

ROLE OF FINANCE TECHNOLOGY (FIN-TECH): OPPORTUNITIES AND CHALLENGES

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ABSTRACT

India, with a population of almost 1.3 billion, is a thriving market for fin-tech. Due to its sizable unbanked or underbanked population, as well as the fact that it is a young nation with high digital penetration, India is an attractive global Fin-Tech market. Over \$500 million has been invested in businesses in the fin-tech space in India over the past several years, and this trend is set to continue. Banks and other financial institutions have taken notice of this and are now actively taking part in the ecosystem. Additionally, the government and authorities have made a number of actions to strengthen the fintech industry and provide new chances for businesses to introduce competitive solutions. This Fin-Tech in India research's goal is to give a comprehensive picture of the Indian Fin-Tech ecosystem. Digital developments in the financial sector and new business models made possible by technology are referred to as "fin-tech." These innovations present significant privacy, regulatory, and law enforcement challenges, but they also have the potential to disrupt current industry structures and blur industry boundaries, enable strategic disintermediation, revolutionise how current businesses create and deliver products and services, create new opportunities for entrepreneurship, and democratize access to financial services.

Keywords: *Fin-Tech Requirement and Initiatives, Ensuring Risks Are Managed and Consumers Are Protected, Regulatory Engagement, and Fin-Tech -Challenges.*

Introduction

Finance is essential for development, particularly for capital allocation, yet much recent growth in the finance sector has been unrelated to effective capital allocation. Financial services are still expensive, and customer advantages from financial breakthroughs have been little. The issue is not a lack of experimentation in finance. It does, indeed. However, despite these improvements, the system's overall effectiveness has not increased. We know that rent seeking and corporate looting can spur innovation, in which case the private and social returns to innovation are fundamentally different, thus this is not a tough theoretical problem to answer. In most industries, there is a conflict between private and social returns, but economists believe that entrance and competition mitigate the severity of the inefficiencies that occur. Fin-Tech refers to financial sector digital advances and technology-enabled business model innovations. Such innovations have the potential to disrupt existing industry structures and blur industry boundaries, facilitate strategic disintermediation, revolutionize how existing firms create and deliver products and services, open new doors for entrepreneurship, and democratize financial services access, but they also pose significant privacy, regulatory, and law enforcement challenges.

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Some of the key characteristics of the Indian market that make it exciting and interesting for Fin-Tech startups are:

- India is the only Fin-Tech hub that offers a huge unbanked population a viable option. India is an appealing site for Fin-Tech companies because of its rising young population, which is open to new technologies.
- Consumer behaviour is already being changed to adopt Fin-Tech solutions, which is a difficult task
- India has a robust talent pipeline with a comparatively cost-effective and easy-to-hire tech workforce because to its extensive technical education.
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In terms of deal size and volume, India has the second-largest startup ecosystem in APAC, behind China. In general, India is brashly moving up the Fin-Tech ladder, giving Fin-Tech companies plenty of opportunities to access the diversified market and prosper if they carefully match their product to their consumers and have a solid go-to-market plan in place. The two main areas where Fin-Tech is most active in India are payments and loans. In India, there are currently 600 fintech companies functioning, of which 40% are new lending and payment startups.

Literature Review

The Indian government began liberalizing its banking industry post-1990 with the introduction of technology-savvy banks. The government also took legislative action to boost the banking system and pushed new technology such as MICR, electronic funds transfer and other electronic payments that revolutionized the banking system and in turn boosted the Indian economy. However, for two decades from 1991, the technological innovation in financial services and banking were government-driven and witnessed slow growth.

This study focuses on digital banking start-ups since they provide similar services to retail banks, such as receiving client deposits, processing payments, and lending money (Chishti and Barberis, 2016). Their funding acts as a barometer for their potential worth. The impact of this money on traditional bank performance is estimated using stock returns in this study. If the returns react badly, the newcomers may disrupt the sector, but a positive effect could indicate complementarity. To specify the research, we select the United States because it has the largest Fin-Tech industry, as well as the highest number of Fin-Tech adopters (Ernst and Young, 2014). Because Fin-Tech is a recent development, very little scientific research has been conducted yet. However, existing research mainly stresses start-ups' ability to disrupt industries (Chishti and Barberis, 2016; Dickerson et al., 2015). According to Kauffman et al. (2015), present financial organisations are primarily dependent on underlying technology advances rather than their past market position. As a result, traditional banks are compelled to improve service quality and lower transaction costs, operating out of strategic necessity rather than competitive advantage (Goh and Kauffman, 2013). Jun and Yeo (2016), on the other hand, downplay rivalry and potential substitution by emphasising Fin-Tech's complementing influence. We are motivated to examine the role of digital banking start-ups in the traditional banking industry using a quantitative approach because of the conflicting opinions on the future of Fin-Tech and the mostly descriptive research.

The Indian banking and financial industry has witnessed the penetration of startups or Fin-Tech in the consumer-facing offerings from the mid-2000s. One of the initial offerings, which came up at around 2005, was the banking correspondent (BC) model, which was used to increase penetration of financial services to the rural household. With agents having basic technology to perform financial transactions BCs offered a low cost alternative to setting up branches for FIs to serve the rural population. FinoPayTech and Eko India were the major startups that took advantage of this opportunity and built their services around the BC model. 2010 saw an emergence of payment startups in mobile wallets; e-bill payment and mobile recharge services. Major Fin-Tech startups such as Oxigen, MobiKwik, Paytm and Freecharge originated between 2005–10. From 2010, there have been multiple Fin-Tech startups that have mushroomed in different segments such as lending (100+ startups), personal finance management (40+ startups) and investment management (90+ startups). Fin-Tech has gained even more prominence with VC firms displaying keen interest with a 40% growth in investments or funding activity between 2014 and 2016. Most of the financial transactions were done online due to COVID-19 pandemic in 2020. It gives a new way of payments and transfers without physical touch to avoid infections.

The Financial Stability Board of the Bank for International Settlements defines Fin-Tech as “technologically enabled financial innovation that could result in new business models, applications, processes or products with an associated material effect on financial markets and institutions and the provision of financial services” (European Banking Authority, 2017, p. 4). A lack of legacy infrastructure and comparatively low level of organizational complexity allows fin-tech firms to be more agile, innovate faster, and be more radical in their approach to innovate.

Traditional banks, on the other hand, appear to be finding it more difficult to adapt to some of the new technological innovations since they must adhere to more stringent regulatory restrictions. Furthermore, when adopting far-reaching organizational changes in a typical bank, a larger number of stakeholders must often be persuaded. Traditional banks' slowness in adapting to digital changes has consequences not only for individual banks, but also for the financial system's stability. There is currently a scarcity of academic research on bank-Fin-Tech partnerships. Scholars have primarily concentrated on specific advances in certain Fin-Tech areas until recently.

Why is Fin-Tech Important?

I'd like to provide a few views about developing financial technologies and their significance to our work in my remarks today. Fin-Tech has the ability to revolutionise the way financial services are delivered and designed, as well as the payment, clearing, and settlement procedures. 2 New digitally enabled financial goods and services, as well as new procedures and platforms, have proliferated in recent years. Fin-Tech may have an impact on practically every element of how we connect with one another financially, from payments and credit to savings and financial planning, just as smartphones altered the way we communicate and exchange information. In our continuously connected, on-demand world, consumers, businesses, and financial institutions are all eager to find new ways to engage in financial transactions that are more convenient, timely, secure, and efficient.

In many cases, Fin-Tech puts financial change at consumers' fingertips--literally. Today's consumers, particularly millennials, are accustomed to having a wide range of applications, options, and information immediately accessible to them. Almost every type of consumer transaction--ordering groceries, downloading a movie, buying furniture, or arranging childcare, to name a few--can be done on a mobile device, and there are often multiple different applications that consumers can choose for each of these tasks based on their preferences. It seems inevitable for this kind of convenience, immediacy, and customization to extend to financial services. Indeed, according to the Federal Reserve Board's most recent survey of mobile financial services, fully two-thirds of consumers between the ages of 18 and 29 having a mobile phone and a bank account use mobile banking.

Thanks to new Fin-Tech platforms, consumers and small businesses now have more real-time financial control. Once widespread adoption is attained, carrying out cashless person-to-person fund transfers becomes technologically manageable, enabling, for instance, the splitting of a check following a meal out with friends or the quick and affordable transmission of remittances to friends or relatives abroad. By automating savings decisions based on what customers can afford, financial management systems assist consumers in setting financial goals and providing feedback on purchases that are inconsistent with those goals. They also help consumers create financial objectives and give feedback on spending that deviates from those objectives. Fin-Tech programmes in certain circumstances automatically transfer spare account balances into savings accounts based on monthly expenditure and revenue trends, effectively making savings the default option. Other applications are providing consumers with more real-time access to earnings as they are accrued rather than waiting for their regular payday. This service may be particularly valuable to the nearly 50 percent of adults with extremely limited liquid savings.⁴ It is too early to know what the overall impact of these innovations will be, but they offer the potential to empower consumers to better manage cash flow to reduce the need for more expensive credit products to cover short-term cash needs.

One particularly promising aspect of Fin-Tech is the potential to expand access to credit and other financial services for consumers and small businesses. By reducing loan processing and underwriting costs, online origination platforms may enable financial services providers to more cost effectively offer smaller-balance loans to households and small businesses than had previously been feasible. In addition, broader analysis of data may allow lenders to better assess the creditworthiness of potential borrowers, facilitating the responsible provision of loans to some individuals and firms that otherwise would not have access to such credit. In recent years, some innovative Community Development Financial Institutions (CDFIs) have developed partnerships with online alternative lenders, with the goal of expanding credit access to underserved small businesses.

The challenge will be to foster socially beneficial innovation that responsibly expands access to credit for underserved consumers and small businesses, and those who otherwise would qualify only for high-cost alternatives. It would be a lost opportunity if, instead of expanding access in a socially beneficial way, some Fin-Tech products merely provided a vehicle to market high-cost loans to the underserved, or resulted in the digital equivalent of redlining, exacerbating rather than ameliorating financial access inequities.

We're also keeping an eye on a burgeoning Fin-Tech category known as "regtech," which tries to make it easier for banks to comply with regulatory requirements. Regtech companies are developing new solutions to help banks and other financial institutions deal with regulatory compliance concerns ranging from new client onboarding to consumer protection to payments and governance. Many of the current solutions are focused on regulatory requirements under the Bank Secrecy Act (BSA), such as know-your-customer (KYC) and suspicious activity reporting. The solutions make use of modern technologies and data-analytic approaches, which could help banks save money and time by identifying and assessing their customers' money-laundering and terrorist-financing concerns. However, it is too early to tell the degree to which innovative approaches to customer due diligence, such as KYC utilities, will deliver efficiency gains such as those outlined in the recent Bank for International Settlements Committee on Payments and Market Infrastructures report on correspondent banking.

Fin-Tech and Banking

Many industries have already been affected by digitalization. The banking industry, which is one of the most traditional and conservative in the economy, has recently been confronted with potentially disruptive technology-driven innovations and Internet-based solutions. In the financial business, new ways to leverage technology are aimed at generating more customer-centric and user-friendly digital applications. Many of these innovative banking solutions have been developed by Fin-Techs, which is a portmanteau word that combines the words "financial" and "technology." Current advancements have the potential to modify or even eliminate several old bank business structures. Many traditional banks have formed strategic relationships with some of the newcomers to counter this challenge. Banking technology startups offering solutions that help banks to digitally and cost-effectively serve their customers are still in an ascent stage and are expected to take off as the digital and smart city initiatives of the Indian government are aimed at providing the physical and digital infrastructure for the last-mile digital connectivity. The last three years (2018-21) have witnessed various developments in the Fin-Tech segment in India where apart from startups and investments, the established corporate sector including banks, financial institutions and others as well as the government and regulatory bodies have taken steps to develop, implement and propel innovative solutions. The regulatory bodies and banks have brought new solutions that will create interesting opportunities for Fin-Tech and the financial services sector as a whole. The most prominent of these is the launch of UPI – Universal Payment Interface. To leverage the increasing usage of smartphones and mobile apps, NPCI (National Payments Council of India, the umbrella organization that sets the payment rails in India) launched UPI, a set of standard APIs with an open architecture provided to the banks in order to facilitate account-to-account transfers by customers by entering just one virtual ID (likename@bankname.com or mobilenummer@bankname.com). Leading startups like India's largest market place e-commerce players Flipkart and Snapdeal have partnered with Yes Bank and Axis Bank respectively to incorporate UPI in their mobile payment offerings. Yes Bank has also worked with 50 merchants across a range of industries, including lending, e-commerce, and mobile payments, to offer complete UPI support through their Yes Pay Wallet. This allows businesses to conduct effective P2P transactions while also removing the delays and failures associated with online payment and gateways. The expanding number of agreements between banks and Fin-Tech firms is another obvious trend in the Fin-Tech sector. For example, HDFC Bank and the Fin-Tech firm 'Tone Tag' teamed together to offer phone-based proximity services, and Yes Bank teamed up with Ultracash Technologies to offer sound-based proximity payments. Banks have also introduced solutions targeted at upgrading the digital financial infrastructure with the help of their in-house employees. Some of the initiatives include:

- ICICI bank launched a contactless mobile payment system which could enhance NFC payments in India
- Axis Bank presented the 'Invoice to Payment' feature that provide end-to-end digital invoicing and payment solutions

- DBS introduced the first mobile bank that allows customers to open accounts digitally with their PAN card and Aadhaar card
- Union Bank launched the *99# mobile application in partnership with NPCI that allows basic services like balance inquiry, fund transfers and mini statements to its customers even when there is no internet. These new solutions will enable Fin-Tech startups to leverage the infrastructure created by banks to enable their solutions or enhance existing offerings with superior product experience

Federal Reserve and Fin-Tech Engagement

To better understand technological changes in lending, payments, and other areas, the Federal Reserve has been engaging with a wide range of market participants to understand barriers to socially beneficial innovations. Our unique structure, with Board and Reserve Bank staff in over 30 locations, allows us to tap expertise in markets and innovation centers across the country to help establish channels of communication, including with nonbank participants with whom we may not otherwise have regular contact. The Federal Reserve also engages in ongoing communication with other regulators to promote, to the greatest extent possible, consistency in approaches and alignment of supervisory requirements. Exchanging ideas and discussing Fin-Tech innovations with other regulators is critical to understanding and vetting risks and, where appropriate, reaching consistent views regarding the application of laws, regulations, or guidance.

Finally, we recognize the value of technical expertise. With Fin-Tech, as with any other emerging financial product or service, the Federal Reserve is learning as much as we can to ensure that we have a robust understanding of the technologies and activities in which banks and other financial firms are engaging, and to inform the development of our policy and supervisory approaches. To that end, the Federal Reserve Board has established a multidisciplinary working group that is engaged in a 360-degree analysis of Fin-Tech innovation. We are bringing together the best thinking across the Federal Reserve System, spanning key areas of responsibility—from supervision to community development, from financial stability to payments—to assess the impact of technological development on the Federal Reserve's responsibilities. As part of this effort, Federal Reserve senior officials and staff have been closely watching developments in Fin-Tech, evaluating its impact on financial services delivery, and assessing the policy and supervisory implications in this area.

Regulatory Engagement

I believe that the Federal Reserve is well-positioned to help shape this innovation as it develops, and it is important that we be clear about our expectations and mindful of the possible effects of our actions. The Federal Reserve and other financial authorities' policy, regulatory, and supervisory actions can have an impact on how new financial technologies are created and implemented, and ultimately how effective they are. Fin-Tech companies and financial institutions must adhere to all applicable legal safeguards and requirements. Simultaneously, it is critical that regulators and supervisors do not place unnecessary restrictions on financial innovations that responsibly bring broad social advantages. Unintended consequences of an overly rigid regulatory or supervisory stance could include the relocation of innovations outside of the regulated banking system, potentially increasing risks and decreasing transparency.

The rapid pace of change and the large number of actors—both banks and nonbanks—in Fin-Tech raise questions about how to effectively conduct our regulatory and supervisory activities. In one sense, regulators' approach to Fin-Tech should be no different than for conventional financial products or services. The same basic principles regarding fairness and transparency should apply regardless of whether a consumer obtains a product through a brick-and-mortar bank branch or an online portal using a smartphone. Indeed, the same consumer laws and regulations that apply to products offered by banks generally apply to nonbank Fin-Tech firms as well, even though their business models may differ. However, the application of laws and regulations that were designed based on traditional financial products and delivery channels may give rise to complex or novel issues when applied to new products or new delivery channels. As a result, we are committed to regularly engage with firms and the technology to develop a shared understanding of these issues as they evolve.

Ensuring Risks Are Managed and Consumers Are Protected

While financial innovation holds promise, it is crucial that financial firms, customers, regulators, and other stakeholders understand and mitigate associated risks. There is a tension between the lightning pace of development of new products and services being brought to market—sometimes by

firms that are new or have not historically specialized in consumer finance--and the duty to ensure that important risks around financial services and payments are addressed. Firms need to ensure that they are appropriately controlling and mitigating both risks that are unique to Fin-Tech as well as risks that exist independently of new technologies.

For example, some Fin-Tech firms are exploring the use of nontraditional data in underwriting and pricing credit products. While nontraditional data may have the potential to help evaluate consumers who lack credit histories, some data may raise consumer protection concerns. Nontraditional data, such as the level of education and social media usage, may not necessarily have a broadly agreed upon or empirically established nexus with creditworthiness and may be correlated with characteristics protected by fair lending laws. To the extent that the use of this type of data could result in unfairly disadvantaging some groups of consumers, it requires careful review to ensure legal compliance. Furthermore, while most customers are aware of how their financial activity impacts their traditional credit scores, alternative credit scoring techniques provide new issues that may raise concerns about fairness and transparency. People and regulators may not always understand what precise information is used by alternative credit scoring systems, how this information affects a consumer's ability to acquire a loan or its pricing, or what behavioural changes consumers may do to improve their credit access and pricing.

Similarly, Even as they deliver enhanced convenience to customers, Fin-Tech advances that rely on data sharing may pose security, privacy, and data-ownership problems. The importance of possible security concerns has been highlighted by recent cases of large-scale fraud and cyber security breaches. As financial institutions' data sets expand beyond traditional customer credit histories, data privacy, data ownership, and whether or not consumers have any influence in how their data is used and shared, as well as the ability to review it for accuracy, will become more of a worry. The Consumer Financial Protection Bureau has issued a call for information in order to better understand the benefits and hazards of new financial services that rely on access to consumer financial accounts and account-related data.

In addition to the risks I have outlined that are specific to new financial technologies, firms also must control for risks that have always been present, even in brick-and-mortar financial institutions. For example, risks around the BSA and Anti-Money Laundering rules cut across all segments and all portfolios. Similarly, firms must monitor credit and liquidity risks of loans acquired or processed via Fin-Tech platforms, especially given that these products have not been tested over an economic cycle.

Furthermore, as a general rule, the introduction of new products or services typically involves heightened risks as a financial institution enters into new areas with which it may not have experience or that may not be consistent with its overall business strategy and risk tolerance. Banks collaborating with Fin-Tech firms must control for the risks associated with the associated new products, services, and third-party relationships. When incorporating innovation that is consistent with a bank's goals and risk tolerance, bankers will need to consider which model of engagement is most appropriate in light of their business model and risk-management infrastructure, manage any outsourced relationships consistent with supervisory expectations, ensure that regulatory compliance considerations are included in the development of new products and services, and have strong fallback plans in place to limit the risks associated with products and partners that may not survive.

With the growing number of partnerships between banks and Fin-Tech companies, we often receive questions about the applicability of our vendor risk-management guidance. We are actively reviewing our guidance to determine whether any adjustments or clarifications may become appropriate in the context of these arrangements. We hear concerns from community bankers in particular about their internal capacity to undertake the requisite due diligence and ongoing vendor management on their own, especially with much larger vendors, and questions about whether the interagency service providers supervision program might be relevant in this context. We are thinking about whether changes brought about by Fin-Tech and Fin-Tech partnerships may warrant consideration of any changes to the interagency supervision program for service providers.

Challenges Facing Indian Fin-Tech Industry

With all these positive developments in Fin-Tech, India needs to address some important challenges.

- **Lack of Efficient Finance Structure**

the lack of a broad-based financial transaction infrastructure, which has posed a significant difficulty because many Indians in rural areas lack bank accounts, credit scores, and home ownership information. This has been a major factor in the lack of financial services adoption. Loans or lending in India, for example, is arduous and time-consuming due to legislation requiring physical documentation such as identification evidence, salary stubs, notarized copies of all documents, signature verification, in-person verification, and physical examination of property. Despite meeting the income sufficiency standard, lending to millions of undocumented and unverifiable Indians carries a high risk due to a lack of relevant financial data.

- **Innovation**

In order to build segment-specific vertical products that are unique to India, there is a dire need for innovation. Small-ticket unsecured loans, prepaid plans for single medical procedures, immediate point-of-sale credit, pay-per-day insurance, micro-investment products, and other examples have already been seen in India. Startups have yet to fully comprehend the market and develop solutions that are usable, accessible, and profitable. Solutions such as lending schemes targeted at female entrepreneurs, social finance, and crowd financing, for example, have yet to be disrupted on a wide scale. Addressing these issues by not only expanding on the innovations already pioneered by Indian Fin-Tech entrepreneurs, but also by collaborating with them and building disruptive solutions, can provide a unique opportunity for startups to profit from the large Indian Fin-Tech market. what happened to your money

- **Building Trust**

With new technology, especially disruptive ones, it can be challenging to get early users on board. Companies not only have to convince consumers to trust their brand, but they also have to argue that their product is crucial. New customers and users are often dubious and sceptical. Many financial companies fight against such feelings by focusing on building trust through the three c's:

- Collaboration
- Credibility
- Customer Experience
- **Collaboration**

Fin-Tech companies can sometimes earn the trust of their users by forming supportive communities. Interacting directly with users, whether through speaking on panels or holding networking events, can help you win their trust. Creating a network of like-minded enterprises that can work together to achieve a certain goal by partnering with other similar businesses can also deliver remarkable results. This network can assist grow individual firms and is a good rather than a negative influence. Traditional banks will, hopefully, eventually join forces with Fin-Tech enterprises to better serve customers.

- **Credibility**

You must provide them with a flawless, clear, honest, and instructive online experience. The main purpose here is to increase transparency in order to foster strong, long-term connections. Customers are more likely to find your brand comforting if you are straightforward and honest. Aligning with larger organisations, governments, and providing social proof, for example, can give your company a human touch. Customer testimonials, films, and thought-leadership content (podcasts, videos, or written text) add social proof to your brand and make it more approachable. As a result, connecting with and building relationships with your audience becomes much easier.

- **Customer Experience**

It is unquestionably difficult to transform the finance business. Making ensuring you communicate with clients, despite the lack of face-to-face meetings, is one of the most difficult barriers to overcome when it comes to developing trust. To meet customers' needs, Fin-Tech organisations must be succinct without being dull, clear without omitting critical information, and honest without being threatening. It's also crucial to keep the human element in mind. Employ real humans in customer care (rather than chatbots) and give customers a phone number to contact if they just want to talk to someone. Also, make it simple for your readers to locate the information they require. Streamline the User Experience (UX) and User Interface (UI) of your website, for example, keep online content fresh, relevant and interesting.

- **Blockchain Integration**

Blockchain is thought to be a crucial component in the fight against cybercrime. However, data security is not the sole application of the Blockchain in the financial sector. Whereas, Blockchain has already proven its worth in a range of investment and financial applications. They are focusing on prospective sectors such as bank investments and safer payment transactions. However, it is claimed that widespread Blockchain adoption will be challenging. With the help of blockchain, anyone can readily view all stages of a transaction and prevent any modifications from occurring, allowing you to always know what happened to your money. However, because this is a new approach, it is difficult to find expertise in software design and implementation.

- **Compliance with Govt. Intervention**

Finance is the most significant regulator industry, which is why the government is always interested in issues linked to finance, such as finance regulation, financial inclusion, and so on. Developers must obtain permission from the government before making any changes to Fin-Tech. The majority of the Fin-Tech sectors are searching for a clear set of norms from their regulators, whether it's the RBI, SEBI, IRDA, or another agency. 11 Fin-Tech businesses that provide deposit, savings, and remittance services received Payment Bank licences from the RBI. The RBI has released a few regulations in the areas of mobile/eWallet and peer-to-peer lending, but much more clarification is needed. Because public funds are involved, P2P loans and payments must be explained as soon as possible. Operating in this field is extremely dangerous due to regulatory uncertainty.

- **Conclusion**

Current developments in the digitization of finance, including the establishment of new business models, are important and deserving of serious engagement on the part of policymakers and regulators. As policymakers, we want to facilitate innovation where it has the potential to yield broad social benefit, while ensuring that risks are thoroughly managed. In safeguarding the public interest, the first line of analysis and protection will always rest with the market participants closest to the new technologies and product innovations and to the organizations that consider adopting them. But regulators also should seek to analyze the implications of technology developments through constructive and timely engagement. We should be attentive to the potential social benefits of these new technologies, prepared to make the necessary regulatory adjustments if their safety and integrity are proven and their potential benefits found to be in the public interest, and vigilant to ensure risks are well understood and managed.

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