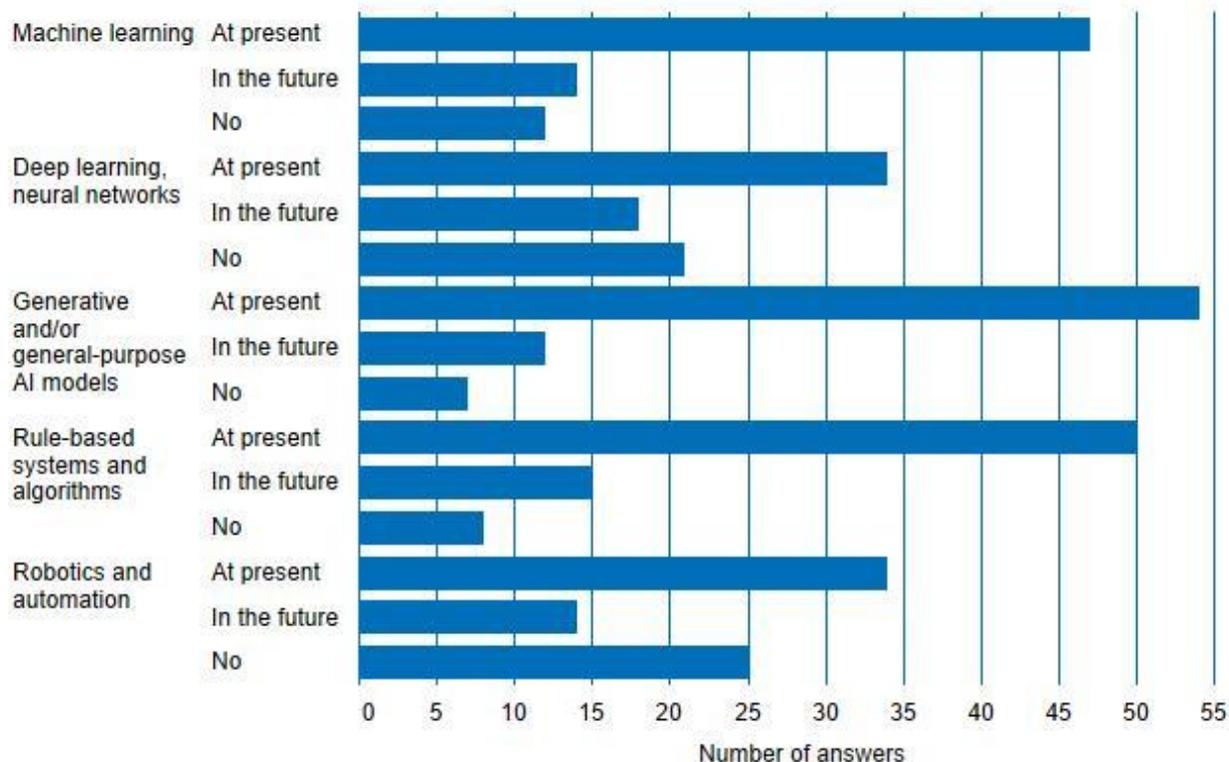


Chart 6: The banking and insurance sectors are the main users of AI.

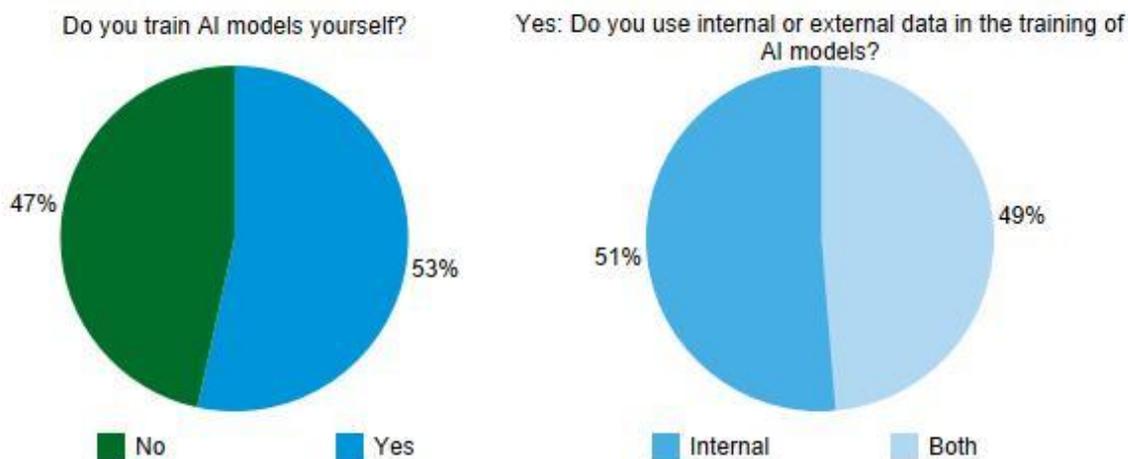
At the time of responding, the most frequently used AI technologies were generative and general-purpose AI models. 74% of respondents reported using these technologies. Rule-based systems and algorithms (68%) and machine learning (64%) were also being used widely. Based on the responses, the use of all technologies will increase in the future.



Source: FIN-FSA

Chart 7: Use of various AI technologies now and related plans for the future

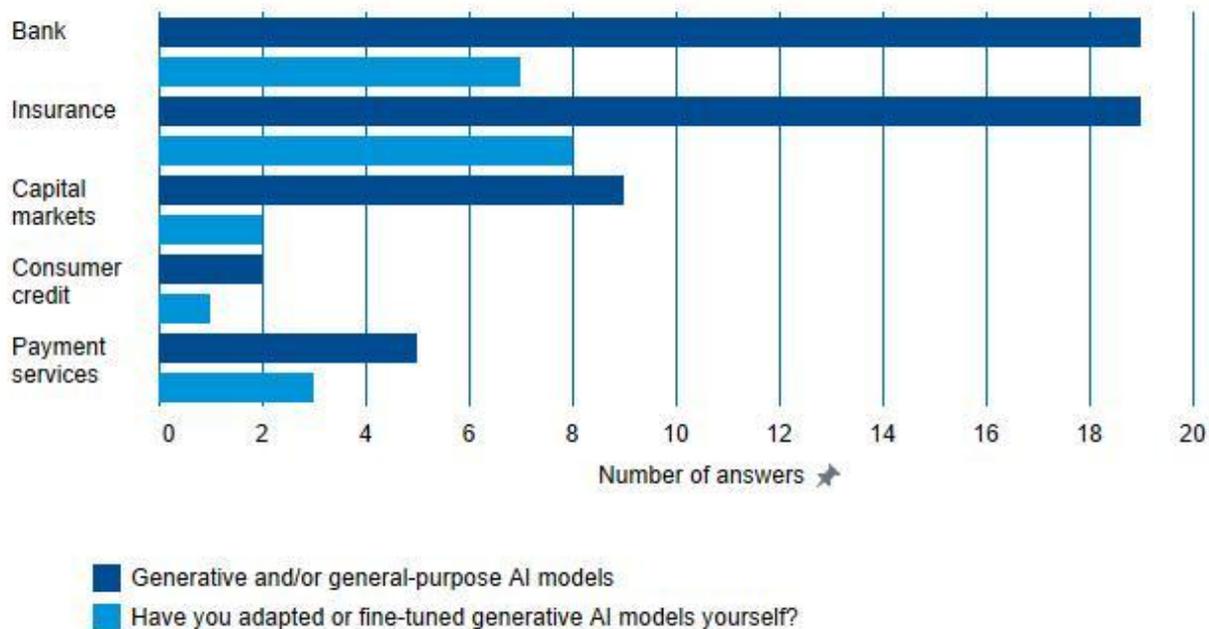
When asked about the training of AI models (the process in which a model is taught to identify patterns in data through examples so that it can later operate independently), 53% of respondents reported that they train AI models themselves. Approximately half of these use only internal data for training, while the other half use both internal and external data.



Source: FIN-FSA

Chart 8: Training of AI models

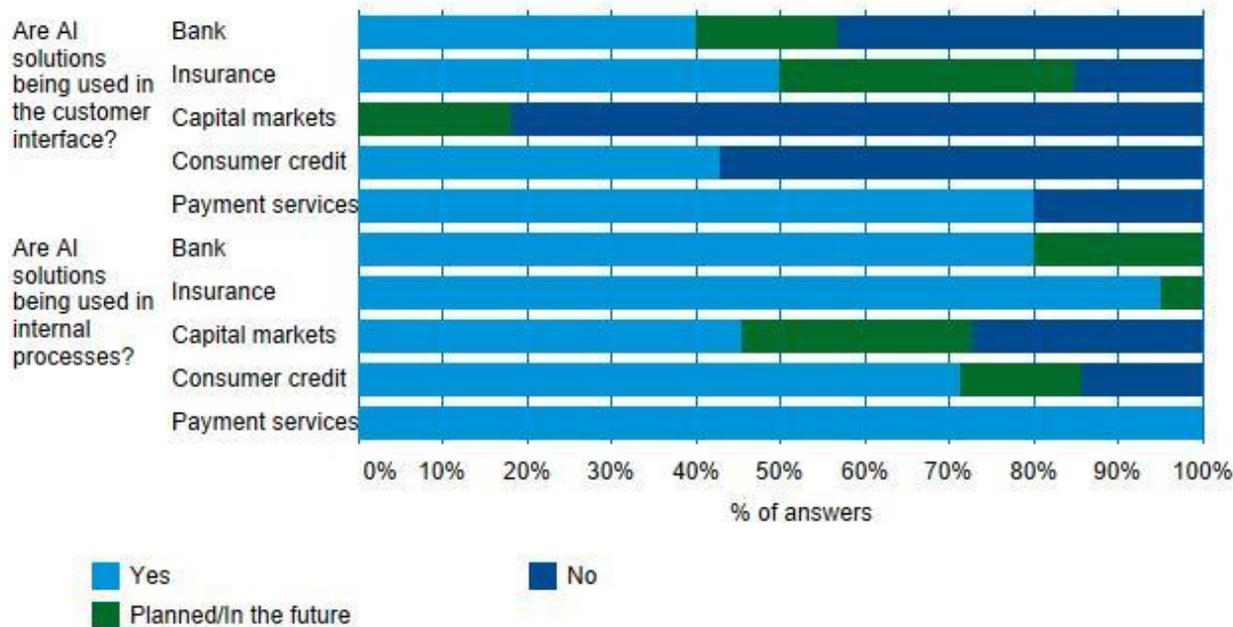
Generative and general-purpose AI models are the most frequently used ones in all sectors included in the survey. 40% of companies using them have also modified them. Among the sectors, AI is clearly most widely used in banking and insurance.



Source: FIN-FSA

Chart 9: Number of users of generative and/or general purpose AI models, and the number of companies that reported having modified or fine-tuned AI models.

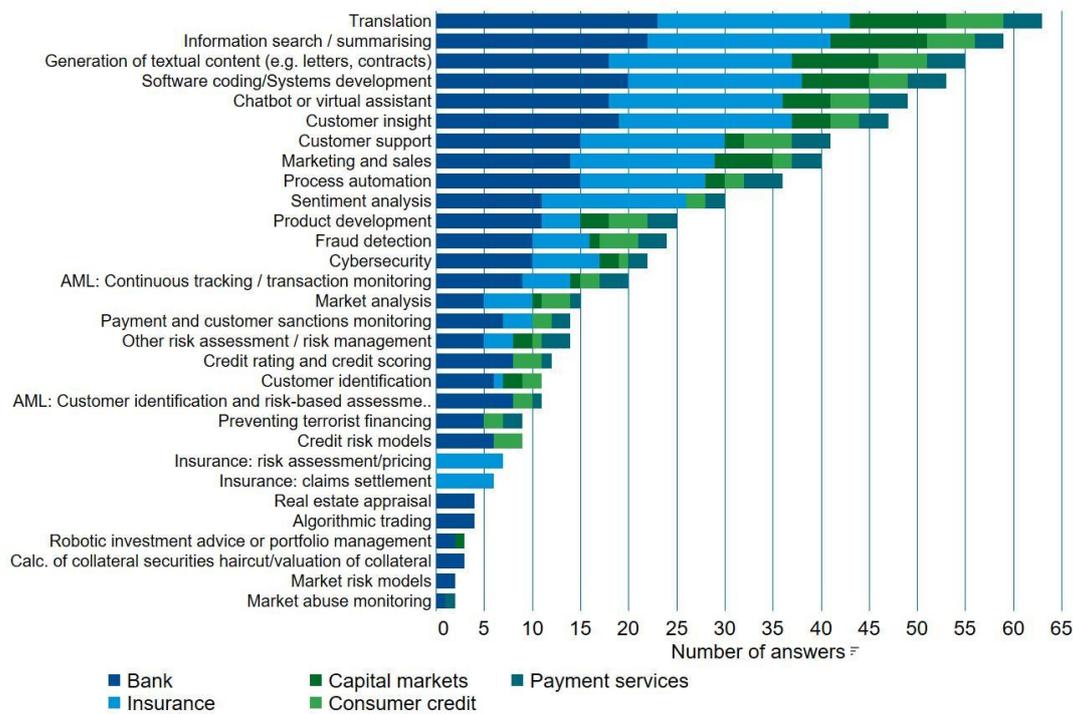
Based on the responses, most of the AI solutions are used in internal processes. Their use in the customer interface will increase somewhat over the next few years.



Source: FIN-FSA

Chart 10: AI solutions in the customer interface and internal processes

According to the responses, the most prevalent current use cases are translations, information search and summarising, generation of textual content, software coding and systems development, enhancing customer insight as well as chatbots and virtual assistants. Among large companies, the most popular use cases also included marketing and sales.

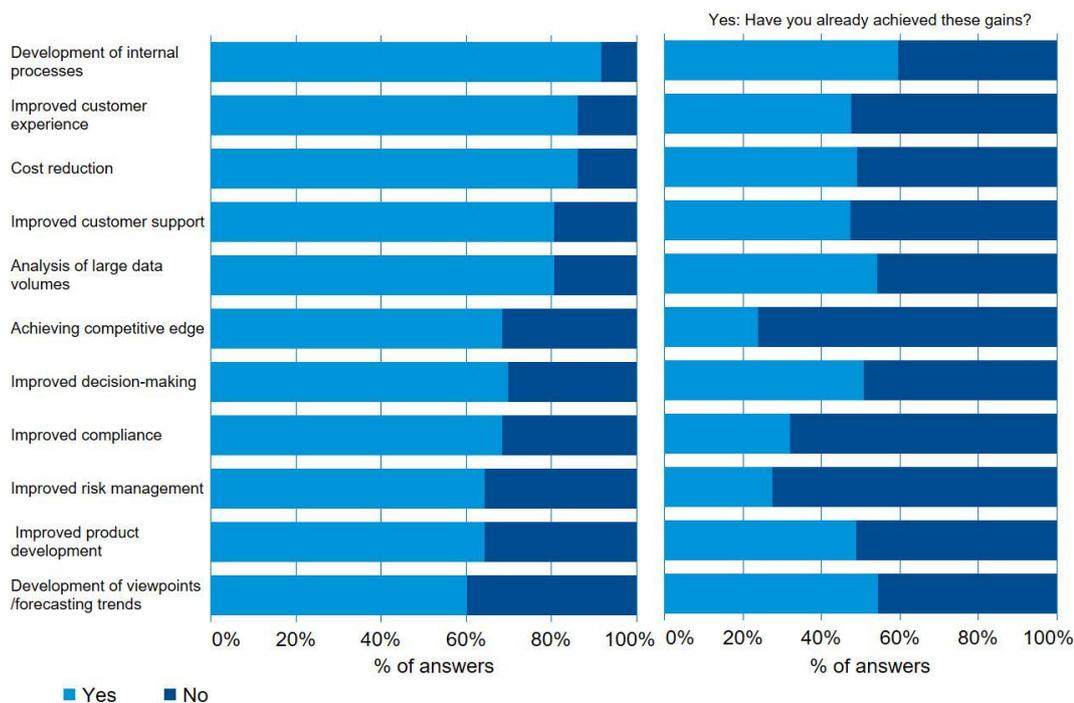


Source: FIN-FSA

Chart 11: AI use cases, all respondents

## 6.2 Benefits sought and achieved

By using AI, the financial sector seeks in particular to develop internal processes, improve the customer experience and reduce costs. According to the responses, these goals have already been reached to some extent.



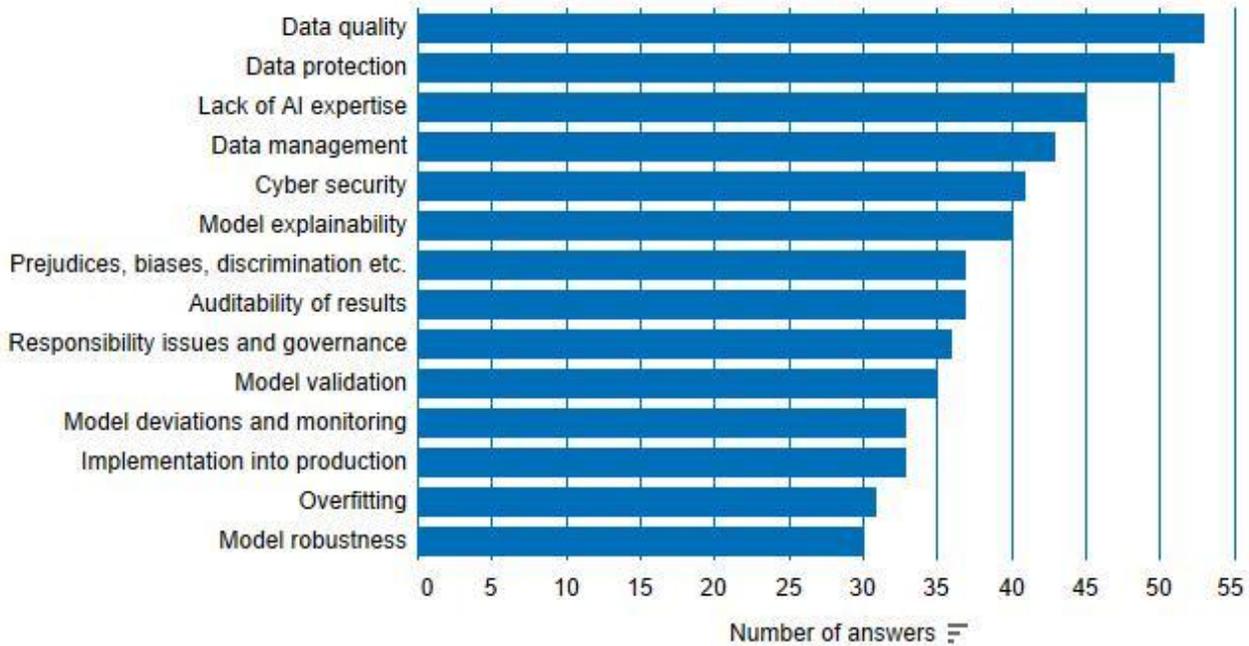
Source: FIN-FSA

Chart 12: Benefits sought by using AI (chart on left) and the extent to which they have been achieved (chart on right), all respondents

Other benefits cited in the responses included focusing human work on more valuable, strategic, and inspiring tasks (employee experience). Additionally, the effective utilisation of data should enable better decision-making and personalised customer experience.

## 6.3 Identified risks

The sector has identified AI-related risks inquired in the survey.. Data quality and data protection issues emerged as the main risks.



Source: FIN-FSA

Chart 13: Identified risks

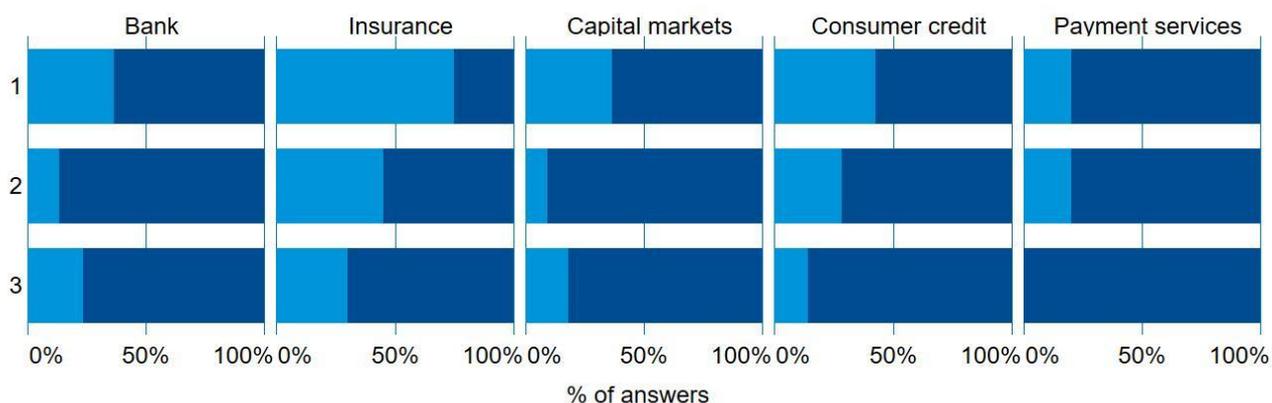
Other risks arising in the responses comprise:

- Risks related to third-party management and inadequate agreements.
- Copyright and IPR risks.
- Emissions and environmental risks related to the production of AI services and infrastructures.

## 6.4 Management of non-discrimination

The purpose of non-discrimination legislation is to ensure the equal treatment of individuals and fair access to opportunities provided by society. This means that persons or groups of people in comparable circumstances should not be treated less favourably merely due to characteristics, such as gender, race, ethnicity, religion or belief, disability, age or sexual orientation.

A key part of the AI Act is to ensure non-discrimination in AI. The survey included three questions about ensuring non-discrimination.



- 1 Do you utilise techniques or procedures to ensure anti-discrimination?
- 2 Do you monitor and regularly assess non-discrimination in AI use cases?
- 3 Have you identified challenges in ensuring non-discrimination in AI use cases?

■ Yes ■ No

Source: FIN-FSA

Chart 14: Ensuring non-discrimination by sector

Based on the responses, the insurance sector utilises AI solutions most widely and has also paid more attention than the other sectors to non-discrimination and ensuring it.

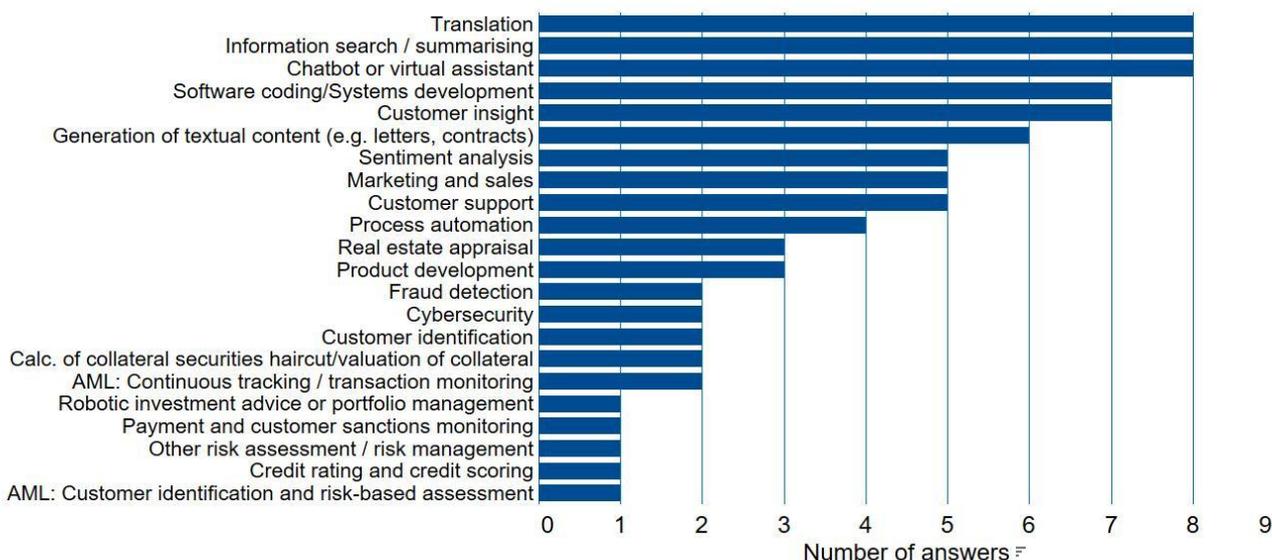
Based on the responses, all sectors either already utilise AI systems classified as high-risk AI systems in the AI Act or plan to use them in the near future. This should increase the need to systematically ensure non-discrimination and identify non-discrimination risks in all subsectors of the financial sector.

Challenges identified in ensuring non-discrimination include detecting biases, organising continuous monitoring and ensuring fair decision-making. One respondent stated the following: “Assessing non-discrimination requires the processing of personal data, while at the same time, we should strive to minimise the processing of personal data.”

Current methods to ensure non-discrimination in the financial sector include AI user guidelines, ethical standards, non-discriminatory data selection for model training, transparent decision-making in AI models, and quality control.

## 6.5 Banking sector

In the banking sector, 10 Finnish banks responded to the survey. All of them reported either already using or intending to start using AI solutions within the next two years.

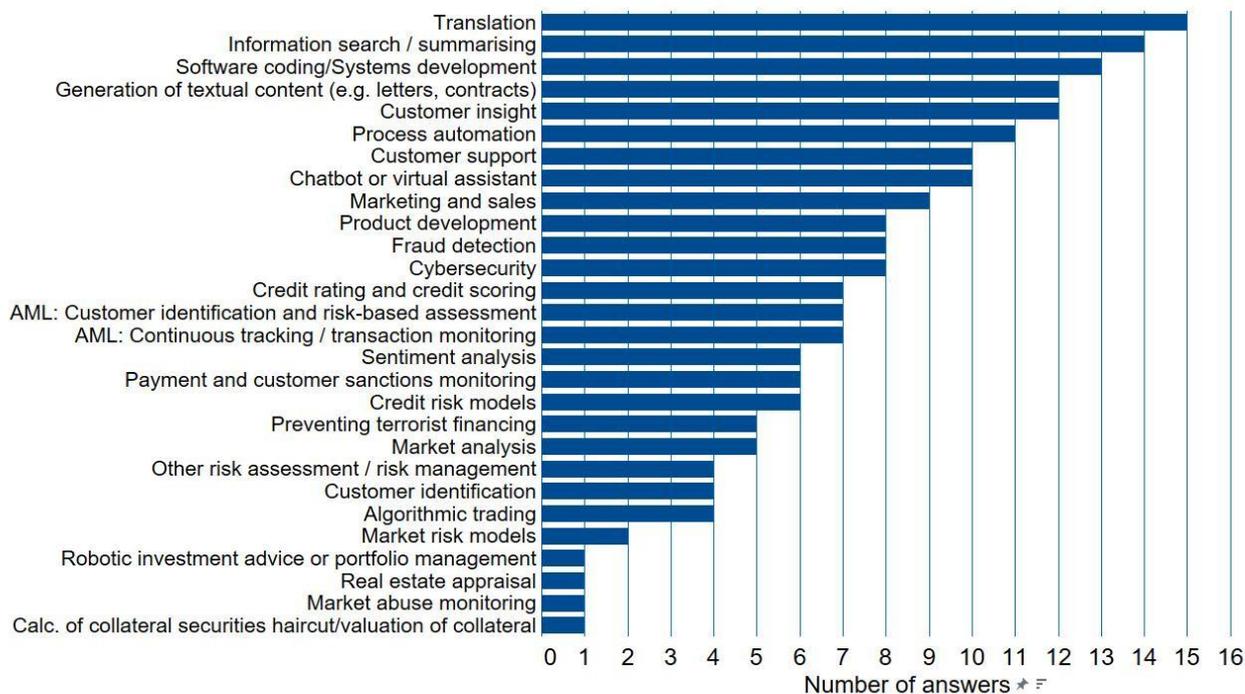


Source: FIN-FSA

Chart 15: AI use cases, Finnish banks

### 6.5.1 Banks' branches

20 branches of foreign banks operating in Finland responded to the survey. All of them reported either already using AI solutions or intending to deploy them within the next two years.



Source: FIN-FSA

Chart 16: AI use cases, foreign banks' Finnish branches

## 6.6 Insurance sector

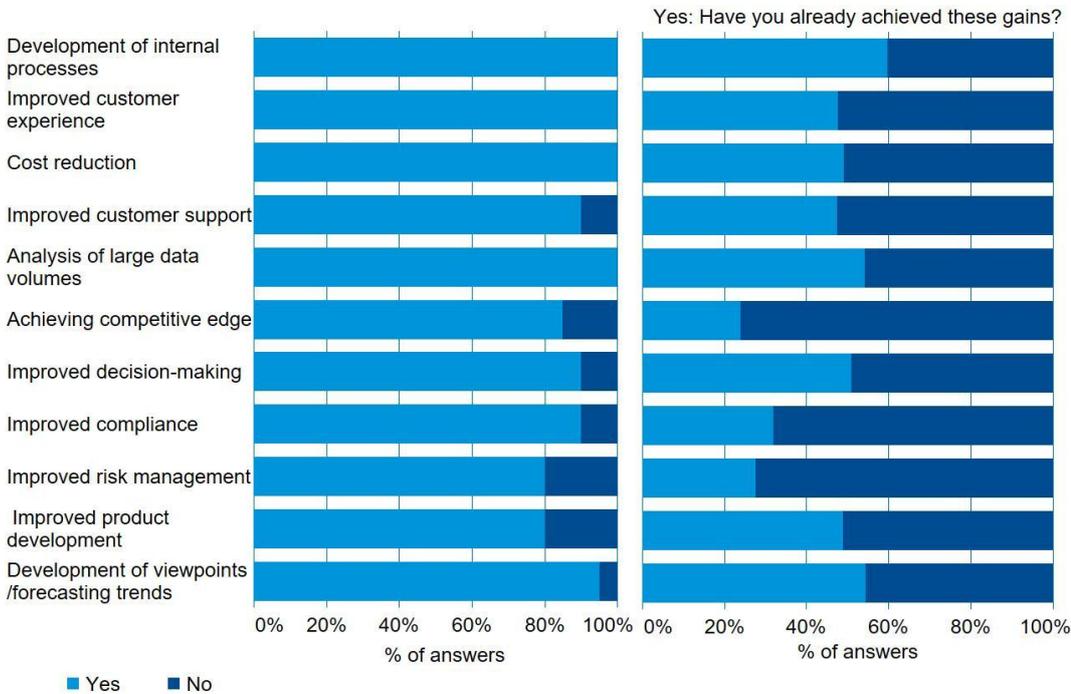
A total of 22 insurance institutions responded to the survey. 20 of them reported either already using or intending to start using AI solutions within the next two years.

In the insurance sector, AI is being used and its benefits sought widely. Risks have also been identified.



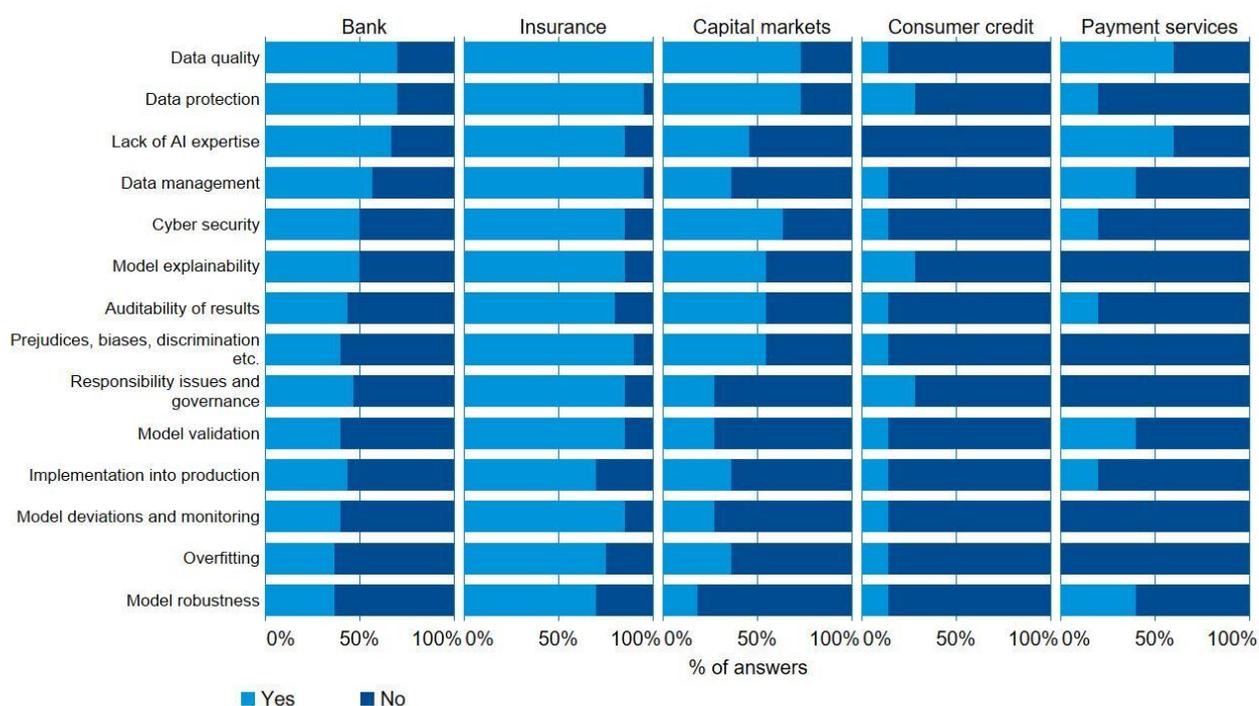
Source: FIN-FSA

Chart 17: AI use cases, insurance institutions



Source: FIN-FSA

Chart 18: Benefits sought from the use of AI, insurance institutions. The insurance sector seeks benefits from the use of AI on a wide front. For the time being, benefits achieved have been modest, largely in line with other sectors.

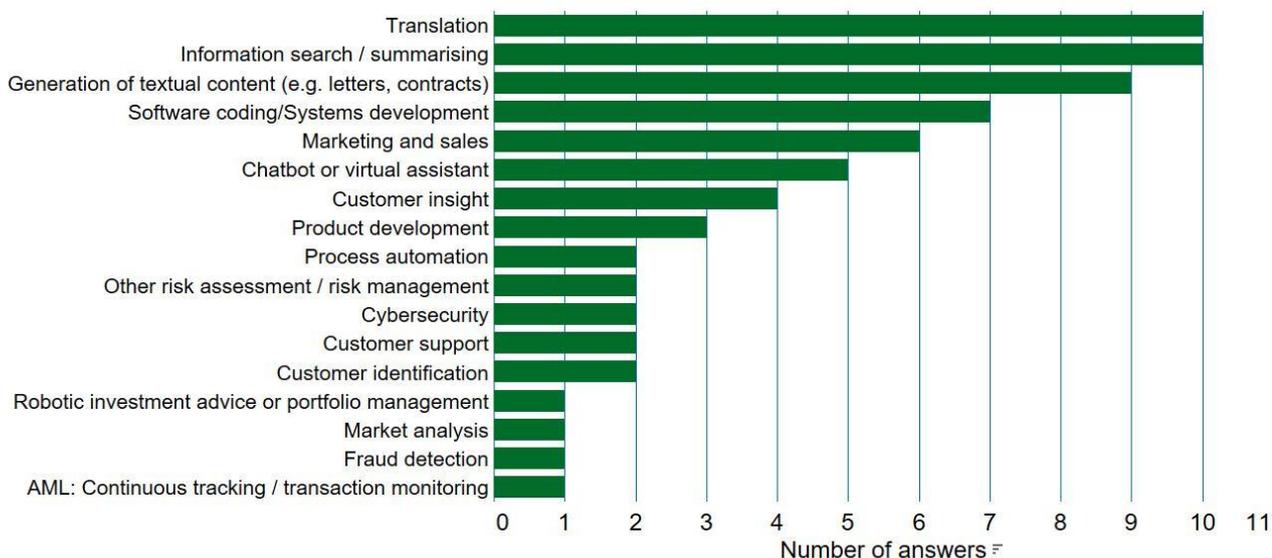


Source: FIN-FSA

Chart 19: The insurance sector identifies risks more extensively than other sectors.

## 6.7 Capital market

11 companies operating in the capital market responded to the survey. All of them reported either already using or intending to start using AI solutions within the next two years.

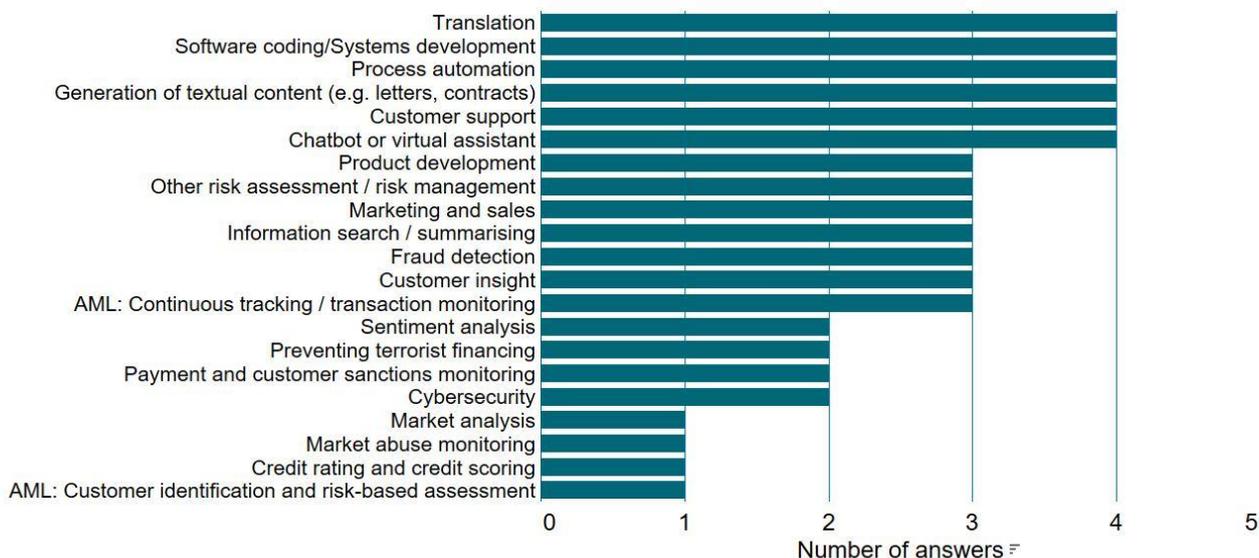


Source: FIN-FSA

Chart 20: AI use cases, companies operating in the capital markets

## 6.8 Payment service providers

Seven PSPs responded to the survey. Five of them reported either already using or intending to start using AI solutions within the next two years.

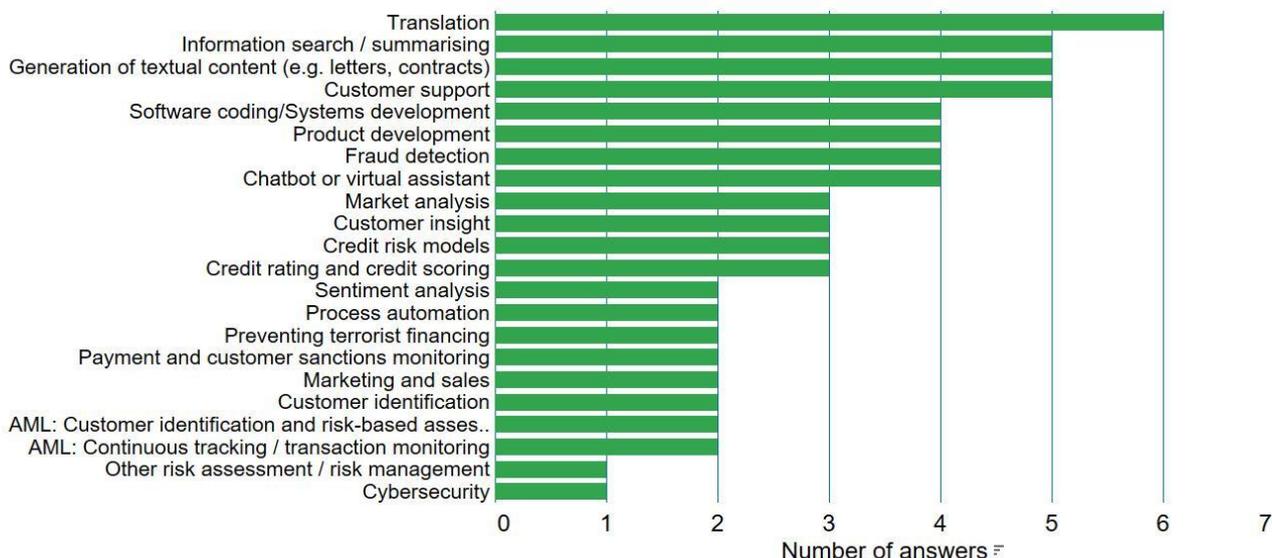


Source: FIN-FSA

Chart 21: AI use cases, PSPs

## 6.9 Consumer lenders

A total of 13 consumer lenders responded to the survey. Seven of them reported either already using or intending to start using AI solutions within the next two years.



Source: FIN-FSA

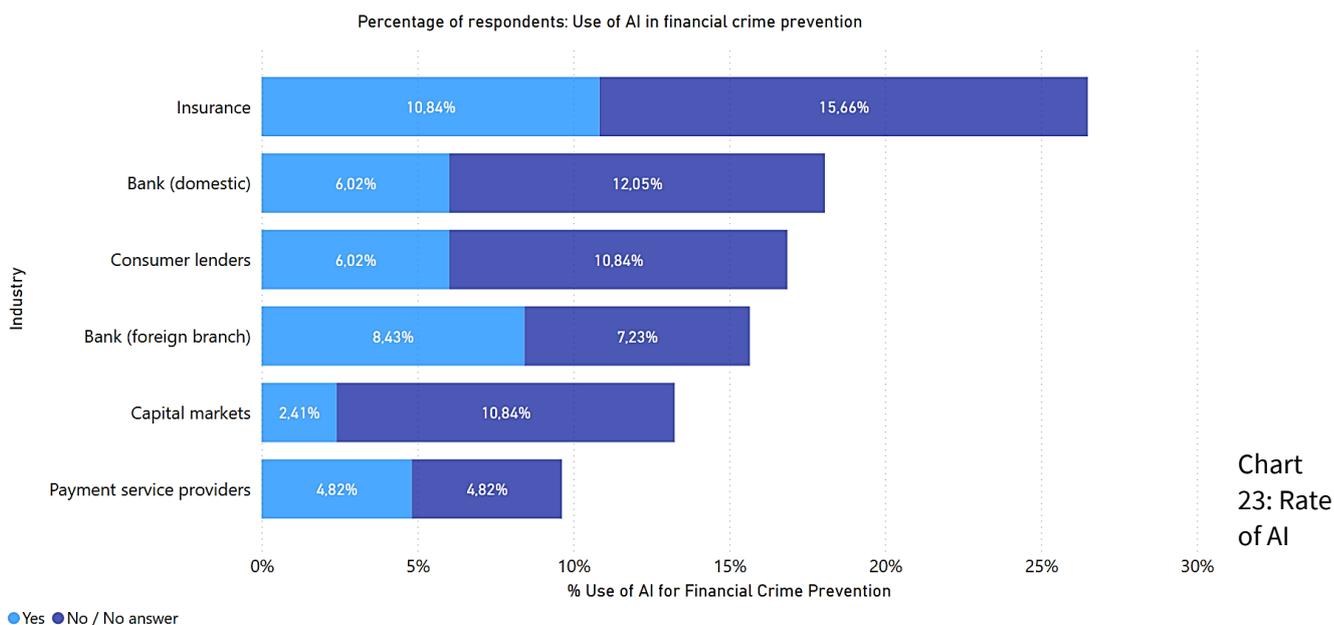
Chart 22: AI use cases, consumer lenders

## 7 Utilisation of AI in the financial crime prevention

The prevention of financial crime covers a broad spectrum of areas, generally including anti-money laundering and counter-terrorist financing, compliance with international sanctions regulations, and the detection and prevention of fraud. The management of these areas constitutes a key part of obliged entities' risk

management methods and is therefore a material part of thematic reviews prepared by the FIN-FSA.

In the survey, approximately 39% of the respondents reported utilising AI based solutions in some area of financial crime prevention. When the responses are reviewed by the size of organisation, AI is found being used by 11% of large, 17% of medium-sized and 11% of small obliged entities. This suggests that the utilisation of AI is the most prevalent among medium-sized entities.



utilisation across various segments of financial crime prevention

In a sectoral review, AI-based methods are utilised most frequently for financial crime prevention in the banking sector, where the rate of utilisation is approximately 14%, including both domestic banks and foreign banks' branches. The insurance sector has the second-highest rate, approximately 11% of the responding companies. In contrast, the utilisation of AI in the capital market sector is low, at just 2%.

As regards financial crime prevention, AI is used particularly for fraud prevention, where the overall utilisation is relatively moderate. This may be explained by the fact that fraud prevention is directly related to the obliged entities' interests and the protection of client assets. In a sectoral review, the banking sector utilises AI the most extensively in different areas: utilisation in customer due diligence and transaction monitoring is fairly common, and somewhat more prevalent in fraud prevention. As regards banks, the utilisation of AI in financial crime prevention is slightly more common among foreign banks' branches than in domestic banks, although domestic banks on average had reserved higher budgets for AI. Among payment service providers, the utilisation of AI is particularly common in transaction monitoring and fraud prevention. In contrast, AI adoption in the capital markets industry is more limited and primarily focused on customer identification, with some use in transaction monitoring and fraud prevention.

Anti-money laundering and counter-terrorist financing as an area of financial crime prevention is commonly considered to include customer identification and the verification of identity, customer due diligence and risk-based assessment, transaction monitoring of the customer relationship and sanctions screening for payments and customers. According to the survey, AI-based methods are used for customer identification by 13% of respondents, for customer due diligence and risk-based assessment by 13% of respondents, for transaction monitoring by 24% and for sanctions screening by 16%. One reason for the lower utilisation of AI in anti-money laundering (compared to fraud prevention) may be that the strict regulations on money laundering and terrorist financing lead obliged entities to exercise caution by relying rather on rule-based models, which are easier to explain.

As regards respondents using AI-based methods in any area of financial crime prevention, 94% were found to use rule-based systems. In addition, 81% of them use methods based on generative models, 69% robotics and automation and 63% machine learning. However, the survey does not allow one to determine conclusively the extent to which these technologies are concerned with the prevention of financial crime because the exact area of application of each technology was not inquired in the survey.

## 8 The AI Act

### 8.1 General

The survey examined the use of high-risk AI systems under the AI Act in the financial sector. The following questions were made with respect to the use of AI at present or its anticipated use in the future.

Do you use or plan to use AI in the future in the following areas of application:

- Evaluation of natural persons regarding their eligibility for essential public assistance benefits and services? (AI Act, Article 6(2), Annex III, 5(a))
- Credit scoring or evaluation of the creditworthiness of natural persons? (AI Act, Article 6(2), Annex III, 5(b))
- Risk assessment and pricing in relation to natural persons for health and life insurance purposes? (AI Act, Article 6(2), Annex III, 5(c))

### 8.2 Answers concerning public assistance benefits and services

The banking and insurance sector as well as consumer lenders include entities who responded that they have already deployed AI systems (3) or plan to do so (3) for assessments concerning the eligibility of natural persons for essential public assistance benefits and services (total 6).

### 8.3 Answers concerning credit scoring and creditworthiness

The banking and consumer lenders sector include entities who responded that they are either using (7 entities) or intending to use (11) AI systems for credit scoring or evaluation of the creditworthiness of natural persons (total 18).

### 8.4 Answers concerning risk assessment and pricing in health and life insurance cases

All sectors except for payment service providers included entities who responded that they are either using (3 entities) or intending to use (7) AI systems for risk assessment and pricing in health and life insurance cases (total 10).

## 8.5 Other answers related to high-risk AI systems

Many companies also reported that the AI Act also deems as high-risk also AI systems intended for the recruitment or selection of natural persons and recognised that this concerns themselves (AI Act, 6 Article, Annex III 4(a)). This provision in the Regulation will not fall within the scope of FIN-FSA supervision, but it is good that the companies participating in the survey have identified a relevant matter in the Regulation.

## 8.6 Preparations for the entry into force of the EU AI Act

Based on the responses, ways to prepare for the entry into force of the Regulation and meet regulatory requirements include the establishment of an AI governance model or policy, rules for the use of AI and the definition of prohibited practices. Preparation of guidance and AI user training are common. Some respondents have specified their own risk assessment model for AI.

Some of the responding companies have no need to prepare for the supervision of high-risk AI systems since they neither have deployed such systems nor plan to do so.

## 8.7 Finding concerning users of high-risk AI systems

When cross-checking respondents that had already deployed high-risk AI systems, it was found that all companies in the "small" and "large" size categories had implemented ethical AI standards, AI user rules and an AI strategy. In the "medium-sized" category, two consumer lenders lacked all of the abovementioned practices.

## Annex 1: Artificial intelligence technology terminology

### Machine learning:

Machine learning is an area of artificial intelligence where a computer is taught to learn from a dataset without being specifically programmed to execute a given task. By machine learning, a computer can make forecasts or decisions based on data.

### Deep learning:

Deep learning is an area of machine learning using artificial neural networks with several layers – hence, the name “deep”. It is particularly effective for large and complex volumes of data, such as images, sound and text.

### Neural networks:

Neural networks are machine-learning models drawing inspiration from the functioning of the human brain – in particular, how neurons transmit signals to each other. Although they do not function similarly to biological brains, the basic idea is the same: simple units combine to form complex systems.

### Computer vision:

Computer vision is an area of artificial intelligence and machine learning aiming to make a computer “see” and understand images or videos like a human being. In practice, it means that the computer analyses visual data (images, videos, camera feed) and makes interpretations based on it.

### Generative and general-purpose AI models:

Generative models are AI models creating new content based on data. They do not merely analyse or classify – they generate, or produce, text, images, sound, music, code and even 3D models.

### Rule-based systems and algorithms:

A rule-based system is a program that operates on the “if X, do Y” principle. The programmer writes exact rules to be complied with by the machine in decision-making. Used when the rules can be defined precisely and a transparent solution is sought.

### Robotics and automation:

Robotics and automation in the context of AI refer to how AI is used to make robots and automatic systems intelligent – i.e. capable of making decisions, adjusting and operating independently in their environment.