Dentons Lee Insights

December 2023

Grow | Protect | Operate | **Finance**

FinChatGPT and the Financial Services Industry: Commercial Considerations and Legal Issues for Banks, Securities Firms, Asset Managers and Insurers

Given the widespread use of ChatGPT around the world, this article is a year-end review of ChatGPT and its introduction in financial services in South Korea. It is also noted that while this article focuses on the financial services industry – much of the contents also is relevant to other industries from both the commercial and legal perspectives.

Overview of ChatGPT

Launched in 2022, ChatGPT, developed by U.S. tech company OpenAI, is an artificial intelligence-driven Natural Language Processing platform ("AI" and "NLP") that has captured emerging global interest across virtually all industries and segments of society. Developed on vast internet data with transformer architecture, it is a sophisticated language model excelling in tasks such as language restatement, text summarization, and content generation with diverse topics and concepts. By seamlessly integrating into conversational interfaces like chatbots and voice assistants which offers users a natural and human-like interaction experience, ChatGPT proves to be a powerful tool for research, problem-solving, and decision-making processes. ChatGPT has made impressive strides in the field of AI and holds the promise to revolutionize numerous industries, including finance.

FinChatGPT is "Disruptive"

The potential applications of ChatGPT in the financial services industry, research and development and strategic teams have initiated new programs to incorporate ChatGPT into their operations and workflow for added efficiencies, productivity and creativity which is now commonly referred to as "FinChatGPT". Banking institutions, securities companies, asset management firms and insurers will take the lead in the financial services industry to offer a wide array of innovative products and services to individuals and businesses. In addition, financial services companies will play a pivotal role in facilitating economic growth, innovation, wealth management, and safeguarding against risks and uncertainties through FinChatGPT. It is expected that the speed of introduction of FinChatGPT will accelerate through trial and error with the vision of smooth and seamless implementation in the financial services industry.

Kim Joo-Hyun, Chairman of the Financial Services Commission (FSC) has emphasized the importance of AI models to the financial industry at the "Seminar on AI Response Strategies in the Financial Industry" held on 17 May 2023, that "AI is a core technology that will change the landscape of the financial industry, and it is the driving force for the continuous growth and development of the financial data ecosystem built through data combination."

Various countries have reacted quickly with the implementation of new laws, regulations and guidelines relating to the use of AI which also include ChatGPT. The European Union has taken a risk-based approach in its *Artificial Intelligence Act*. China has also forged ahead with the implementation of a collection of AI-based regulations including the *Administrative Provisions on Algorithm*

Recommendation for Internet Information Services, the *Provisions on Management of Deep Synthesis in Internet Information Service*, the *Provisional Provisions on Management of Generative Artificial Intelligence Services*, and the *Trial Measures for Ethical Review of Science and Technology Activities*. On a federal basis, Canada has published a *Code of Conduct on the Responsible Development and Management of Advanced Generative AI Systems* along with a legislative bill proposed as the *Artificial Intelligence and Data Act* (AIDA) to form a part of the *Digital Charter Implementation Act, 2022*. The U.S. does not yet have any federal legislation while certain statutes have been adopted on a state-by-state basis addressing AI and privacy-related rules.

FinChatGPT in South Korea

Banking

Banking institutions provide various financial services and products to individuals and businesses where the integration of ChatGPT may offer numerous advantages that enhance customer experiences and operational efficiency. By training the language model with relevant banking data, it can act as an efficient multilingual virtual assistant providing real-time responses to clients' inquiries in their preferred languages. This fosters stronger customer relationships and improves overall banking services. ChatGPT's data analysis capabilities if being fine-tuned with relevant customer data and personalized algorithms will also allow for personalized financial advice or customized to specific business models, recommended or hedge fund or investment for commercial clients, thus empowering customers to make informed decisions based on their unique financial situations. It can also assist in credit risk assessment with pre-defined credit risk models during loan approval procedures, ensuring real-time regulatory compliance updates and aiding in better decision-making.

Securities Firms

Securities firms involve in the purchase, sale and trading of stocks, bonds and other investment products on behalf of clients, hence stay updated with market trends helps them making well-informed choices. By gathering and integrating relevant financial data to custom train ChatGPT, it can analyze and process vast amounts of financial data, news articles, reports and other textual data to provide valuable and customizable insights when conducting investment research and identifying potential investment opportunities, assessing risk factors, and predicting market trends.

In South Korea, Mirae Asset Securities has introduced the industry's first service using ChatGPT by suggesting attractive stocks of the day that to the customers and provides a summary of the combined market data and recent important news. This is an effort following the use of ChatGPT by the company for real-time overseas news translation and summary service starting from February 2023. Korea Investment & Securities also launched an AI-based research service called "AIR – AI Research" which has discovered more than 500 stocks that have not been lighted on by existing research centers; while KB Securities launched "KB Robo News" using AI to analyze and provide disclosure information of U.S. listed companies.

Insurers

In the insurance industry that primarily revolves around anticipating and minimizing risks, AI tools like ChatGPT enhance risk management solutions. Along with common benefits such as cost savings, minimizing human errors and improving customer services, ChatGPT revolutionizes fraud detection and prevention. It analyzes claims data, customer interactions, and historical patterns to identify suspicious activities and prevent potential fraudulent claims, protecting customers' financial assets and preventing losses from fraud.

ChatGPT also aids underwriters in risk assessment and policy eligibility determination based on company-specific data, thereby automating underwriting processes and fostering innovation. ChatGPT can also automates Know Your Customer (KYC) and Anti-Money Laundering (AML) processes by efficiently analyzing vast customer data to identify potential compliance concerns. It also verifies customer identities, cross-checks against authorization lists, and flags suspicious transactions, thus reducing crimes and improving compliance checks.

Asset Management Companies

As a financial institution that manages and invests to maximize pool funds returns from investors in various assets, such as stocks, bonds, and real estate, AMC may consider ChatGPT as a new opportunity in market research and analysis. Its designed algorithms continuously monitor financial markets with real-time insights on market movements and events that may impact investment decisions. Integrating real-time insights generated by ChatGPT into portfolio management systems enables seamless data exchange and informed decision-making.

The potential of ChatGPT to analyze historical fund performance data also allows AMCs to evaluate the effectiveness of their investment strategies and make data-

driven improvements. The language model contributes to articulating the company's investment philosophy and approach, ensuring consistent messaging to clients and stakeholders.

Following the success of ChatGPT, Samsung Asset Management has also launched its first fund in South Korea to focus on AI platforms, AI implementation technology companies and generative AI service companies.

Legal Implications and related Issues for ChatGPT

Whilst ChatGPT can offer businesses increased efficiency and cost savings, ChatGPT is not a one-size-fits-all solution and challenges related to real understanding, inherited bias, and knowledge limitations do exist. The implementation of both public version and proprietary version of ChatGPT within organizations and by their staffs – especially if the company offers its ChatGPT-utilized service directly to South Korean users – gives rise to various legal concerns under South Korean laws that need careful consideration and management.

Intellectual Property

Developing AI models like ChatGPT demands vast amounts of text data, often collected automatically from websites. If ChatGPT is proven to extensively copy significant portions of other companies' databases through web scraping or crawling during its data collection process, such actions could potentially lead to legal liabilities under Korean law, including the Copyright Act and the Unfair Competition Prevention Act (UCPA).

South Korean courts have already dealt with dispute cases involving web scraping or crawling violations related to database rights infringement, reproduction and transmission rights infringement, or unauthorized use of others' achievements under Article 2(1)(m) of the UCPA. Representative cases are the dispute on recruiting information – *Job Korea v. Saramin HR* where Saramin HR as the defendant was found to have engaged in repeated and systematic copying and display of the crawled information for its own commercial purposes constituted infringement of JobKorea's database rights and therefore constituted a violation under the *Copyright Act* (infringement of the database rights); or the dispute on hotel accommodation information – *Yanolja v. GC Company* where it was found that GC Company operational strategy of copying Yanolja's database through an internally developed crawling program constituted unauthorized use of other's achievements prohibited under the UCPA.

Additionally, there may be an issue as to whether ChatGPT-generated answers can be considered copyrighted works eligible for protection under the *Copyright Act* considering AI does not fall within the meaning of a "human author", which is essential because South Korea only acknowledges creations that originate from the emotions or thoughts of "human beings" as artistic works. It is also noted that ChatGPT-generated answers might resemble literary works protected by copyright. Utilizing ChatGPT generated content in such scenario for purposes like reproduction, distribution, or commercially use could potentially violate the *Copyright Act*, thus requiring careful assessment and valuation prior to any relevant actions.

Data Protection and Privacy

If a ChatGPT chatbot generates false information that leads to something resembling defamation, particularly if it communicates untrue damaging allegations about someone to a third party, the providers could potentially face defamation lawsuits under Article 307 of South Korea's *Criminal Act*. Whilst arguing liability could be more complex in cases involving ChatGPT-style chatbots due to the automated nature of the responses generated through statistical computational processes which are not authored or reviewed by specific individuals, developers and deployers of ChatGPT-like bots and similar generative AI technologies may not absolve themselves of liability simply by explaining technical limitations and relying on disclaimers. To mitigate risks and liability, AI providers and utilizers should take reasonable measures and establish effective risk management frameworks.

Accuracy of ChatBot and Mis-Selling

Comprehending the intricacies of FinChatGPT is essential when implementing it in real-world application, one of which is its occasional production of plausible-sounding responses that are factually incorrect or nonsensical. The potential risk of ChatGPT releasing inaccurate data and re-influencing itself could lead to the dissemination of disinformation and bullying campaigns. Financial organizations using ChatGPT for commercial purposes may also face mis-selling issues if incorrect product data is fed to the model and thereby marketing to the customers. Financial companies scraping public data and publishing false information through its chatbot could be investigated for engaging in practices harming consumers, leading to possible violation under the *Financial Consumer Protection Act* (FCPA).

In professional services setting, there is concern about potential financial or reputational losses resulting from automated advice and mis-selling to clients based on ChatGPT output. The handling of damages and whether

professional indemnity insurance covers such risks have become recent concerns of financial institutes. To mitigate these risks, it is advisable that the output of ChatGPT-like models be reviewed by individuals who comprehend the model's functioning and possess expertise in the relevant field. They can assess the accuracy and quality of the output before using it in any decision-making process.

Jail-Breaking and Hacking

Security researchers, technologists, and computer scientists are actively working on and have successfully initiated several jailbreaks and prompt injection attacks against ChatGPT and other generative AI systems. This attempt demonstrates that the jailbroken chatbots can bypass rules against generating offensive content or discussing illegal activities or can be injected with malicious data or instructions. This can lead the AI system to spout harmful statements, create phishing emails, and promoting violence, potentially resulting in serious criminal activities and cyberattacks. Considering it can be instructed to ignore all previous instructions, send unsolicited emails to all customer contacts, ask for customers' personal information, etc., the risks of these attacks are even greater when the chatbots have access to critical financial data, which could lead to personal information infringement, loss of consumer assets, cybersecurity breaches, and ethical concerns under South Korean laws such as PIPA, UCPA, and FCPA. Financial instability also emerges if multiple financial companies simultaneously use a specific AI model.

Regulation Improvement in South Korea and Future Development of FinChatGPT

Amidst the recent rise and notoriety of ChatGPT, discussions on its introduction and utilization have gained significant momentum among various entities, including government bodies, public organizations, businesses, and academic institutions in South Korea. Active efforts to establish a legal framework allowing free utilization of ChatGPT while safeguarding the rights of related stakeholders' rights are also underway.

Since 2021, the FSC has been actively improving regulations related to data in the financial sector and established a testbed to enhance trust to promote the use of FinAI technology. On 17 May 2023, FSC introduced a Verification System for AI-driven Credit Scoring Model and a Security Guideline for Use of AI in Financial Sector[1] to bolster public trust in AI-based financial services, promising to continue to promote innovation in financial industry. This is a follow-up to

the "*Measures to Activate the Use of Artificial Intelligence in the Financial Sector and Secure Trust*" announced by the FSC in August 2022 to promote AI usage and ensure credibility in the financial sector.

The Personal Credit Rating System Verification Committee plans to use the Verification System for AI-driven Credit Scoring Model to examine credit bureaus that are using AI credit scoring model on whether they are properly managing credit data in line with peculiar characteristics of AI, and whether these companies have made a reasonable selection for algorithms and variables used in their credit scoring models, etc. Meanwhile, the Security Guideline for Use of AI in Financial Sector suggest security matters to be considered when developing AI models for each development stage, and additionally provide a security checklist for AI chatbot services. The security checklist is expected to help field practitioners to examine security-related matters more conveniently in a simple checklist format.

The Science, ICT, Broadcasting and Communications Committee of the South Korea's National Assembly also took a notable step in this direction by passing the "Bill on Fostering AI Industry and Creating Foundations for Trust" (the "AI Framework Bill") on 14 February 2023 as the world's first bill on AI, garnering widespread attention. Only a final approval through a resolution from the plenary session of the National Assembly are underway before the bill is officially passed. Nevertheless, notable areas of uncertainty remain open in the AI Framework Bill, including how "high-risk" domains such as healthcare, medical devices, employment, loan review, and sensitive data categories like biometric data which closely linked to the financial sector remain to be defined and regulated.

Developing comprehensive laws and regulations in these areas and gaining further clarity on the courts' stance will require some time. As AI technologies, including ChatGPT, continue to advance, it is essential for financial industry stakeholders and users to understand potential legal issues and implications. Meanwhile, responsible use is crucial to maximize its potential and benefits. Keeping a close watch on legislative developments, trends, and court decisions in the coming years will be vital to navigate the evolving landscape effectively.

---

[1] The Security Guideline for Use of AI in Financial Sector can be found at the financial security regtech portal (regtech.fsec.or.kr)

This newsletter is not designed to provide legal or other advice and you should not take, or refrain from taking, action based on its content.

At Dentons, we always strive to constantly transform the way we deliver services to our clients. Dentons has announced the launching of a Dentons proprietary version of ChatGPT – "fleetAI", that will empower its lawyers to apply generative artificial intelligence on active client matters starting from August 2023 and in due course will also be made available to colleagues across the global firm.

The Finance Practice Group at Dentons Lee is highly regarded for our expertise and legal works. We aim to provide transparency, avoidance of conflicts while providing another option to clients in a concentrated legal marketplace with a keen understanding of the business, critical thinking, creative solutions, and highly competitive cost efficiencies.

Please reach out to us should you have any questions regarding this newsletter or seek legal/regulatory support in South Korea and abroad.

Key Contacts

John JungKyum Kim
Foreign Senior Attorney
D+82 2 2262 6400
john.jk.kim@dentons.com

Joo-Hyung Lee
Senior Managing Attorney
D+82 2 2262 6105
Senior Managing Attorney

Sang-Yeol Cha
Senior Attorney
D+82 2 2262 6186
sangyeol.cha@dentons.com

Dong-Hwan Kim
Senior Attorney
D+82 2 2262 6275
donghwan.kim@dentons.com

Hye-In Jin
Attorney
D+82 2 2262 6227
hyein.jin@dentons.com

Hee-Woo Kim
Attorney
D+82 2 2262 6456
heewoo.kim@dentons.com

Jacob H. Cho
Foreign Attorney
D+82 2 2262 6419
jacob.cho@dentons.com

Nguyen Hoang Tuan Linh
Foreign Legal Consultant
D+82 2 2262 6421
linh.ht.nguyen@dentons.com