

FSC PLANS TO PROMOTE THE USE OF ARTIFICIAL INTELLIGENCE IN FINANCIAL SERVICES

Vice Chairman Kim So-young presided over a meeting with relevant industry officials and experts on August 4 and held discussions on ways to promote the use of artificial intelligence (AI) in financial sectors and ensure public trust in financial services based on AI. Some of the key measures of the plan include the following.

- a) Building an AI data library that allows pseudonymized data to be reused
- b) Issuing detailed guidelines for AI development and usage in five specific areas
- c) Granting an exemption of the network separation rule on the development and test servers using pseudonymized data
- d) Building an AI testbed to support data and computing resources for testing
- e) Establishing an AI-based credit evaluation model and a process for verifying the security of AI-based services.

SUMMARY OF VICE CHAIRMAN'S REMARKS

In his opening remarks, Vice Chairman Kim emphasized the importance of making advancement in AI technology to make effective use of the exponentially increasing availability in big data amid hyperconnected networks and the hyperconvergence and big blur phenomena. To help realize success in digital financial innovation, Vice Chairman Kim said that financial regulatory reforms need to take place to ensure that financial sectors can make use of big data and AI technology effectively.

In this regard, digital financial innovation based on the promotion of the use of big data and AI will help to (a) boost consumer convenience by allowing more customized financial services to be introduced, (b) strengthen the function of financial intermediation services, (c) improve financial institutions' risk management functions through enhancement of analysis and assessment and (d) increase the access to financial services and enhance financial inclusion for vulnerable groups such as individuals with thin credit history.

To this end, the FSC will make active efforts to remove barriers that stand in the way of making use of AI in financial services. First, by building a financial AI data library, authorities will ensure an expanded availability of big data which is necessary for AI development and learning. Second, by issuing detailed guidelines for AI development and usage in five specific areas, authorities will work to lay grounds and establish rules in support for active use of AI in financial sectors. Third, by building an AI testbed, authorities will set up a process for verifying the security of AI-based services to ensure public trust in them.

Lastly, Vice Chairman Kim stated that even though numerous setbacks are unavoidable in the process, it is necessary to face the challenge and overcome difficulties for the development of the financial industry.

KEY MEASURES

The FSC announced the measures for promoting the use of AI in financial services and ensuring accountability in AI-based financial services based on the comments gathered from relevant institutions and market experts. The measures reflect the three key principles¹ for financial regulatory reform initiatives put forward at the 1st financial regulatory reform committee meeting held on July 19.² Promoting the use of AI based on big data is seen as the most useful and necessary in the financial industry with the financial MyData³ and data convergence⁴ services already in place and being used actively. To help foster global leading financial companies and to grow into a major market of the financial industry, it is necessary to make support available to ensure that the AI usage in financial services takes root and expands in a steady and safe way. To help achieve this, the FSC will pursue the following measures.

I. SUPPORT EXPANSION IN THE AVAILABILITY OF BIG DATA

- a) Build a financial AI data library: Currently, pseudonymized data needs to be discarded after each usage which makes it difficult to build and operate a large data set of pseudonymized data.
 - ⇒ Through the financial regulatory sandbox program, building a financial AI data library is possible which will allow pseudonymized data to be reused after data convergence.

- b) Promote collaboration to build an AI big data usable by all financial sectors: Large sets of unstructured and specialized data are needed for AI development but it has been difficult due to significant cost related to obtaining data
 - ⇒ Promoting collaboration and cooperation centered on financial industry associations and financial data infrastructure institutions can help build an AI big data accessible and usable by all financial sectors.

- c) Make additional designation of “data specializing institution”: Promoting the development of AI-based services requires establishing an ecosystem and infrastructure that will help facilitate data convergence activities.
 - ⇒ Authorities will make additional designation of “data specializing institution” that are equipped with credibility, expertise and openness and that can make active

¹ (a) Regardless of online or offline, support financial institutions to grow into global leaders, (b) establish an ecosystem where both financial institutions and big tech companies can actively seek digital innovation and (c) allow domestic financial companies to do what overseas financial companies can do

² Please click [here](#) to see the press release dated July 19, 2022.

³ MyData service was first launched in the financial industry in August 2020 through a revision to the Credit Information Use and Protection Act (as of end-July 2021, 59 MyData service providers have been approved).

⁴ Data convergence completed (end-2021) : 112 cases (financial sector), 14 cases (non-financial sector)

contribution to the promotion of data convergence activities

II. ESTABLISH GROUNDS TO PROMOTE AI USAGE

- a) Introduce detailed guidelines for AI development and usage in five specific areas: Although there is an AI guideline in the financial industry introduced in July 2021, industry officials have called for the need for more functional and service-specific guidelines that they can refer to when actually launching AI-based services.
- ⇒ The Korea Federation of Banks introduced detailed guidelines for AI development and usage in the five specific areas including credit assessment and evaluation services, robo-advisor services, chatbot services, customized financial product referral services and fraud detection system (FDS) services.
- b) Lay grounds to introduce and promote explainable AI (XAI): There are vibrant discussions currently taking place on explainable AI (XAI) at home and abroad for the purpose of ensuring consumer protections from AI's decision making.
- ⇒ Authorities will prepare an information guideline containing the definition, requirements and best practice scenarios on explainable AI (XAI) in financial sectors by commissioning a research on XAI.
- c) Improve rules on network separation and the use of cloud computing: A seamless development and usage of AI services requires making use of external APIs and cloud computing services.
- ⇒ Through the financial regulatory sandbox program, authorities will seek an exemption of the physical network separation rule on the development and test servers that make use of pseudonymized data.

III. ENSURE ACCOUNTABILITY IN AI USAGE

- a) Build a testbed for AI in financial services: To verify accuracy and credibility of AI-based financial services, it is important to have a verification process using diverse data sources.
- ⇒ Authorities will build a verification data set and a testbed environment enabling various types of AI-based financial services to be tested through financial data infrastructure institutions.⁵
- b) Set up a process for verifying AI-based credit evaluation model: There are growing attempts at developing and operating credit evaluation models using various types of non-financial data from financial companies, fintechs and platform service providers and using AI methodologies.
- ⇒ Through the personal credit evaluation system verification committee, authorities will establish and operate an AI-based credit evaluation verification system.
- c) Prepare a process for verifying the security of AI-based services: There exist various security risks in making use of AI such as personal information breach and algorithmic errors.

⁵ Credit assessment (Korea Credit Information Services), financial fraud prevention (Korea Financial Telecommunications & Clearings Institute), financial security (Financial Security Institute)

⇒ Authorities will set up and operate an AI security verification system through financial institutions' self-verification mechanisms and a third-party verification support provided by the Financial Security Institute.

d) Establish an AI-based oversight system to effectively supervise financial services: With the application of new technologies such as AI and big data in financial sectors leading to more automated financial services, the regulatory environment has become more complex and there are growing needs for introducing SupTech (supervisory technology) using AI and big data analytics.

⇒ Authorities will work to make improvements to the system performance of the current AI-based financial regulatory system while continuing to make efforts for innovation in SupTech.

FURTHER PLAN AND SCHEDULE

The FSC will make efforts to promptly implement specific measures included in the announced plan and continue to pursue regulatory reforms in financial sectors by paying close attention to the voices on the ground and maintaining close communication with relevant stakeholders.

Key measure		Schedule	Detail	Pursued by
Support expansion in big data availability	Build a financial AI data library	Q3 2022	Set up a consortium	KCIS
		Q2 2023	Build a library	
	Promote collaboration to build an AI big data usable by all financial sectors	Q3 2022	Set up taskforce	KFB, KFTC, FSI
		Q2 2023	Build a data set	
Make additional designation of "data specializing institution"	Q4 2022	Make additional designation	FSC, FSS	
Establish grounds to promote AI usage	Introduce detailed guidelines on AI development and usage	Aug 2022	Introduce guideline	FSC, FSS, etc.
	Lay grounds to introduce and promote explainable AI (XAI)	Q3 2022	Commission a study	FSC, FSS, etc.
		Q1 2023	Prepare guideline	
	Improve rules on network separation and the use of cloud computing	Aug 2022	Revise regulation of the supervision of electronic financial business	FSC, FSS
		Oct 2022	Revise guideline	
		Dec 2022	Inspect internal control	
Jan 2023		Enforce revised rules		
Ensure accountability in AI usage	Build a testbed for AI-based financial services	Q4 2022	Prepare plans	KCIS, KFTC, FSI
		Q4 2023	Build a testbed	
	Set up a process for verifying AI-based credit evaluation model	Q3 2022	Prepare verification system	KCIS
		Q1 2023	Enforce verification system	
	Establish a process for verifying the security of AI-based services	Q4 2022	Prepare verification system	FSI
		Q2 2023	Enforce verification system	
	Establish an effective AI-based financial supervision system	Ongoing	-	FSS

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