Response of the Global Legal Entity Identifier Foundation (GLEIF) to the European Commission's Targeted Consultation on Artificial Intelligence in the Financial Sector

September 2024

The Global Legal Entity Identifier Foundation (GLEIF) is pleased to provide comments to the European Commission's targeted consultation on artificial intelligence in the financial sector.

First, GLEIF would like to respond to Q1. "*Are you using or planning to use AI systems?*"

Yes, GLEIF is already using AI systems.

GLEIF would like to respond to Q2. "*What are the positive things you encounter when using AI?"*

AI has proven highly beneficial by enhancing efficiency and quality, reducing costs, and improving data quality and integrity. Through automation, AI streamlines processes, leading to faster and more reliable outcomes.
Examples:

1. Extraction of structured data from unstructured texts and documents, e.g., contracts, annual reports.
2. Summary of lengthy texts extracting key information
3. Utilizing chatbots to assist internal and external stakeholders

GLEIF would like to respond to Q3. "*What are the negative things you encounter when using AI?"*

When using AI, GLEIF encounters data privacy concerns. Dependence on cloud providers and general-purpose AI model vendors also introduces risks related to control, security, and vendor lock-in. Additionally, the explainability of AI models is a persistent challenge.

GLEIF would like to respond to Q4. "*Will you be deploying AI for new or additional processes within your Organization?"*

Yes, GLEIF will be deploying generative AI based solutions across all departments.

GLEIF would like to respond to Q5. "*Are you developing or planning to develop in-house AI applications?"*

Yes, when feasible, GLEIF develops AI solutions in-house. However, developing generative AI-based solutions internally requires significant investment, making it less practical for us at this stage. In such cases, GLEIF explore external options to balance costs and capabilities.

Although the costs and size of large AI models have decreased significantly in recent months, only the Big Techs are in the position of developing such models, leaving SMEs limited to only fine-tuning these. This situation raises additional challenges, as there is no control over the data used for the training or over the topology and parameters used for the model.

GLEIF would like to respond to Q6. "*Which tools are you using to develop your AI applications? Examples: machine learning, neural networks, natural language processing, large language models, etc."*

GLEIF is utilizing a variety of tools to develop our AI applications, including machine learning, neural networks, natural language processing methods, large language models, and graph models.

GLEIF would like to respond to Q7. "*Please score the following benefits from most significant (10) to least significant (1):"*

- **Fraud detection**: AI algorithms can analyse large amounts of data to detect patterns and anomalies that may indicate fraudulent activity, helping to reduce financial losses for businesses and customers.10
- **Risk management**: AI can analyse and predict market trends, assess credit risks, and identify potential investment opportunities, helping financial institutions make more informed decisions and manage risks more effectively. 10
- **Automation of routine tasks**: AI can automate repetitive tasks such as data entry, transaction processing, and document verification, freeing up time for employees to focus on more complex and strategic activities. 10
- **Cost savings**: by automating processes and improving efficiency, AI can help financial institutions reduce operational costs. 8
- **Personalized financial advice**: AI can analyse customer data to provide personalized financial advice and recommendations, helping customers make better financial decisions and improve their financial well-being. N/A

- **Compliance and regulatory support**: AI can help financial institutions stay compliant with regulations by analysing and interpreting complex regulatory requirements and monitoring transactions for suspicious activities. 8
- **Enhanced decision-making**: AI can analyse large amounts of data and provide insights that can help financial institutions make better investment decisions, assess credit risks and optimize their operations. 8
- **Improved security**: AI can enhance security measures by identifying potential security threats, detecting unusual patterns of behaviour, and providing real-time alerts to prevent security breaches.6
- **Streamlined processes**: AI can streamline various financial processes, such as loan underwriting, account opening, and claims processing, leading to faster and more efficient services for customers.6
- **Improved customer service**: AI can be used to provide personalized and efficient customer service, such as chatbots that can answer customer queries and provide assistance 24/7. 10

GLEIF would like to respond to Q8. "*What are the main benefits/advantages you see in the development of your AI applications?"*

Developing AI applications in-house include greater control over the technology, enhanced data privacy, and the ability to tailor solutions specifically to our needs. This allows us to minimize reliance on external providers and reduce risks related to confidentiality and compliance

GLEIF would like to respond to Q9. "*Please score the following challenges and risks from most significant (10) to least significant (1):"*

- Lack of access to the required data, in general. 5
- Lack of access to the data in an appropriate digital format. 1
- Lack of access to appropriate data processing technology, e.g. cloud computing. 2
- Data privacy: it is crucial to ensure that sensitive financial information remains confidential. 8
- Lack of trust in relation to performance levels/ security aspects/ certified solutions/ reliability of the technology. 5
- Regulatory compliance with financial regulation: financial services are heavily regulated and not all types of AI applications are in line with requirements under these regulations. 2
- Innovation: the ability to leverage on combining AI with other technologies to enhance its potential and generate new services? 1

- Transparency and explainability: AI algorithms can be complex and opaque. It can be difficult for humans to understand how AI arrives at certain conclusions, which can create issues of trust and accountability. 8
- Bias and discrimination: AI models are trained using data, and if the data is biased, the AI model can also be biased, leading to unfair outcomes. 5
- Reputational risk from undesirable AI behavior or output. 8
- Liability risks: legal uncertainty on who bears the liability in case of damages generated by the malfunctioning of the AI applications. 8
- Skills gap: the development of AI requires specific tech skills, and there is a shortage of such skills. 6
- Dependability: as financial institutions rely more and more on AI; the dependability of these systems becomes paramount. Any malfunction or error (e.g. in risk management) can lead to significant financial losses. 7
- Job displacement: the use of AI can potentially automate certain roles in the financial sector leading to job displacement. 1
- Cybersecurity: AI systems could be targeted by cybercriminals, leading to potential data breaches or manipulation of AI systems. 9
- Integration challenges: integrating AI technologies with existing systems and processes can be complex and expensive. 2
- Additional cost: the deployment and use of AI requires up-front investment and ongoing resources (acquiring or developing applications, keeping them up to date, training/skills). 9

GLEIF would like to respond to Q10. "*What are the main difficulties/obstacles you are facing in the development of your AI applications?"*

The main obstacles we face in developing AI applications include the high costs associated with source intensive AI-based solutions. While closed-source solutions are more affordable as a service, they present privacy concerns. The main concern is described by the lack of transparency of the closed-source models, e.g., data used for the training, architecture of the model, bias evaluation, assessment of the goodness of the model. On the other hand, hosting local models is costly, and these models often do not perform as well as cloud-based alternatives, further complicating the development and bringing into production process

GLEIF would like to respond to Q11(a). "*Please rank the potential negative impact that widespread use of AI can have on the following risks. 8 being the highest risk***."**

- Operational risks 5
- Market risks N/A
- Liquidity risks N/A

- Financial stability risks N/A
- Market integrity risks N/A
- Investor protection risk N/A
- Consumer protection risk 7
- Reputational risk 8

GLEIF would like to respond to Q11(b). "*Please explain your answer to the previous question and give examples when possible."*

GLEIF is not a financial institution; we are a not-for-profit foundation providing open-source, high-quality legal entity reference data through the globally recognized Legal Entity Identifier (LEI). The LEI is widely used within the financial services sector.

We would like to offer comments on the first and last items. In both cases, we see significant risks when AI operates without appropriate monitoring and quality assurance, potentially involving human oversight. Given that AI models can still generate inaccurate or easily misinterpreted information, we believe this poses considerable risks, particularly in managing operations, which could lead to reputational damage.

In addition, the advanced capabilities of AI models in mimicking voice and imagery make it increasingly difficult for consumers to distinguish between real and generated (fabricated) information. This poses significant risks to society, particularly in areas where individuals rely on accurate information to make critical decisions, such as managing their financial affairs. The potential for misinformation in these contexts can lead to harmful consequences, undermining trust and increasing the likelihood of poor decision-making.

GLEIF would like to respond to Q12. "*AI may affect the type and degree of dependencies in financial markets in certain circumstances, especially where a high number of financial entities rely on a relatively small number of third-party providers of AI systems. Do you see a risk of market concentration and/or herding behavior in AI used for financial services?"*

Yes, there is a risk of market concentration, particularly in the areas of cloud services and general-purpose AI model providers. At the top level, options are very limited, with key players being Google Cloud, Microsoft Azure, and Amazon Web Services. Local solutions are often not feasible due to financial constraints and performance limitations. Additionally, general-purpose AI model providers are similarly concentrated within these major cloud firms. As more processes become dependent on these providers, the risk of concentrated failure increases, as demonstrated by recent globe wide incidents.

GLEIF would like to respond to Q13. "*Can AI help to reduce the reporting burden?"*

Yes, AI can reduce the reporting burden by automating the process. AI tools can streamline the generation of regulatory reports, reducing manual effort and the risk of human error.

GLEIF would like to respond to Q14. "*Do you think AI can facilitate compliance with multiple regulatory standards across the EU and thus facilitate market integration or regulatory compliance? For example, would you consider it feasible to use AI for converting accounting and financial statements developed under one standard (e.g. local GAAP) to another standard (e.g. IFRS)? Please elaborate."*

AI can assist in facilitating compliance with multiple regulatory standards across the EU by automating the alignment of different frameworks. For example, AI can draft conversions of financial statements, allowing human experts to focus on review and final adjustments. This helps streamline compliance efforts and enhances efficiency. However, we believe the results should be always verified by a human expert prior to exposing them.

GLEIF would like to respond to Q15. "*In order to develop AI applications, do you need access to external datasets that you currently don't have access to?"*

Yes.

GLEIF would like to respond to Q16. "*Which datasets would you need to develop meaningful AI applications and for which purpose / use case?"*

For certain tasks, fine-tuning open-source models is feasible, but it requires access to relevant datasets. For example, the collection of annual reports can serve as a valuable data source for various tasks.

GLEIF would like to respond to Q17. "*Do you face hurdles in getting access to the data you need to develop AI applications in financial services?"*

Yes, in many cases, the necessary data is either behind a paywall or expensive to collect manually, making it challenging to access the datasets required to develop AI applications. Examples include the collection of annual reports.

GLEIF would like to respond to Q20. "*Has AI changed your business model?"*

No.

GLEIF would like to respond to Q21. "*Which parts of the value chain are being improved with AI?"*

AI is improving multiple parts of the value chain. AI enhances operational efficiency by streamlining processes.

GLEIF would like to respond to Q22. "*Are there functions that cannot/would not be improved by AI?"*

Certain functions requiring deep human judgment, complex relationship management, reasoning, or ethical decision-making may not be fully improved by AI. These areas involve nuanced understanding and strategic planning, which AI today may struggle to replicate.

GLEIF would like to respond to Q23. "*Do you use general purpose AI models, including generative AI, and their respective reference architectures?"*

Yes, we use general purpose AI models, including generative AI, and their respective reference architectures. We opt for these models because they provide flexibility, scalability, and the ability to address a wide range of tasks across different departments. Their adaptability allows us to efficiently handle diverse applications.

GLEIF would like to respond to Q24. "*How do you plan to operationalise and adopt general purpose AI at scale?"*

We plan to operationalize and adopt general purpose AI at scale primarily through cloud-based solutions and closed-source models. This approach allows us to reduce the high costs associated with scaling open-source or in-house models. Cloud platforms provide the necessary infrastructure and scalability, while closed-source models offer pre-built capabilities that can be easily integrated into our operations without the need for extensive in-house development. This ensures cost efficiency while maintaining performance and reliability.

GLEIF would like to respond to Q25. "*How does the increasing availability of general purpose AI models, including generative AI applications, impact the need to access new datasets?"*
While general purpose AI models solve many tasks out of the box, they also bring new opportunities for specific use cases. This brings the need for access to diverse datasets, as fine-tuning these models or using these models for retrieval augmented generation requires relevant data to improve their accuracy and performance in specialized tasks. As a result, the demand for access to datasets has evolved, with a focus on acquiring domain-relevant data that can be used to unlock the full potential of these models.

GLEIF would like to respond to Q26. "*Compared to traditional AI systems such as supervised machine learning systems, what additional opportunities and risks are brought by general purpose AI models?"*

General purpose AI models, such as generative AI, offer additional opportunities compared to traditional supervised machine learning systems by providing greater flexibility and adaptability across a wide range of tasks, reducing development time and allowing for quicker deployment. However, they also bring increased risks, such as reduced transparency and explainability and the potential for unintended biases due to the generalized nature of their training.

GLEIF would like to respond to Q27. "*In which areas of the financial services value chain do you think general purpose AI could have a greater potential in the short, medium and long term?"*

In the short-term, general-purpose AI can assist with a variety of daily tasks, such as customer service automation and routine data analysis. In the medium term, it holds potential for more advanced applications through agentic workflows. In the long term, AI could transform areas by fully automating processes, leading to significant efficiency improvements across the financial services value chain.

GLEIF would like to respond to Q28. "*Have you developed, or are you planning to develop an AI strategy or other relevant guidelines within your organisation for the use of AI systems?"*
Yes, we are in the process of developing a comprehensive AI strategy within our organization. This strategy will include guidelines for the use of AI systems, governance frameworks, and clear processes for integrating AI into various departments. The goal is to ensure responsible and effective AI deployment while aligning with regulatory standards and business objectives.

GLEIF would like to respond to Q29. "*Have you put in place or are you planning to put in place governance and risk management measures to ensure a responsible and trustworthy use of AI within your organisation?"*
Yes, we are implementing governance and risk management measures, including ethical guidelines, bias mitigation, and regulatory compliance.

GLEIF would like to respond to Q30. "*What are the main evolutions to be expected in AI in finance?"*

AI in finance can evolve to become more autonomous, with systems capable of fulfilling complex tasks, adapting to real-time data, and managing large-scale operations with minimal human intervention.

GLEIF would like to respond to Q31. "*Which financial services do you expect to be the most impacted by AI?"*

Creation of entirely new financial products and services driven by intelligent automation, could reshape the entire market.

GLEIF would like to respond to Q32. "*Do you have any additional information to share?"*
Standards and identifiers play a crucial role in enhancing security and minimizing risks associated with AI, particularly generative AI (GenAI). By establishing clear frameworks for data provenance, standardized identifiers such as the Legal Entity Identifier (LEI) can help verify the authenticity of data sources and the entities involved in AI model development and usage. This enables better traceability and accountability, reducing the risk of biased or misleading information generated by AI systems. Additionally, adhering to global standards ensures consistency and reliability in AI operations, allowing for more effective monitoring, auditability, and governance of AI systems, which ultimately mitigates risks like misinformation, fraud, or malicious use of AI technologies.

For instance, introducing Digital Identity for AI Systems presents part of a solution mitigating above concerns. Assigning unique identifiers to AI models themselves, similar to the LEI for legal entities, could improve transparency and accountability. These identifiers would allow tracking of the model's origin, development history, and subsequent use, ensuring that AI systems cannot be misused or misrepresented.

Implementing global standards for AI development and requiring certification could ensure that models meet specific security, ethical, and bias mitigation criteria. AI models could be tested and certified by independent bodies, ensuring they comply with best practices in terms of safety, data privacy, and fairness.

