

A vision for platform-based banking

A young woman with dark hair tied back, wearing a white t-shirt and a dark grey apron, is smiling warmly. She is holding a black handheld payment terminal. In the foreground, a hand is holding a smartphone over the terminal. The background is a bakery with shelves of bread.

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A vision for platform-based banking

The platform-based business model has taken hold in the digital economy, and the concept is starting to emerge in banking. Aided by ubiquitous mobile access and easy distribution through mobile app stores, FinTech companies and some progressive banks have started to make inroads with the customers of traditional banks. This threatens the banks' vertically integrated and product-focused business model, which is not always suited for building or integrating innovative FinTech services.

In response, EY recommends that banks explore the concept of platform-based banking. A banking platform establishes standards for third-party FinTech developers to build products and services on behalf of bank customers while allowing the banks to deliver a unified banking experience. It also allows banks to own the end-to-end experience of traditional integration points such as bill pay and peer-to-peer (P2P) payment. The banks would contribute to the platform their expertise in security, authentication and compliance, while the FinTech companies would provide customer-focused capabilities. Building or participating in a banking platform would require

significant organizational and technological transformations, however these are well within the reach of a traditional bank. The cost of technology has also come down, allowing for these transformations to be feasible.

The result would benefit all stakeholders: FinTech companies would have better access to the mass market; customers would enjoy a transformed, personalized banking experience under the protection of the regulated banking industry; and traditional banks would have access to new revenue streams while maintaining their relevance in this era of digital disruption.



The growth of the platform-based business model in the digital economy

In the digital economy, you can become a driver without owning a taxi, a hotelier without owning a hotel, or a bookseller without owning a bookstore. Yet if you want to be a banker, at present you still need to comply with the regulatory requirements designed for traditional banks.

Digital-economy innovations share a common factor: the platform-based business model. Through an intermediary platform, passengers can find drivers, visitors can find empty rooms, and in general, buyers can find sellers.

Customers have embraced these platform-based businesses for reduced friction, lower prices and better service, along with the convenience of using mobile devices as the primary point of contact. Mobile apps have already driven adoption of platforms for personal transportation, same-day delivery, and access to the digital sharing economy, and popular mobile apps allow people to send payments, stick to budgets and split the bill for dinner.

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These capabilities have permanently changed customer expectations, such that people now expect their mobile phones to be a “one-stop shop” for their day-to-day financial needs. Mobile devices are also beginning to play a critical role for larger financial decisions such as purchasing a home or planning retirement, especially for “mobile-first” or “mobile-only” younger generations.

Recognizing the market opportunity to serve mobile-first customers, FinTech companies are introducing disruptive business models that eliminate unneeded expenses and do a better job at capitalizing on customer data.



These business models support no-fee or low-fee products and services that threaten banks' fee and margin revenues. For example, FinTechs offer attractive solutions to millennials and young high earners for refinancing their student loans and for funding easy-to-use retirement accounts using mobile interfaces with push-button simplicity.

FinTechs are leading the way in innovation using rapid development methodologies on the latest technology stacks, launching products and services not yet offered by banks, and digital technology places FinTechs on equal footing with established financial institutions. Social networks (a platform-based business model) allow FinTechs to target customers by geography or demographics, while app stores (another platform-based business model) enable customers to enroll quickly and easily into new, personalized products and services that provide instant decisions and rapid transactions. The time between discovery and usage of a new service can now be measured in minutes. Using

these approaches, FinTech companies can provide banking products and services without the legacy cost structures of traditional banks.

The banking industry has thus far avoided the level of disruption seen in other industries, owing to a combination of regulatory barriers, industry structure, entrenched customer relationships, and customer concerns over privacy and reputation. Yet those are not insurmountable obstacles, especially when customers expect and demand higher levels of service and convenience. With mobile networks and platform-based business models, FinTechs can bypass the strengths of today's banking industry. For traditional banks, the key question is whether they can develop the capabilities to meet customer expectations for instant mobile access to a wide range of diverse products and services. To do so, they will have to embrace the platform-based business model, either as an active participant on others' platforms, or on platforms of their own.



The decline of the vertically integrated business model in banking

In the traditional operating model, banks own and operate a vertically integrated value chain that stretches from production to sales, distribution and servicing. Even though banks can outsource various components, the overall cost structure remains relatively fixed.

The imminent threat of disintermediation makes the traditional operating model unsustainable. Using the rapid development tools available for mobile app deployment, FinTech companies can avoid entire expense categories involved with physical buildings and computing infrastructure, allowing them to market highly functional financial products and services at highly competitive rates. The new entrants can also choose to compete in areas of strength with the highest profit margins, leaving low-margin, high-cost services (e.g.,

safety deposit boxes) to the incumbent providers. Moreover, they can design their new offerings from the ground up to be oriented toward self-service. The net result is that new competitors can challenge banks' production costs while undercutting them elsewhere in the value chain.

This represents an extremely challenging situation for vertically integrated banks. As these trends accelerate, banks' fee and margin revenues will be increasingly at risk. Although the traditional banking industry has numerous regulatory and reputational advantages, disruptive innovation will find a way through to the marketplace. In response, banks need to re-evaluate their vertically integrated banking business models by considering platform-based business models.



Traditional bank operating models unsuited for building FinTech innovations

Even though traditional banks have access to the same cloud-based technology stacks and rapid-development methodologies as the FinTech innovators, they have been slower to take advantage of these approaches.

By contrast, venture-backed FinTech companies are built from the ground up to support the emerging customer base with the latest technology. They have the flexibility to build new solutions from a clean sheet of paper, along with the financial backing and incentive structures to attract the top development talent. Consequently, FinTech companies, rather than traditional banks, have demonstrated the highest levels of innovation in product and channels.

Across several dimensions (see chart), FinTech companies are better-positioned to take advantage of deploying the latest technologies. US banks would need a costly, multiyear transformation program to achieve a similar level of speed and flexibility in new product development.

Instead of trying to imitate the way that FinTech companies approach technology development, traditional banks should capitalize upon FinTech innovations by incorporating external products and services into their portfolio. We believe that traditional banks should seek to build an operating model that draws upon their strengths in terms of customer reach, regulatory expertise and branding. That's the idea behind platform-based banking.

Comparing traditional banks and FinTech companies

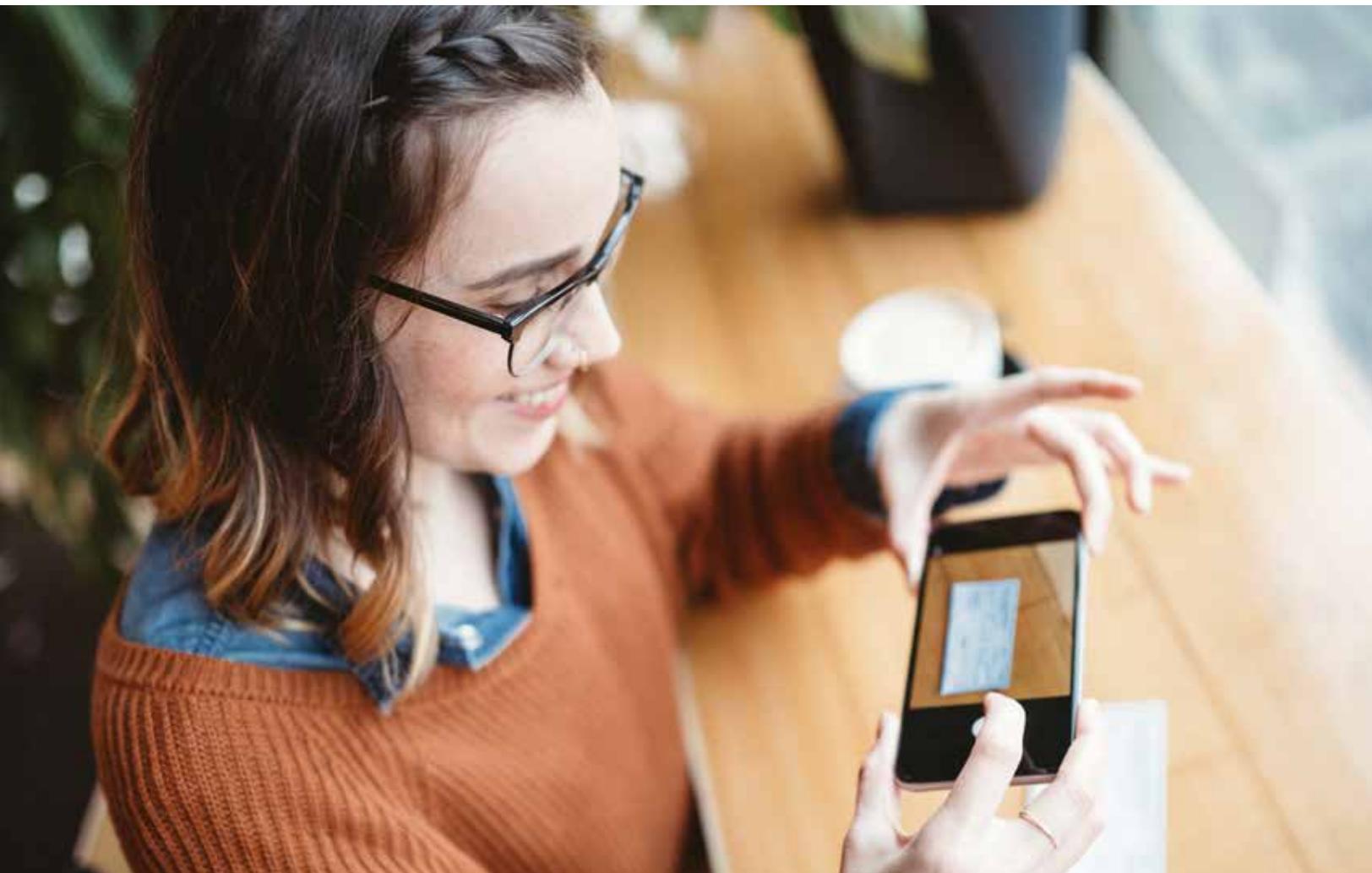
	Traditional banks	FinTech companies
Customer acquisition	Branch and online	Mobile-first
Customer experience	Branch-focused, with online and mobile	Mobile and online
Customer service	Branch, contact center, self-service	Self-service, investment in chatbots
Customer demographic	Primary Gen X	Primary millennials
Product approach	Product-centric, one-size-fits-all	Customer-centric, personalized
Operating model	Vertically oriented, centralized	Service-oriented, decentralized
Data and analytics	Single-source, based on internal data	Multi-source, including customer interactions, social sharing, insights from partners
Development approach	Waterfall, with in-house R&D and computing resources	Agile, with maximum use of mobile, cloud and application programming interfaces (APIs)
Development cycle times	Slow due to red tape, long approval times and budget cycles	Fast due to smaller organizational chart, R&D partners, clear metrics, and direct investor oversight.
Risk and compliance	Extensive internal focus on regulation and compliance	Managed through partners



Introducing platform-based banking

As outlined earlier, the broader digital economy has seen a clear trend toward platform-based business models. As translated to retail banking, a platform would intermediate between a broad range of financial products and services (including FinTech providers) and the mass market of retail customers.

A platform for financial transactions would need to establish “plug-and-play” standards enabling developers to build innovative products and services for consumers. The platform infrastructure would manage the secure exchange of data, oversee authentication and authorization, and ensure compliance with relevant regulations. Oversight and governance of a banking platform would ideally be managed using defined and shared standards among institutions working in federation with network operators and associations of FinTech companies.



Based on their knowledge of their own customers and markets, banks would use the full range of the platform's capabilities to build omni-channel "customer journeys" that anticipate customers' interactions across digital and physical environments. Sales and service interactions would need to be designed for self-service, with escalation paths that provide relevant context to bank employees and support meaningful human interactions.

For developers, including FinTech companies and banks' internal development teams, the base-level capabilities available through a banking platform would allow them to focus on delivering value to consumers instead of building custom overhead for secure connectivity, identity management and regulatory compliance. For example, if you have a better idea for how to build personal financial management software, there's no incremental value to you or your potential customers from also having to figure

For customers, the experience of banking would be completely transformed away from the current, vertically integrated model. Instead of being limited to the products and services offered by their own bank, customers would instead have access to a digital banking "app store" that allows them to select their desired services from a broad range of sources. With the knowledge that whatever financial apps they select have been vetted by the platform, customers will be able to build their own personalized banking experiences based on their individual needs.

Fast-moving banks have already started taking steps toward the platform strategy and building their own platforms. The largest banks are involved with developing projects jointly with partners and with each other, and some are establishing FinTech divisions with the skill sets needed to develop software for these platforms. The banking marketplace has

The broader digital economy has seen a clear trend toward platform-based business models

out customer authentication and Know Your Customer regulations on your own. Working through a bank-led platform will allow developers to focus on building transformative ideas with greater confidence that they can reach the marketplace with a solid, tested product. Instead of re-creating established infrastructure, developers can focus on unlocking the tremendous potential inherent from combining data sources in new and unique ways using intelligent algorithms that, for example, make use of digital data from social networks and Internet of Things (IoT) devices being deployed in smart homes, smart offices and smart cities.

also seen online lending and deposit products coming from new entrants, including institutional banks that traditionally avoided retail.

Yet the strategy of platform-based banking is not limited to the largest banks. Regional and community banks will be able to capitalize upon their strengths and their ideas to reach new customers without having to open new branches. Furthermore, smaller banks will be able to retain customers with a much-expanded menu of services that they would not be able to deliver on their own.



Organizational and technological aspects of platform-based banking

We believe that traditional banks possess the skills and resources to execute upon the vision of building a platform-based bank.

The most challenging aspect of moving to a platform-based approach will be in managing the organizational change involved, which is an integrated effort that covers everything from strategy and governance to customer experience management.

The organizational aspects of platform-based banking include:

- ▶ **Set a platform-based banking strategy:** commit to building or joining a banking platform, and decide upon an approach through a combination of partnerships and alliances, technology incubators, FinTech acquisitions or investments, and internal FinTech capabilities
- ▶ **Reshape the business architecture:** decompose the operations into capabilities and manage interactions and services with third parties
- ▶ **Put together a multidisciplinary team:** include product owners from the lines of business, technology experts, and specialists in risk, compliance, and digital strategy
- ▶ **Redesign the customer experience:** leverage design thinking approach to identify the customer journeys that should prompt digital offerings from the platform, as well as those moments that require human interaction
- ▶ **Simplify the internal product lineup:** focus on profitable products and discontinue products that are not competitive on price or other dimensions, especially if they have significant variable costs associated with their operations
- ▶ **Make distribution and operations platform-ready:** train employees and the call center to guide customers toward platform-based services as appropriate; sales incentive structures need to be adjusted to account for the platform-based business model
- ▶ **Highlight digital expertise across the org chart:** re-evaluate existing organizational structures to place a focus on digital talent management; establish incentives for a test-and-learn culture of innovation
- ▶ **Realign the process, risk and control (PRC) framework:** extend the control environment to third parties, document and trace PRC changes, and manage the impact of regulatory requirements and risk management concerns

On the technology side, we recommend that banks use technology stacks and development methodologies similar to those used by FinTech companies. Your bank's development team may not need to be the first to use a new feature, however they should at least possess fluency with the approaches being used by contributing FinTech companies on the banking platform. That way, a bank can achieve the optimal benefits from a platform-based transformation initiative. The technology steps to take to adopt platform-based banking include:

- ▶ **Upgrade data and analytics:** ensure that you can act on usage metrics and transaction data generated through a platform; create a single view of the customer to enable targeted products and other interfaces with platform offerings
- ▶ **Pursue process automation:** streamline operations for existing manual processes and existing operations, so that bank capabilities can be delivered through APIs as platform-based services to FinTech providers
- ▶ **Adopt next-generation technology:** ensure compatibility with advanced services by deploying flexible IT infrastructure that enables open collaboration with partners, customers and employees
- ▶ **Update development approaches:** train development teams in Agile, microservices, and DevOps, mimicking FinTech approaches to synchronize with their development capabilities
- ▶ **Experiment with minimum viable product (MVP) and rapid prototyping:** regularly push out product features and enhancements to customers as part of a continuous feedback loop with customers to understand what works, and what doesn't
- ▶ **Maintain open banking APIs:** provide managed third-party access to bank and customer data, so that FinTech companies can integrate and test their apps in a sandbox environment, and then easily move to production

The first step to platform-based banking: open APIs and microservices

Traditional banks use internal APIs to intermedate between their core banking platform and their core banking app, creating a direct channel to customers under their control.

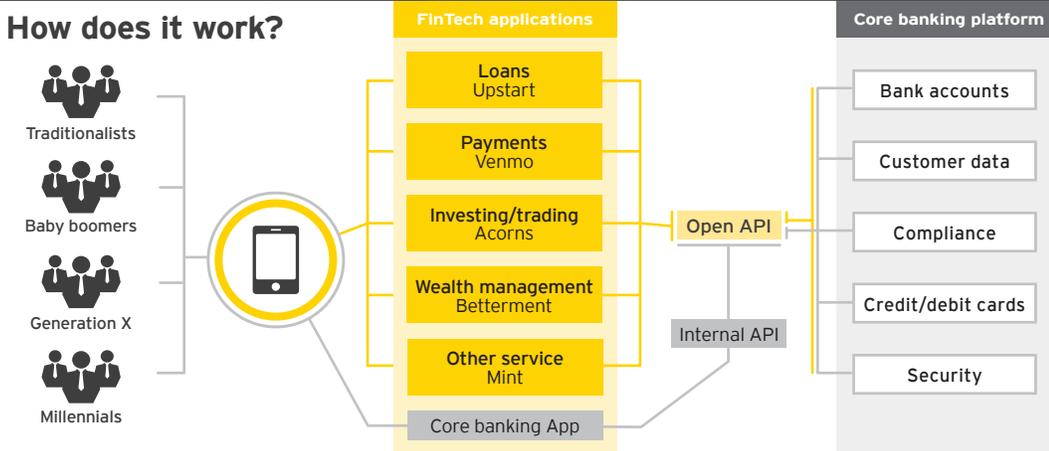
Platform-based banking relies upon participation in a broader network of FinTech applications for loans, payments, investing, wealth management and other services.

The critical step for banks is to establish open APIs that enable outside services to present the appropriate credentials, request and retrieve customer information, and execute transactions through the core banking platform itself.

Open APIs allow banks to participate in the data-sharing ecosystem that is becoming necessary for keeping up with the level of service and new capabilities being cultivated in the FinTech ecosystem. As the ecosystem becomes more advanced and adapted to customer needs, it will become increasingly difficult for banks to go it alone with nothing more than their own apps.

Platform-based banking overview

How does it work?





Stakeholder benefits of platform-based banking

The realization of the vision of platform-based banking will unlock the potential of technology in the financial services marketplace, and the benefits will accrue to FinTech companies, to retail customers and to the banks themselves.

FinTech companies will benefit from access to a wider customer base, enabling them to scale their offerings faster without having to spend extensively on marketing, go through time-consuming regulatory approvals, or figure out on their own how to meet demanding security requirements. Investors will have a clearer path to return on capital, and employees will be able to monetize their contributions on an accelerated timescale. Also, by working through a platform rather than independently, companies can rely upon quality-of-service guarantees with banks and other FinTech partners. That will enable banks and innovative companies to orchestrate services that combine data from multiple sources to achieve higher levels of personalization than would be possible outside of a platform.

Bank customers will benefit immediately by having access to new products and services alongside banks' core offerings. They will benefit from improved digital experiences and capabilities, with innovative products made available through a trusted platform backed by their bank. From better customer experiences, customers will form stronger relationships with their banks resulting in higher levels of satisfaction. For banks hosting these platforms, the high-level benefit will come from encouraging the growth of a highly competitive market in digital innovation in a way that benefits the organization. Instead of watching external players siphon their customers away through the app store of a mobile ecosystem, a banking platform channels innovation toward their own customers.

Instead of having to catch up with a swarm of well-financed and technology-advanced competitors, banks can instead bring those innovations to market in a convenient, cost-efficient way with faster go-to market speed for new solutions.

Platform-based banking also enables banks to reduce their dependence upon legacy technology built to support vertically oriented business models. The transition to a platform can be an integral step toward further transformation of the underlying cost structure and business model of a financial institution.

Drawing upon their demonstrated strengths in regulatory compliance, information security and customer trust, banks can become valued partners and curators of financial platforms, enabling a new wave of diversified, innovation led revenue streams to support customer acquisition, retention, wallet-share growth and profitable revenue enhancement.







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