Testimony of Ravi Loganathan, Head of Financial Institution Service, Sardine and President, SardineX Before the House Financial Services Subcommittee on Digital Assets, Financial Technology and Inclusion Hearing on Connecting Communities: Building Innovation Ecosystems Across America.
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Chairman Hill, Ranking Member Lynch, and members of the Subcommittee on Digital Assets, Financial Technology and Inclusion, my name is Ravi Loganathan, and it is my privilege as the Head of Financial Services at Sardine and President of SardineX to submit this written statement on collaboration among the banking and fintech communities and building innovation ecosystems. On behalf of the Sardine and SardineX teams, thank you for the opportunity to participate in this important discussion.

Sardine is a fintech industry leader, focusing on behavior-based fraud detection, compliance, and risk management solutions. Our mission is to enhance the security of online financial transactions and safeguard the wider financial services ecosystem. Our team consists of seasoned experts from diverse backgrounds, including industry stalwarts from Revolut, Coinbase, Zelle, PayPal and Early Warning Systems. This collective expertise positions Sardine at the vanguard of tackling complex risk management challenges in financial services.

Sardine offers a comprehensive set of solutions for modern risk management, including:

- **Behavior-based Fraud Prevention**: At the core of our offerings is behavior-based fraud prevention. We delve deep into behavior biometrics, utilizing device intelligence and behavior biometrics combined into one solution to detect sophisticated emerging threats.
- **Insights and Data Sharing**: Sardine leverages real-time data sharing to solve counterparty risk. This unique approach enables clients to make informed decisions and mitigate risks effectively when facilitating money movement through any payment rail including RTP, FedNow, ACH, Zelle, Card and Debit rails.
- **Device Intelligence**: Our platform incorporates various aspects of device intelligence, such as browser fingerprints, bot detection, and proxy/VPN detection, to provide a comprehensive view of each transaction's risk.
- **Transaction Monitoring**: We offer transaction monitoring solutions that combine AML and fraud prevention in one API, enabling clients to centralize all transaction monitoring across their Fraud, Compliance, Trust & Safety teams.
- **Payments Solutions**: Our platform facilitates the fastest and most secure on-ramp to digital wallets, addressing the critical need for safety and efficiency in digital currency transactions

These solutions have positioned Sardine as a trusted partner for over 200 fintech and bank customers globally, monitoring transactions worth over $150 billion. In today's testimony, I will discuss how Sardine's suite of risk managment solutions plays a pivotal role in fostering

collaborations between banks and fintech companies, ensuring secure and innovative financial services for all.

Role of Risk Management in Fostering Collaboration

The financial landscape is rapidly evolving, and with it, the need for robust risk management systems. As banks and fintech companies collaborate to introduce innovative services, managing risk becomes paramount. This collaboration, however, should not compromise security and safety of the average consumer accessing these new services. Sardine's role in this innovation ecosystem is to provide a comprehensive risk management framework, ensuring that these collaborations are not only innovative but also secure and compliant with regulatory standards.

The following are two examples of risk management frameworks that are supporting collaboration and innovation across the financial services ecosystem.

SardineX: Risk Management Utility for Real-time Payments and Instant Settlement

As the financial industry rapidly embraces real-time payments and instant settlements, understanding counterparty risk becomes increasingly critical. This shift towards faster payments inevitably leads to faster fraud, as the time window for detecting and preventing fraudulent activities narrows significantly. SardineX addresses this urgent need by focusing on the intrinsic behavior of users, distinguishing genuine transactions from those where a fraudster has taken control of a user's account.

In countries like the UK, Brazil, and India, faster payment schemes have become common and have experienced triple-digit growth rates over the last five years. With the United States now pushing for the adoption of real-time payments including FedNow and Clearing House, RTP, it is anticipated that in the coming years, the majority of payments will be processed in real-time. This transition underscores the importance of real-time fraud detection and risk management for all parties involved in a transaction.

SardineX is uniquely positioned to tackle these challenges. It is a utility that serves the entire industry, where all participants, including banks and fintechs, can inquire about the entity conducting a transaction. This inquiry helps in determining the reputation of the entity, whether a consumer or a business. SardineX returns back signals that the inquiring institution can integrate into its risk management process to render a decision. This collaborative approach enhances the utility for every participant, as each inquiring institution returns feedback on the transaction, thereby benefiting the next institution that inquires into the utility.

Operating under the frameworks of the Gramm-Leach-Bliley Act (GLBA) for fraud information sharing and Section 314(b) of the USA PATRIOT Act for detecting money laundering activities, SardineX is a member-run organization that includes a diverse group of financial institutions and fintechs. The operating rules that govern SardineX are voted on by its members, ensuring a

collaborative approach to managing the ongoing operations of the utility. This initiative marks a significant step in the proactive management of financial risks, setting a new standard for collaborative, real-time risk management in financial services.

SponsorOS: Risk Management Operating System for Banking as a Service (BaaS)

In the evolving landscape of Banking-as-a-Service (BaaS), which has become a critical alternative source of non-interest income and deposits for community and regional banks, the ability to scale programs responsibly is paramount. Effective risk management is crucial in mitigating regulatory and reputational risks associated with these programs. As the BaaS model gains traction, so does the necessity for banks to automate fraud, compliance, and risk controls effectively for their partner programs in a way that scales and meets regulatory requirements.

Recognizing this need, Sardine has developed SponsorOS, a solution specifically designed to bridge this gap. SponsorOS is a comprehensive tool that addresses both fraud and compliance in a single form factor, catering to the needs of both the bank and its fintech partners. It simplifies the complexity inherent in BaaS oversight by providing a unified platform for fraud detection, compliance services, and risk management.

Sponsor OS prevents common unauthorized and authorized fraud vectors, including account takeover, identity fraud, friendly fraud, and imposter scams. It works across various payment rails, such as ACH, RTP, blockchain, card, and wire, and integrates into mobile and web experiences, ensuring security at every point of the user journey.

The solution combines proprietary device identification and behavioral biometrics for real-time user understanding, effectively flagging suspicious devices and activities. This capability is critical in preventing social engineering attacks and identifying fraudulent behavior based on distinctive patterns like repetitive movements, use of shortcuts, or window switching.

For Know Your Customer (KYC) checks, the solution integrates with over 20 data sources and uses a combination of personally identifiable information (PII) and collected risk signals to assess the risk of identity theft or synthetic identity fraud. This includes partnering with a leading documentary KYC provider for real-time ID information extraction and selfie-liveness detection.

In Anti-Money Laundering (AML) compliance, the solution provides match scoring based on PII for sanctions alerts, politically exposed persons (PEP) lists, and other screenings. These checks are performed daily, with the platform combining device intelligence with AML checks to enhance rulesets and prevent money laundering prior to transactions...

Furthermore, the solution centralizes transaction monitoring across fraud detection, KYC, AML compliance, and more in one combined view. This includes monitoring tools with no-code rule builder for custom rules and risk scores, and the ability to cover crypto transactions for comprehensive financial oversight..

In addition to its suite of features, SponsorOS offers a particularly critical capability for sponsor banks: the ability to impose rules based on their specific risk appetites and program standards directly to each fintech partner. This feature is pivotal in enabling banks to proactively monitor and ensure fintech partners' adherence to program standards.

Through SponsorOS, banks can dynamically manage risk and compliance across their fintech partnerships, maintaining consistent standards and mitigating potential risks. This solution enables banks to maintain a consolidated view of their risk posture across their entire BaaS portfolio, thereby enhancing oversight and reducing the compliance burden. With SponsorOS, banks can now scale their BaaS programs responsibly, ensuring they meet regulatory requirements while fostering healthy partnerships with fintech partners.

Combating AI-enabled Fraud

As the financial industry moves toward real-time payments and instant settlements, we face a growing threat: the rise of AI-enabled fraud. This new landscape of fraud, fueled by advancements in AI, poses a significant and evolving challenge to consumers and businesses alike.

Organized criminals and individual fraudsters are now exploiting AI tools for various nefarious activities. These include:

- **Phishing Attacks:** AI-generated phishing emails, which use remarkably human-like language, making them difficult to distinguish from genuine messages.
- **Deepfake Identity Theft**: The use of deepfake technology to create realistic video and audio impersonations for identity theft, fraud, or manipulation.
- **Automated Social Engineering**: AI chatbots that mimic human behavior to engage in convincing conversations, manipulating victims into making financial transactions.
- **Synthetic Identity Fraud**: AI's role in creating synthetic identities by combining real and fictitious information to open fraudulent accounts or obtain loans.

The scale and sophistication of these AI-driven attacks are growing exponentially, presenting a clear and present danger to the financial ecosystem. This new wave of fraud demonstrates how rapidly evolving technology can be exploited to deceive, steal, and disrupt, thereby undermining trust in financial systems and threatening economic stability.

In this context, collaboration between banks and fintech companies becomes imperative. A robust data sharing infrastructure is essential to combat these sophisticated fraud mechanisms. This infrastructure would enable the sharing of real-time insights and information related to emerging fraud events, allowing for a more proactive and effective response. Regulatory agencies can play a key role in facilitating these collaborations, creating a united front against AI-driven fraud.

Sardine, with its advanced solutions like SardineX and SponsorOS, is at the forefront of this battle. Our technology is designed to evolve with these emerging threats, offering cutting-edge solutions for real-time fraud and compliance risk management. We recognize the importance of collaborative efforts in this fight against AI-enabled financial crimes and are committed to providing the tools and frameworks necessary for banks and fintech companies to work together effectively.

Role of Regulators in Fostering Collaboration and Innovation

Globally, regulatory approaches to fostering collaboration between banks and fintechs show significant variation. In the United States, the regulatory landscape is characterized by a cautious approach from agencies like the OCC and CFPB. The OCC places a strong emphasis on risk management in bank-fintech partnerships, particularly in the context of BaaS, highlighting the importance of oversight. Meanwhile, the CFPB focuses on consumer protection, actively enforcing actions against fintech companies and overseeing non-bank entities deemed risky.

Contrasting this, the U.K.'s Bank of England and Singapore's MAS have created more supportive environments for fintech innovation. The Bank of England provides essential infrastructures, such as Real-Time Gross Settlements and data standards like LEI and ISO20022, to facilitate fintech growth. MAS's FinTech Regulatory Sandbox in Singapore allows for the controlled testing of new fintech products, speeding up market entry while ensuring regulatory clarity.

However, in the U.S., the future of federal regulatory sandbox programs, particularly those run by the CFPB, remains uncertain. This uncertainty has paved the way for state governments to establish their own regulatory sandboxes, with several states leading such initiatives. Despite these efforts, the CFPB's sandbox and no-action letter programs face challenges, including their limited ability to waive rules from other agencies and potential increased scrutiny from federal regulators.

To improve the U.S. regulatory framework and foster a more conducive environment for financial innovation, the CFPB could collaborate with other agencies like the SEC and OCC. This would involve coordinated regulatory relief for sandbox participants, potentially streamlining regulations in line with successful international models. For effective collaboration expansion in the U.S., significant reforms and inter-agency cooperation are necessary. Establishing a more comprehensive federal regulatory sandbox, promoting universal data standards, and adopting a collaborative regulatory approach would balance innovation with consumer protection and risk management, contributing to a dynamic and competitive financial services sector.

Role of Accelerator Programs in Fostering an Innovation Ecosystem

Accelerator and incubator programs play a crucial role in driving fintech innovation, especially in the complex and highly regulated financial services industry. These programs provide fintech

startups with essential resources, including access to a network of industry experts, strategic customers, and potential partners. They enable startups to accelerate their growth, refine their value propositions, and navigate the stringent risk controls, compliance, and governance requirements in the financial sector.

Our firsthand experience in the FIS Accelerator Program is a testament to these benefits. It provided Sardine with crucial insights into market fit and strategies for integration with financial institutions. The program facilitated engagement with seasoned industry executives, which was pivotal in refining our product offerings and business model. Additionally, it opened doors to potential clients and partners, aiding us in effectively navigating the financial services industry's complex regulatory and operational landscape. This experience was instrumental in accelerating our growth, enhancing the scalability of our innovations, and solidifying our position in the fintech sector.

Such programs are integral to the fintech ecosystem, offering a collaborative environment that compresses the timeframe for growth and innovation. They are particularly valuable for startups looking to break into the market, providing a platform for proof of concept, investment, and even acquisition opportunities. The track record of accelerator programs suggests that participating fintechs will emerge with refined business strategies and better-prepared revenue models.

Conclusion: A Call to Action for Enhanced Collaboration with Risk Management

In conclusion, the rapidly evolving financial landscape underscores the need for increased collaboration between banks and fintechs, particularly emphasizing responsible risk management for scaling new products and services. This collaboration is vital to address challenges such as AI-enabled fraud while capitalizing on innovative technology opportunities. Regulatory bodies like the OCC, CFPB, and their international counterparts are key in fostering these collaborations through initiatives like regulatory sandboxes and clear regulatory frameworks.

Our experience in the FIS Accelerator Program illustrates the immense value of these efforts. Both banks and fintechs stand to benefit from these partnerships, fostering innovation, enhancing risk management capabilities, and ultimately improving services for consumers and businesses.

By working together, we can create a financial ecosystem that is both progressive and secure, paving the way for a future where financial services are more inclusive, efficient, and resilient.