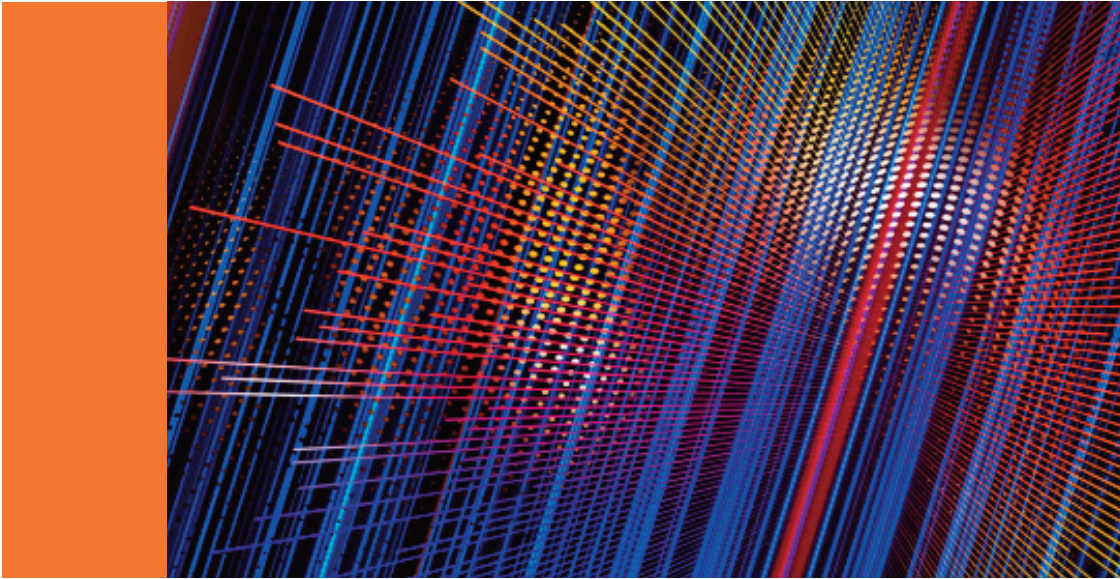


Global Banking Practice



Cutting Through the FinTech Noise: Markers of Success, Imperatives For Banks

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Introduction

Silicon Valley is coming. There are hundreds of start-ups with a lot of brains and money working on various alternatives to traditional banking.

– Jamie Dimon

Banking has historically been one of the business sectors most resistant to disruption by technology. Since the first mortgage was issued in England in the 11th century, banks have built robust businesses with multiple moats: ubiquitous distribution through branches, unique expertise such as credit underwriting underpinned both by data and judgment, even the special status of being regulated institutions that supply credit, the lifeblood of economic growth, and have sovereign insurance for their liabilities (deposits). Moreover, consumer inertia in financial services is high. Consumers have generally been slow to change financial services providers. Particularly in developed markets, consumers have historically gravitated toward the established and enduring brands in banking and insurance that were seen as bulwarks of stability even in times of turbulence.

The result has been a banking industry with defensible economics and a resilient

business model. In recent decades, banks were also helped by the twin tailwinds of deregulation, a period ushered in by the Depository Institutions Deregulation Act of 1980 (DIDRA), and demographics (e.g., the baby boom generation coming of age and entering their peak earning years). In the period between 1984 and 2007, U.S. banks posted average returns on equity (ROE) of 13%. The last period of significant technological disruption, which was driven by the advent of commercial Internet and the dot-com boom, provided further evidence of the resilience of incumbent banks. In the eight-year period between the Netscape IPO and the acquisition of PayPal (one of the winners of this era) by eBay, more than 450 attackers – new digital currencies, wallets, networks, etc. – attempted to challenge incumbents. Fewer than five of these survive as stand-alone entities today. In many ways, PayPal is the exception that proves the rule: it is tough to disrupt banks.

The FinTech Moment

History does not repeat itself; but it often rhymes. – Mark Twain

This may now be changing. McKinsey's proprietary Panorama FinTech Database tracks the launch of new FinTech companies – i.e., start-ups and other companies that use technology to conduct the fundamental functions provided by financial services, impacting how consumers store, save, borrow, invest, move, pay and protect money. In April 2015, this database included approximately 800 FinTech start-ups globally; now that number stands at more than 2,000. FinTech companies are undoubtedly having a moment.

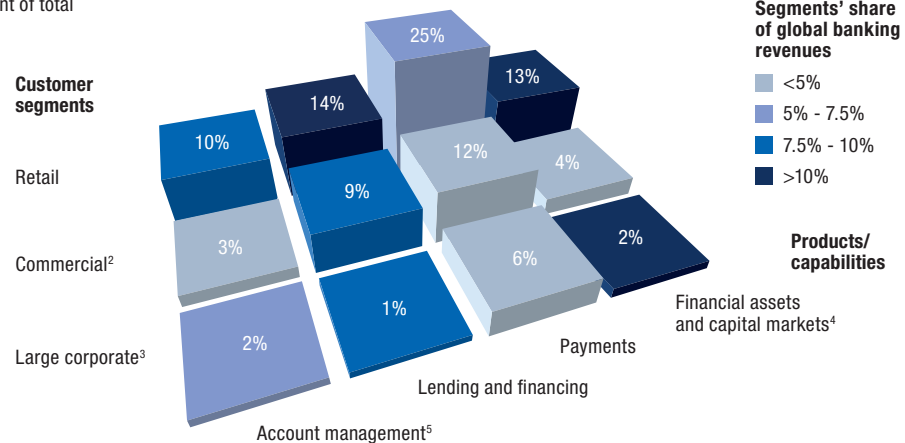
Globally, nearly \$23 billion of venture capital and growth equity has been deployed to FinTechs over the last five years, and this number is growing quickly (\$12.2 billion was deployed in 2014 alone).

So we now ask the same question we asked during the height of the dot-com boom: is this time different? In many ways, the answer is no. But in some fundamental ways, the answer is yes. History is not repeating itself, but it is rhyming.

Exhibit 1

FinTechs are everywhere, especially in payments

Customer segments and products of leading FinTechs, 2015¹
Percent of total



¹ 350+ commercially most well-known cases registered in the Panorama database, may not be fully representative.

² Includes small and medium-size enterprises

³ Including large corporates, public entities and non-banking financial institutions

⁴ Includes sales and trading, securities services, retail investment, non-current-account deposits and asset management factory

⁵ Revenue share includes current/checking account deposit revenue

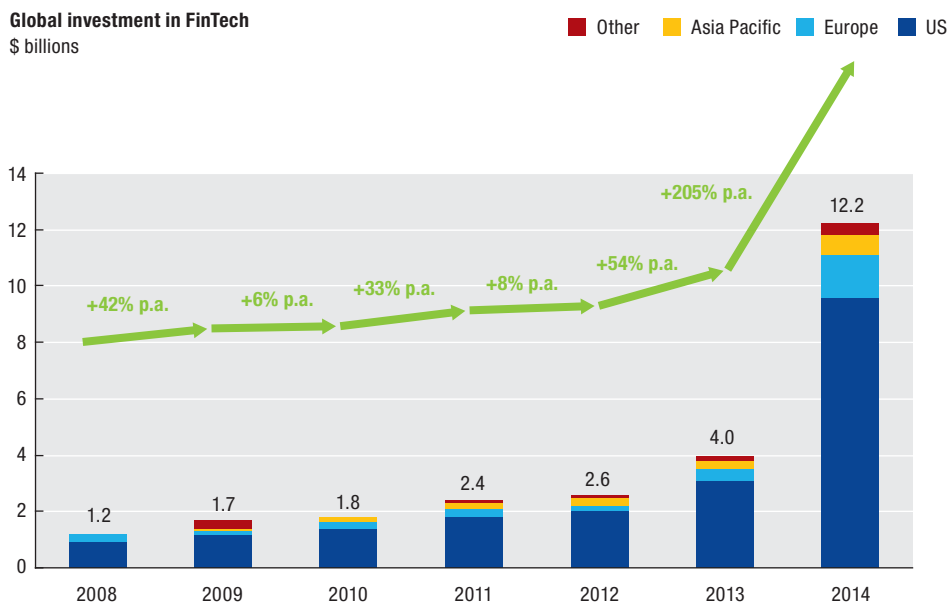
The historical moats surrounding banks are not different. Banks remain uniquely and systemically important to the economy; they are highly regulated institutions; they largely hold a monopoly on credit issuance and risk-taking; they are the major repository for deposits which customers largely identify with their primary financial relationship; they continue to be the gateways to the world's largest payment systems; and they still attract the bulk of requests for credit.

Some things have changed, however. First, the financial crisis had a negative impact on trust in the banking system. Secondly, the ubiquity of mobile devices has begun to undercut the advantages of physical distribution that banks previ-

ously enjoyed. Smartphones enable a new payment paradigm as well as fully personalized customer services. In addition, there has been a massive increase in the availability of widely accessible globally transparent data, coupled with a significant decrease in the cost of computing power. Two iPhone 6s have more memory capacity than the International Space Station. As one FinTech entrepreneur said, "In 1998, the first thing I did when I started up a FinTech business was to buy servers. I don't need to do that today – I can scale a business on the public cloud." There has also been a significant demographic shift. Today, in the U.S., alone, 85 million Millennials, all digital natives, are coming of age, and they are considerably more open than the

Exhibit 2

The level of VC investment in FinTech has recently accelerated



Source: CBInsights, McKinsey Panorama

Exhibit 3

Origination and sales – the focus of non-bank attackers – account for ~60% of global banking profits

Global banking revenues and profits by activity, 2014

\$ billions

	Balance-sheet provision	Origination/sales
Core banking		
Lending	1,239	301
Current/checking accounts	526	131
Deposits	174	44
Fee-based businesses		
Investment banking ¹	136	214
Transactions/payments	0	483
Asset management and insurance ²	0	577
Total revenues	2,075 (54%)	1,750 (46%)
Total after-tax profits	436 (41%)	621 (59%)
ROE	6%	22%
	Credit disintermediation	Customer disintermediation

¹ Corporate finance, capital markets, securities services

² Asset management includes investment and pension products. Insurance includes bank-sold insurance only.

Source: McKinsey Panorama – Global Banking Pools

40 million Gen Xers who came of age during the dot-com boom were to considering a new financial services provider that is not their parents' bank. But perhaps most significantly for banks, consumers are more open to relationships that are focused on origination/ sales (e.g., Uber, AirBnB, Booking.com, etc.), are personalized, and emphasize seamless or on demand access to an added

layer of service separate from the underlying provision of the service or product. FinTech players have an opportunity for customer disintermediation that could be significant – McKinsey's 2015 Global Banking Annual Review estimates that banks earn an attractive 22% ROE from origination and sales, much higher than the bare-bones provision of credit, which generates only a 6% ROE.¹

¹ *The Fight for the Customer: McKinsey Global Banking Annual Review 2015*, September 2015, mckinsey.com.

Fintech Attackers: Six Markers of Success

Predictions are dangerous, especially about the future. – Yogi Berra

While the current situation differs from the dot-com boom, the failure rate for FinTech businesses is still likely to be high. However, in a minority of cases, FinTechs focused on the retail market, will break through and build sustainable businesses, and they are likely to profoundly reshape certain areas of financial services – ultimately becoming far more successful than the scattered and largely sub-scale FinTech winners of the dot-com boom. Absent any mitigating actions by banks, in five major retail banking businesses - consumer finance, mortgages, lending to small and medium-sized enterprises, retail payments and wealth management - from 10% to 40% of bank revenues (depending on the business) could be at risk by 2025. Attackers are likely to force prices lower and cause margin compression.

We believe the attackers best positioned to create this kind of impact will be distinguished by the following six markers:

1) Advantaged modes of customer

acquisition. FinTech start-ups must still build the most important asset of any business from scratch: customers. Banks already have them, and attackers will find it difficult to acquire them cost-effectively in most cases. FinTech

attackers are subject to the same rules that apply to any e-commerce businesses. Over time, a key test of scalability is that gross margins increase while customer acquisition costs decrease. During the dot-com boom, eBay, a commerce ecosystem with plenty of customers, was able to reduce PayPal's cost of customer acquisition by more than 80%. FinTech attackers this time around will need to find ways to attract customers cost-effectively. In the payments point-of-sale (POS) space, several FinTech attackers, such as Revel and Poynt, are seeking to capitalize on an industry disruption – the rollout of EMV (Europay, MasterCard and Visa – the global standard for chip-based debit and credit card transactions) in the U.S. and the resulting acceleration of POS replacement cycles. They are attempting to leverage distribution from merchant processors and others with existing merchant relationships to acquire merchants as customers more quickly and less expensively than would otherwise be possible.

2) Step-function reduction in the cost

to serve. The erosion of the advantages of physical distribution make this

a distinctive marker for the most disruptive FinTech attackers. For example, many FinTech lenders have up to a 400 bps cost advantage over banks, because they have no physical distribution costs. While this puts a premium on the importance of the first marker, it also enables FinTech businesses to pass on significant benefits to customers with regard to cost and time to process loan applications.

3) Innovative uses of data. Perhaps the most exciting area of FinTech innovation is the use of data. For example, several players are experimenting with new credit scoring approaches – ranging from looking at college attended and majors for international students with thin or no credit files to trust scores based on social network data. Many of these experiments will fail, stress-tested by credit and economic cycles (it is not hard to lend based on different underwriting criteria when times are good; the hard part is getting the money back when times are tough). But big data and advanced analytics offer transformative potential to predict “next best actions,” understand customer needs, and deliver financial services via new mechanisms ranging from mobile phones to wearables. Credit underwriting in banks often operates with a case law mindset and relies heavily on precedent. In a world where more than 90% of data has been created in the last two years, FinTech data experiments hold promise for new products and services, delivered in new ways.

4) Segment-specific propositions. The most successful FinTech attackers will not begin by revolutionizing all of banking or credit. They will cherry pick, with discipline and focus, those customer segments most likely to be receptive to what they offer. For example, Wealthfront targets fee-averse Millennials who favor automated software over human advisors. Lending Home targets motivated investment property buyers looking for cost-effective mortgages with an accelerated cycle time. Across FinTech, three segments – Millennials, small businesses and the underbanked – are particularly susceptible to this kind of cherry picking. These segments, with their sensitivity to cost, openness to remote delivery and distribution, and large size, offer a major opportunity for FinTech attackers to build and scale sustainable businesses that create value. Within these segments, many customers are open to innovative, remote FinTech approaches not offered by traditional banks

5) Leveraging existing infrastructure. Successful FinTech attackers will embrace “co-opetition” and find ways to engage with the existing ecosystem of banks. Lending Club’s credit supplier is Web Bank, and PayPal’s merchant acquirer is Wells Fargo. In the same way that Apple did not seek to rebuild telco infrastructure from scratch but intelligently leveraged what already existed, successful FinTech attackers will find ways to partner with banks, e.g., acquire underbanked customers that

banks cannot serve or acquire small business customers with a SaaS offering to run the business overall while a bank partner supplies the credit. Apple Pay offers a template for this: with tokenization capabilities supplied by the payment networks, it seeks to provide an enhanced digital wallet customer experience in partnership with banks.

6) Managing risk and regulatory stakeholders. FinTech attackers are flying largely under the regulatory radar today, but they will attract attention as soon as they begin to attain meaningful scale. Those that ignore this dimension of building a successful business do so at their own peril. Regulatory tolerance for lapses on issues such as KYC, AML, compliance, and credit-related disparate impact will be low. Those FinTech players that build these capabilities will be much better positioned to succeed than those that do not. More broadly, regulation is a key swing factor in how FinTech disruption could play out. Although unlikely to change the general direction, regulation could affect the speed and extent of disruption, if there were material shocks that warranted stronger regulatory involve-

ment, e.g., cyber-security issues with leading FinTechs. The impact could also vary significantly by country, given different regulatory stances, e.g., Anglo-Saxon regulation on data usage versus other EU countries; payments system directives in Europe that cause banks to open up their Application Programming Interfaces (APIs) to non-banks; Brazil's regulatory stance on P2P lending; or stricter regulation in some Asian markets.

As with disruptors in any market, the ultimate test of whether a FinTech player succeeds or fails is whether these six markers combine to create a sustainable new business model. Consider what inventory means for Netflix, or storefronts are for Amazon. A successful business model would change the basis of competition and drive revenues differently, e.g., data advantages may be more important than distribution, and revenues may not rely on traditional banking spread and fee economics. Despite what is likely to be a large failure rate among FinTechs, the small number of winners will have a business model edge that sustains them through economic and credit cycles and helps them build enduring brands.

Banks: Six Digital Imperatives

If you can keep your head while all about you are losing theirs... – Rudyard Kipling

Banks are subject to a lot of noise about FinTechs today. Optimism regarding technology is at a high, mobility is widely regarded as a game-changer, and vast amounts of capital are being deployed in FinTechs. Banks may be tempted to dismiss the noise entirely, or they may panic and overreact. We recommend a middle ground that focuses on separating the signals that are truly important from the noise. Specifically, this means that banks should be less preoccupied with individ-

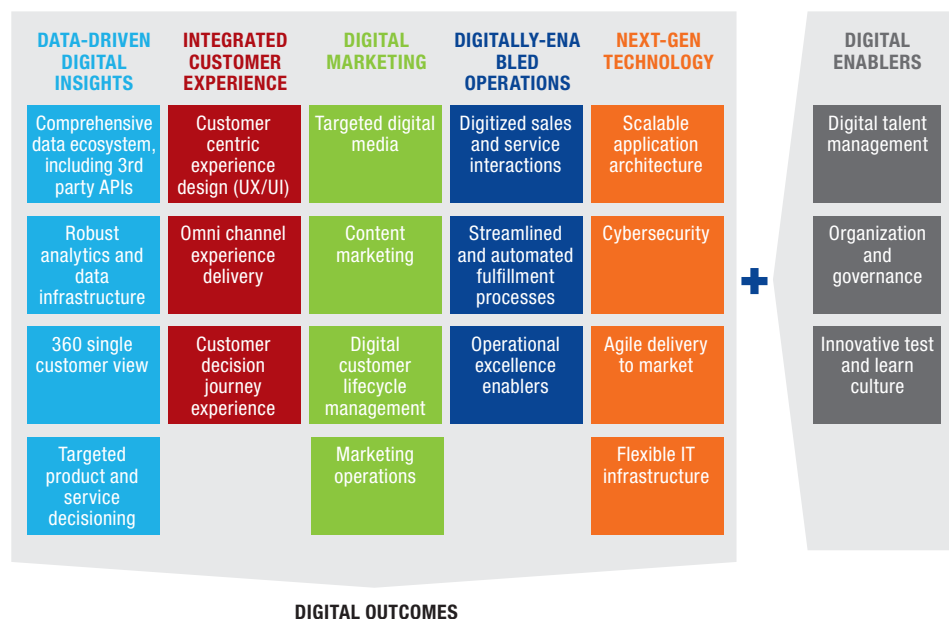
ual FinTech attackers and more focused on what these attackers represent – and build or buy the capabilities that matter for a digital future.

1) Use data-driven insights and analytics holistically across the bank.

Attackers powered by data and analytics – be they FinTechs, large consumer ecosystems (e.g. Facebook, Google, Apple), or some of the more progressive financial institutions – are opening

Exhibit 4

Banks should be focused on building an extensive set of distinct digital capabilities



NOTE: The framework illustrated above is a component of McKinsey's Digital Capabilities (DC™) diagnostic, a 360° objective benchmark of the extensive set of core digital capabilities needed to enable a successful digital strategy.

up new battlegrounds in areas like customer acquisition, customer servicing, credit provision, relationship deepening

Access to large quantities of transaction data, underwriting and custom-scoring customers for credit-worthiness, understanding and managing through credit and economic cycles – these are unique assets, skills and capabilities that banks have built and leveraged over centuries.

through cross-sell, and customer retention and loyalty. Consider the provision of credit - one of banking's last big moats. Access to large quantities of transaction data, underwriting and custom-scoring customers for credit-worthiness, understanding and managing through credit and economic cycles – these are unique assets, skills and capabilities that banks have built and leveraged over centuries. But now the large-scale availability of new and big data (and the fact that banks no longer have a monopoly on such data) is pushing banks to radically transform just to keep up. Building a comprehensive data ecosystem to access customer data from within and beyond the bank; creating a 360-degree view of customer activities; creating a robust

analytics and data infrastructure; and leveraging these to drive scientific (versus case law-based) decisions across a broad range of activities from customer acquisition to servicing to cross-selling to collections - all are critical to a bank's future success.

2) Create a well-designed, segmented and integrated customer experience, rather than one-size-fits-all distribution.

The days of banking being dominated by physical distribution are rapidly coming to an end. The proliferation of mobile devices and shifting preferences among demographic groups mean that customers expect more real-time, cross-channel capabilities (e.g. status inquiries, problem-resolution) than ever before. Physical distribution will still be relevant, but far less important, and banks must learn to deliver services with a compelling design and a seamless unconventional customer experience. Banks must recognize that customer expectations are increasingly being set by non-banks. Why does a mortgage application take weeks to process? Why does it take an extra week (or two) to get a debit card online versus in a branch? Why can't a customer make a real-time payment from his/her phone to split a dinner check? Banks need to respond to these questions by improving their customer experience and meeting their customers' changing expectations. Financial services is the only business where you can be rejected as a customer. In an age where mobile devices provide real-time trans-

parency on just about everything, it is critical to provide customers with information about the status of an application or what other documents are required. Account balances must be consistent across channels, and banks should consider the real-time updating that an on-demand app such as Uber provides and aim to deliver that level of transparency when it matters. Such innovation provides opportunities for banks to improve and differentiate their customers' cross-channel and cross-product experiences.

Today, banks are in a fight
for the customer, not only with other
banks but also non-banks.

3) Build digital marketing capabilities that equal eCommerce giants.

Today, banks are in a fight for the customer, not only with other banks but also non-banks. The moats that have historically protected banks will not even begin to compensate for the wide gap in marketing skills that currently exists between eCommerce players and banks. Big data and the advanced analytics capabilities described above are merely the foundation of digital marketing. Mastering digital media, content marketing, digital customer lifecycle management and marketing operations will be critical to banks' success. Building these capabilities and recruiting and

retaining digital marketing talent will require considerable time and investment.

4) Aggressively mitigate the potential cost advantage of attackers through radical simplification, process digitization and streamlining.

After the last dot-com boom, banks successfully electrified core processes. Now they must digitize them. The difference is crucial – an electronic loan processing and fulfillment process at a bank largely implies the sharing and processing of PDF files of paper documents. We estimate that the majority of the cost of processing a mortgage is embedded in highly manual loops of work and rework. Digitizing a mortgage application would involve creating and manipulating data fields in a largely automated manner in the cloud, e.g., borrower income and liabilities. This will be a multi-year process for banks, as it will require the integration of multiple legacy systems and potential re-platforming to enable truly digitized processes. Simplification, digitization and streamlining opportunities exist across large swaths of banking operations. The sooner banks attack these opportunities, the more prepared they will be to compete with FinTech attackers that have a structurally lower cost base. New technologies will offer banks opportunities to test and scale to achieve efficiencies. For example, as the hype surrounding Bitcoin currency fades, it is clear that the “baby in the bathwater” may well be distributed ledger technologies that enable more

cost-effective storage and rapid clearing and settlement of transactions in the banking back office.

From providing truly scalable application architecture with a particular emphasis on mobile to addressing the cybersecurity threats they face every day to learning agile delivery and modernizing their infrastructure, banks have a challenging, but important road ahead in building next-generation technology capabilities.

5) Rapidly leverage and deploy the next generation of technologies, from mobile to agile to cloud.

The technology agenda for banks and bank CIOs has become even more demanding and complex. First and foremost, “mobile-first” is not just a buzzword – it is the clearest directive banks could receive from consumers about how they want to interact with their service providers. Secondly, banks must fortify not only their technologies, but also their internal processes and cultures, to defend customers’ data from breaches. Third, the pace of innovation in banking is accelerating rapidly, requiring banks to increase their speed to keep up, including software development through techniques such as agile and continuous

delivery. Finally, significantly faster, more nimble and dramatically lower-cost versions of processing and storage technologies are now commonplace. Banks need to move onto such platforms, retiring and replacing legacy systems quickly. Since such systems are neither easily nor quickly replaced, many banks may choose to move to a “two-speed architecture” approach that builds more flexible layers of technology on top of existing systems, but still draws on and interacts with those systems to provide the next generation of technology agility and seamless customer experiences. From providing truly scalable application architecture with a particular emphasis on mobile to addressing the cybersecurity threats they face every day to learning agile delivery and modernizing their infrastructure, banks have a challenging, but important road ahead in building next-generation technology capabilities.

6) Rethink legacy organizational structures and decision rights to support a digital environment. The typical organization chart of any bank will show a matrix of products and channels, with physical distribution usually leading in size and scope. The P&Ls that accompany these matrices vest power in the owners of the channels and products that are most likely to be in the firing line of FinTech attackers. These attackers are typically oriented to customer metrics tied directly to their financial performance. In contrast, most banks have consensus-oriented cultures that require a long

time to build alignment. Banks must complement their existing P&Ls with approaches that enable faster adaptability to external changes and foster cultures that support speedier decision-making. Banks must think hard about how best to organize to support the five preceding imperatives, i.e., what organizational structure and decision rights will most effectively support a data and insight driven operating model, a distinctive customer experience, digitized processes for greater efficiency, and next-generation technology deployment? What innovations should take place within the bank? What should be developed in incubators or even in separate digital banks under separate brands? Should the bank have separate laboratories or a VC-like investment vehicle to be able to experiment with new technologies?

Taken together, these six imperatives carry the same overall implication for

banks as the six markers do for FinTechs: a long-run shift in the nature of competition and successful business models. An overarching challenge for banks is how to “open up” structurally – both in terms of how they leverage partnerships and how they permit other entities to access their capabilities. Those banks that pursue a thoughtful approach to meeting this challenge will be best positioned to evolve their business models and find new sources of value for their customers, while performing well financially.



The age of FinTechs is here. Will this time be different than the dot-com boom? Will most FinTech attackers fail? Will the few attackers who succeed fundamentally reshape banking? Regardless of the odds of success for individual FinTech attackers, banks must seek important signals amid the FinTech noise in order to reposition their business models and cultures for success. There is no time to lose.

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