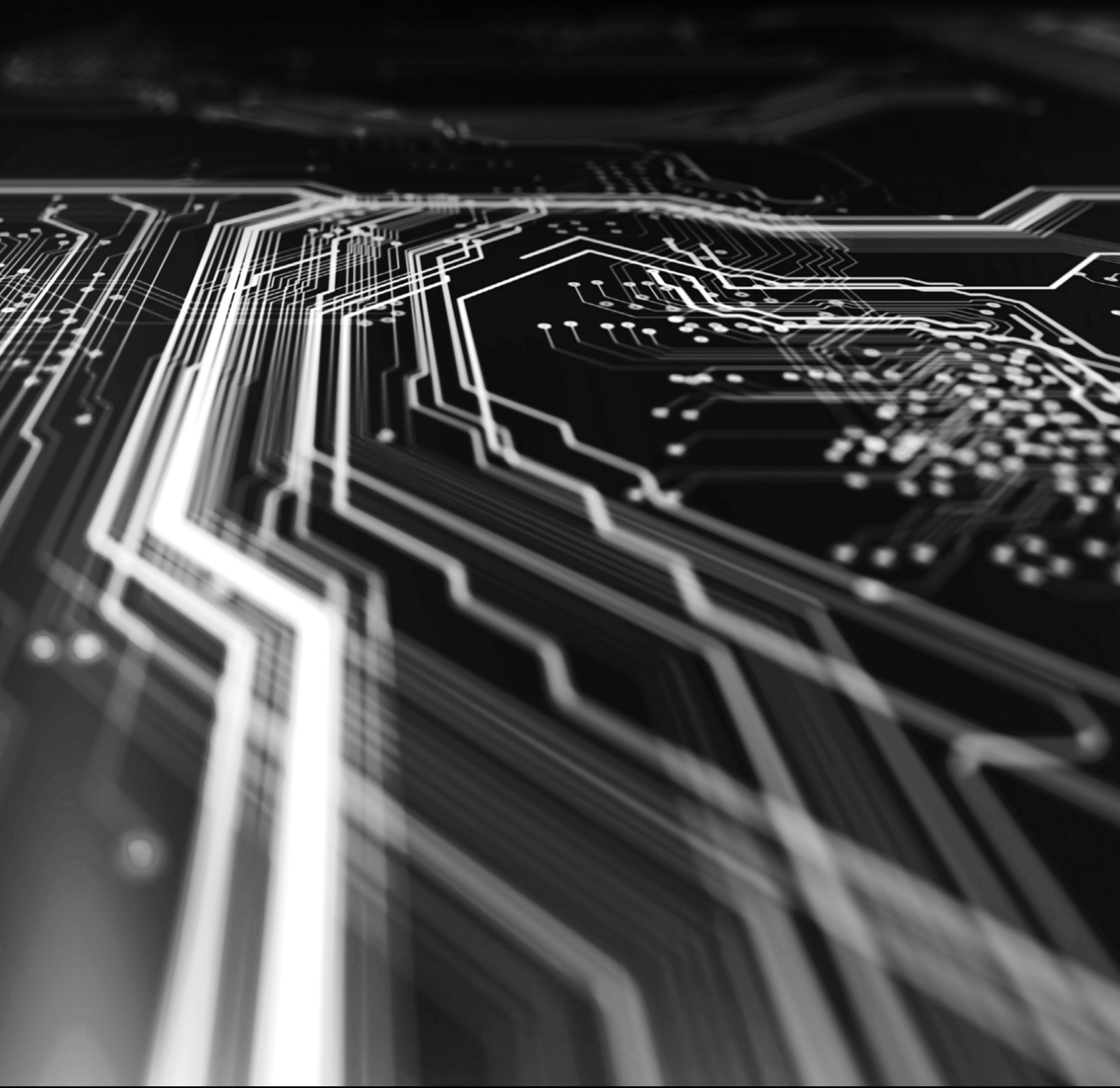
Open Banking:
Start Now and Move Fast



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Leaders of the Open Banking Movement Come in Many Shapes and Sizes, But They All Hold the Advantage

Open banking is proving to be a game changer for financial services. As the last pieces of a more modern, flexible technology infrastructure fall into place, Fintech disrupters and financial institutions with a clear strategy are surging ahead with innovative and profitable open banking initiatives.

Those that seize the opportunity to give their customers more, deliver it through unique and compelling digital experiences and work with Fintechs to challenge "the way banking is done" can adapt and thrive in a changing world.

Open banking is about solving the struggle to differentiate. It's about helping financial institutions use the wealth of data at their disposal to be truly innovative – launching new partnerships, new ways of engaging customers and new revenue opportunities. Ultimately, it's about being more nimble, agile and responsive to the ever-changing needs of clients, consumers and regulators.

By using means such as open application programming interfaces (APIs) to share banking data with other entities, financial institutions can:

- Co-innovate with third parties to expand their service offerings
- Create more intuitive and frictionless customer journeys
- Pursue new business models and revenue streams
- Accelerate growth and expand into new markets
- Increase speed to market without inviting additional risk
- Compete with Fintech challengers and the big banks

Increasingly, open banking is an important strategy and a necessary investment. Many financial institutions have already embraced open banking to deliver a superior customer experience, reach the next generation of customers through new distribution channels and grow deposits and loans outside their branch footprint. With many others gearing up to move forward with open banking initiatives, this leaves the minority of banks without any open banking strategy at risk of losing customers and being left behind.

Almost 80 percent of financial institutions have entered into Fintech partnerships, creating both disruption and synergies.

"Synergy and Disruption: Ten Trends ShapingFintech," McKinsey & Company, 2018

Open banking will both accelerate that disruption and allow financial institutions the opportunity to participate and benefit from the change.

Market Forces Shaping the Push for Openness in the U.S.

From a global perspective, the U.S. could seem behind in open banking adoption. The sharing of customer-authorized data has been mandated in Europe by the Second Payments Services Directive (PSD2), and in the United Kingdom by the Open Banking Implementation Entity (OBIE). Since those regulations were announced, many other jurisdictions such as Australia, Singapore and Japan have also passed open banking measures.

Meanwhile, the U.S. Department of the Treasury concluded in a 2018 report that the same type of open banking regulations cannot be readily applied on this side of the pond due to significant differences in the size, nature and diversity of the financial services sector between the U.S. and the U.K.

Whether or not formal regulation is to come, U.S. financial institutions have the same capabilities at their disposal as banks across the globe, and market forces continue to drive more American banks to launch open banking initiatives.

The U.S. institutions moving ahead now see the benefits of open banking not only for their customers and third-party partners, but also for their own businesses.

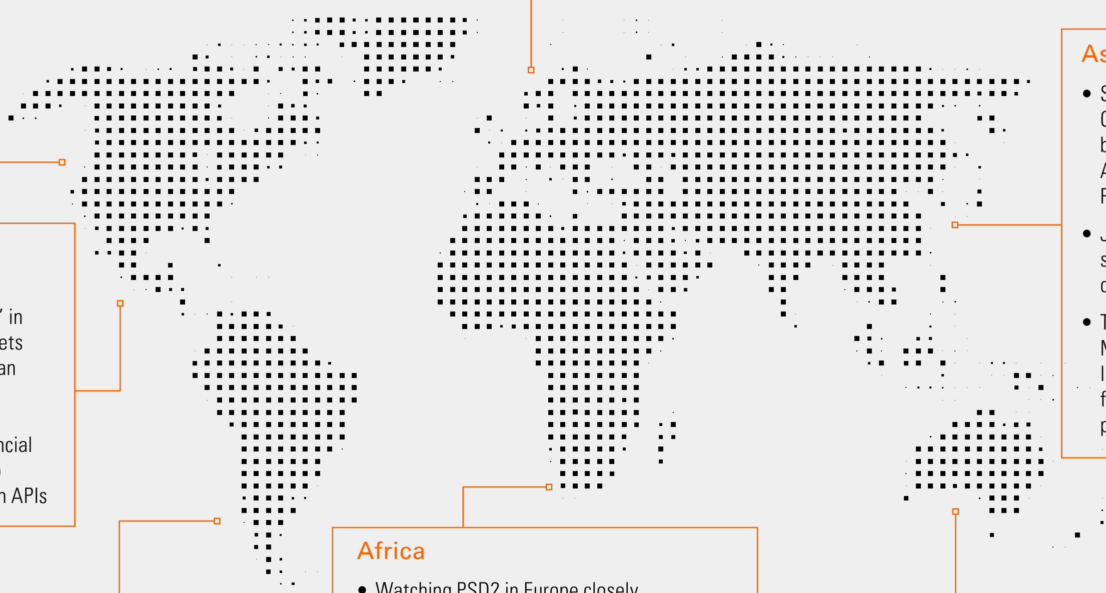
Open Banking Hot Spots

North America

- Industry-led initiatives for API standardization are ongoing
- Large bank and vendor API integration efforts are underway
- Canadian government launches advisory committee on open banking

Europe/U.K.

- Both the EU's revised payment services directive (PSD2) and U.K.'s Open Banking Standard are live



Asia

- Singapore, India and China take steps to boost open banking API adoption by Fintechs
- Japan implements slow rollout of open banking
- The Hong Kong Monetary Authority launches open-API framework in phased approach

Mexico

- Passage of "Fintech Law" in March 2018 sets the stage for an open banking standard by requiring financial institutions to establish open APIs

Latin America

- Brazil's central bank issues new banking rules
- Chile regulators follow Brazil's lead

Africa

- Watching PSD2 in Europe closely
- Nigeria sets up an Open Technology Foundation for developing open API standards
- South Africa Reserve Bank (SARB) establishes a Fintech program

Australia and New Zealand

- Implementing open banking regulations in a phased approach

The promises of open banking are the same opportunities banks have always looked for – accelerated growth, competitive differentiation, better customer experiences and new revenue.

U.S. financial institutions could still pull ahead in the race to create new, differentiated banking experiences. By some measures, open banking regulations in the U.K. have not yet produced the impact lawmakers hoped to see.

Nearly three-fourths of adults in the U.K. have not heard of open banking.

- YouGov® Custom Research, 2018

The competitive offerings predicted to emerge are taking a back seat while many U.K. banks focus on meeting requirements rather than seizing new opportunities. Some instances have even been reported of banks warning customers of the risks of open banking.

In a recent survey conducted by Tink, European financial executives struggling to check all the boxes of open banking compliance cited regulation as the single biggest overall threat to banking.

Freed from the need to make compliance their top open banking priority, U.S. institutions may have an edge in thinking innovatively and using new strategies to take on Fintech challengers or partner with them to create new products.

Banks Still Hold the Key to Consumer Trust

Fintech challengers have been slowly eroding banking relationships for years. Those potentially disruptive, sometimes unregulated businesses have been able to move forward with innovation quickly, offering simple but powerful services that fill gaps in the offerings of traditional financial institutions.

Companies like Venmo, Mint and Rocket Mortgage offer customers easy ways to make payments, understand their finances and get approved for a loan – services that should be table stakes for banks to deliver. Even the Starbucks app, with over $1.2 billion loaded on it at any time (as reported by the Wall Street Journal), holds more funds than many banks.

Fintechs aren't just acting more like banks, some are applying for federal bank charters to actually become banks.

As companies known for things like mobile card processing and e-commerce seek approval for banking charters, additional businesses outside the traditional banking realm may make similar bids – opening the door to a new species of businesses turned banks.

Financial institutions can use open banking initiatives to compete with the challengers in three key ways:

1. Moving faster to develop and deliver similar high-value experiences
2. Partnering with complementary Fintechs to expand their services
3. Becoming "the bank behind" the Fintech – offering Banking as a Service (BaaS) to fuel the tech company's banking functionality

The third option, BaaS, is not only a way for banks to avoid being disrupted by tech companies. It also represents a major opportunity for financial institutions to access new distribution channels for banking services and draw fee-based revenue from a source other than their accountholders.

By allowing Fintech partners to share in their banking ecosystem, financial institutions can participate in the growing migration of financial services from traditional banking channels into the fabric of customers' lives.

While consumers can continue to go directly to Fintechs for financial services, research shows financial institutions still have the home court advantage on consumer trust. When Bain & Company asked consumers in 2018 if they are willing to share more data to get a better product offering, 78 percent said they are willing to share with their primary bank, 63 percent said they would share with another bank, and just 43 percent would share with a nonbank.

This level of trust is due, in part, to the fact that the financial services industry is regulated to protect consumers. Plus, consumers have increasing concerns about the sharing of data between Fintechs and other entities. PayPal, for example, has disclosed the names of hundreds of third parties it may share a customer's personal information with.

So far, the industry has barely scratched the surface on the possibilities of BaaS. But a multitude of banks have launched successful partnerships with Fintechs. This model is relatively easy to pursue, and many banks are finding that they have their pick of Fintechs to partner with.

According to the World FinTech Report 2018, 75.5 percent of Fintechs surveyed want to collaborate with traditional financial services firms.

Customer data is being shared in multiple industries. However, financial and transactional data is of special interest to tech companies because of the many ways it can be used to add value. For example, imagine the type of highly personalized financial services that could be created by working with a Fintech to aggregate real-time data about customer spending habits, credit history and information from pay stubs. A financial institution could compare the information with the consumer's financial goals to offer more meaningful financial advice.

"While the banking industry will continue to be challenged and disrupted by digital giants and Fintechs, it is in the strongest position yet to reverse the dynamic and become a challenger and generate win-wins with the disrupters."

"From Challenged to Challenger: Becoming a 21st Century Bank in and Open Banking World," Celent, 2019

Competing With the Big Banks

Open banking can help level the playing field not only with Fintech challengers, but also with the nation's largest banks – which have been gaining ground in recent years.

Bank of America already has a relationship with one in five Gen Z consumers; and the 15 largest U.S. banks manage 77 percent of all FDIC-insured assets. With these big banks spending billions on technology, it's hard to imagine how smaller banks can continue to offer competitive offerings to attract new customers.

Open banking has in some ways intensified competition within the financial services industry, because the large banks have become some of the first movers in open banking initiatives.

For example, BBVA was among the first to launch a BaaS platform in the U.S., and the organization has recently announced a partnership with Wise, a Fintech that will leverage the BBVA Open Platform to offer digital banking for small business. Several others, including Wells Fargo, Bank of America and JPMorgan Chase, have launched their own developer hub that connects third parties to an API catalog.

At the same time, open banking has given community banks more ammunition to fight back by empowering them to work independently with Fintechs to create new solutions.

Banks of any size can participate in open banking and add value for their customers.

Largest U.S. Bank Tech Budgets for 2019

JP Morgan Chase: $11.4 billion

Bank of America: $10 billion

Wells Fargo: $9 billion

Citigroup: $8 billion

"Here's a breakdown of how much U.S. banks are spending on technology," Business Insider, March 2019

The Modern Tech Stack Changes All

While many financial institutions are eager to experience the benefits of becoming more open, it's important to note that the answer is nowhere as simple as opening the data floodgates. In fact, there's a wrong way to share data with third parties. Poorly implemented, open APIs can create a tangled web of integration, open security gaps and set a financial institution back rather than propelling it forward:

- Making complete data sets available in **industry-recognized standard formats** is imperative, such as those established by Afinis (formerly known as IFX or Interactive Financial Exchange) and the Banking Industry Architecture Network (BIAN)
- While interfaces are nothing new, more modern formats such as **JSON** and **RESTful APIs** are lighter, more flexible and require less bandwidth – making them ideal for a mobile-first world
- **Real-time events** drawn from the core and customer channels offer a particular advantage because they can create an event stream that gives third parties access to a wealth of data updated in real time

As noted by PwC in "Opening the Bank for a New Era of Growth," modern APIs can reduce the cost, time and complexity for banks to connect third-party solutions with their core systems. Celent goes a step further to declare early generations of technology "fundamentally incapable of meeting the needs of banks and Fintechs pursuing a platform strategy." In "From Challenged to Challenger: Becoming a 21st Century Bank in an Open Banking World," Celent outlines the following four principles of a modern tech stack: API first, cloud-native, open data model and real time 24x7x365.

With the latest waves of technology development bringing advancement to all four of those design principles, financial institutions are empowered like never before to transform the customer experience and help people bank the way they want to bank.

Case Study: Synchrony Financial

Synchrony Financial offers a key example of what financial institutions can create with open banking. The bank underwent an incredible transformation and in 2019, was awarded a Model Bank Award from research and advisory firm Celent.

The Celent case study shares how Synchrony Bank's strategy emerged from the desire to be a truly best-in-class digital bank. Its goal was to digitize customer-facing business services as well as internal processes to create a frictionless, end-to-end digital flow of data and services long into the future.

The critical technology achievement of the entire transformation is Synchrony's Business Services Layer (BSL). The BSL provides an intelligent cloud-based architecture from which new solutions can easily be plugged in and integrated to the entire landscape.

Because of the extensive transformation, the bank can implement capabilities in its digital platforms in an extremely short amount of time. The bank owns its own destiny, free to create differentiating experiences that allow it to compete and attract deposits against an ever-crowded market of challengers and entrants.

For example, when the bank launches its new account opening process, it expects the account opening experience to be 50 percent faster.

New Customers and New Ways to Serve Them

Today's customers are ready for innovation. The gig economy is exploding, with the U.S. freelance workforce now up to 56.7 million people, according to Upwork. Gen Z is predicted to become the most entrepreneurial generation yet, and both Millennials and Gen Z are fully digital native.

What will the face of banking customers look like in five years? What problems can financial institutions solve for them? As new customers emerge, so will new brands to meet their shifting needs.

By using open banking to expand their capabilities, financial institutions can develop a specific brand and expand into niche markets through their digital presence.

Which bank or Fintech will become known for helping microbusinesses thrive? Which will create unprecedented levels of personalization and become branded as the bank that knows you?

Imagine that a financial institution has set a strategy to become the leader in helping consumers take control of their finances. Open banking can support this goal by making it faster and easier for the bank to partner with third parties to offer integrated personal financial management tools for budgeting, purchase affordability and automatic investing.

As consumers go about their lives, financial institutions can continue offering financial guidance in other contexts. By partnering with e-commerce sites like Amazon, banks could make real-time banking account balances and monthly budget information visible at the point of purchase. The bank could also make HSA account balances and other account details available through popular pharmacy apps to support better-informed decisions about healthcare spending.

Freely sharing data can also help banks remove friction from these experiences. For example, if customers would like to create a monthly budget through a bank's online budgeting tool, all known information about them, including detailed spending habits, can be auto-filled into the form. They can easily save progress and continue where they left off from another device or at a branch.

This type of advanced support for customers' financial health encourages customers to deepen emotional bonds to the financial institution. It's also the type of service customers would be willing to pay for – creating the potential to draw in new customers and generate additional revenue.

Solving Problems for Commercial Customers

Financial institutions interested in using open banking to pursue new business models may find that commercial customers offer some of the strongest opportunities for growth and expansion.

When business customers do well, the banks that serve them do well – and with open banking there will be many new ways to help them prosper.

Consider the property management industry as an example. These firms manage a large number of properties and an even a larger number of accounts manually. Financial institutions can give them a more efficient way to manage all of their finances by sharing data about account balances and transactions in real time with property management software.

This makes it easy for the property management companies to reconcile operating accounts on the fly. When a company purchases a new rental property, its bank could provide the loan and offer services that automatically sign the property up for landscaping services, trash collection and other utilities.

Any number of niche markets could be served by creating these types of compelling experiences. Financial institutions could also expand their services to offer conveniences with a broad appeal across industries, such as HR and marketing support, accounting services, risk analysis and insurance.

Where's the Money?

The need to embrace new strategies and compete in different ways is clear, but how do financial institutions monetize open banking? At the most fundamental level, financial institutions can use open banking technology to accelerate digital transformation and create differentiating customer experiences – boosting adoption of digital channels to drive relationships, revenue and retention. Open banking can also support expansion into new markets, driving deposits to fuel lending.

Beyond supporting the more traditional methods for banks to make money, a number of pricing models can be followed to turn the sharing of banking data or functionality with third parties into a revenue driving activity.

Banks that choose to share data can charge fees to third parties based on the volume or type of data they consume, the number of times they call for data, or the number of transactions completed through an interface. There are also various ways for banks to pass on a portion of the fee to their customers, or to earn revenue from other banks by building and selling new innovations through an open marketplace.

Similarly, financial institutions that choose to share banking functionality with third parties can generate fees from their Fintech partners or the Fintech's customers (the consumer of the banking services).

As additional revenue streams materialize – including many options banks may never have considered before – the modernization and standardization of open banking continues to make it faster and easier to move forward. When the first waves of open banking technology were developed, lengthy and complex professional services engagements were required. Today, new possibilities are developing rapidly, making it easier than ever to embrace open banking strategies.

How to Win: Think Like a Venture Capitalist

The range of responses to open banking will be great. Some financial institutions will use open banking technology to reimagine a new digital future and flourish beyond all expectations. Some will move forward with the new innovations forged by others. Those who stand still will not remain standing.

In a consolidating industry, where the number of FDIC-insured banking institutions has dropped from over 8,500 to about 5,600 in a decade, financial institutions need to be bold, collaborate and continue innovating to secure their future.

Open banking strategies allow financial institutions to be creative and differentiate in the same way a venture capitalist identifies a problem and then devotes resources to solve it in a way that's unlike anything the market has seen before.

A clear strategy and the right technology, resources and support are all that's needed to move forward. And yet, many banks struggle to embrace transformation.

Banks struggle between the need to open their systems to external partners and clients via APIs, and the business imperative to not lose control of the user interaction with their clients.

"Corporate Banking API Strategies and Monetization," Aite, May 2019

For some organizations, it can feel like going against their nature to share customer data with third parties. Others may hesitate due to the perceived risk of sharing data. Many have trouble making the investment without a direct tie to immediate revenue.

Those concerned with security should consider the uncontrolled methods of data sharing happening today. Many third-party data aggregators ask customers to share their online banking user credentials and then use screen scraping to gather data. This puts customers at risk when they lose visibility into how their data is used and by whom.

Banks can fear this inevitable open-banking transformation, or they can embrace it, and benefit from becoming the solution provider that customers are so desperately seeking.

"Open banking is an opportunity," BankThink, American Banker, April 2019

Using an open banking approach, financial institutions can actually create a more secure method of offering customers the same services. Banks that employ a layered security strategy using technology from a trusted vendor can take advantage of the ideal ecosystem for data sharing. Furthermore, financial institutions can minimize risk by sharing data only when there is a sound business case for doing so and appropriate security measures are in place.

Financial institutions will need to consider both their opportunities and what may hold their organizations back. Changes may be required to their business model, operating model and infrastructure.

If there are any cultural limitations to being bold, these should be acknowledged. Open banking can help support and foster a culture of co-innovation.

The real risk posed by open banking is missing out on the reward of moving forward – and creating the potential of being left behind.

A Strong Foundation for Open Banking

Fiserv solutions are built on an **enterprise services framework** (ESF), which creates an open and simplified flow of information between solutions.

For financial institutions wanting to make non-Fiserv solutions part of the customer journey, the ESF ecosystem is made available as **Communicator Advantage™ from Fiserv**. Developers can use Communicator Advantage to integrate to Fiserv technology. Communicator Advantage exposes tens of thousands of fields from bank core solutions from Fiserv through standardized methods.

Real-time notification cloud streams are unique to the Fiserv offering and make it possible for developers to incorporate real-time event notification into new applications. Fiserv currently processes 500 million events per month.

In addition, **API management** capabilities and **microservices** are coming soon.

Go Big or Go Home?

Pioneers of the industry have used open banking to accelerate their business in a variety of ways – replatforming their banks for greater agility, opening their own developer portals and building services on top of their data that are resold to other banks and Fintechs.

All these options and countless more are possibilities for financial institutions to pursue. But less aggressive financial institutions don't necessarily need to take on massive projects to profit from open banking.

Even small steps forward in a phased approach can have a positive impact on growth and revenue.

Wherever banks choose to start, they should focus on creating differentiation in the market, making a positive impact on the consumer experience and aligning themselves with a technology partner that offers as much strategic and tactical support as desired.

While highly aggressive banks may want a technology provider committed to providing more flexibility and agency – empowering them to manage their own transformation – others will prefer strategic guidance and partnership.

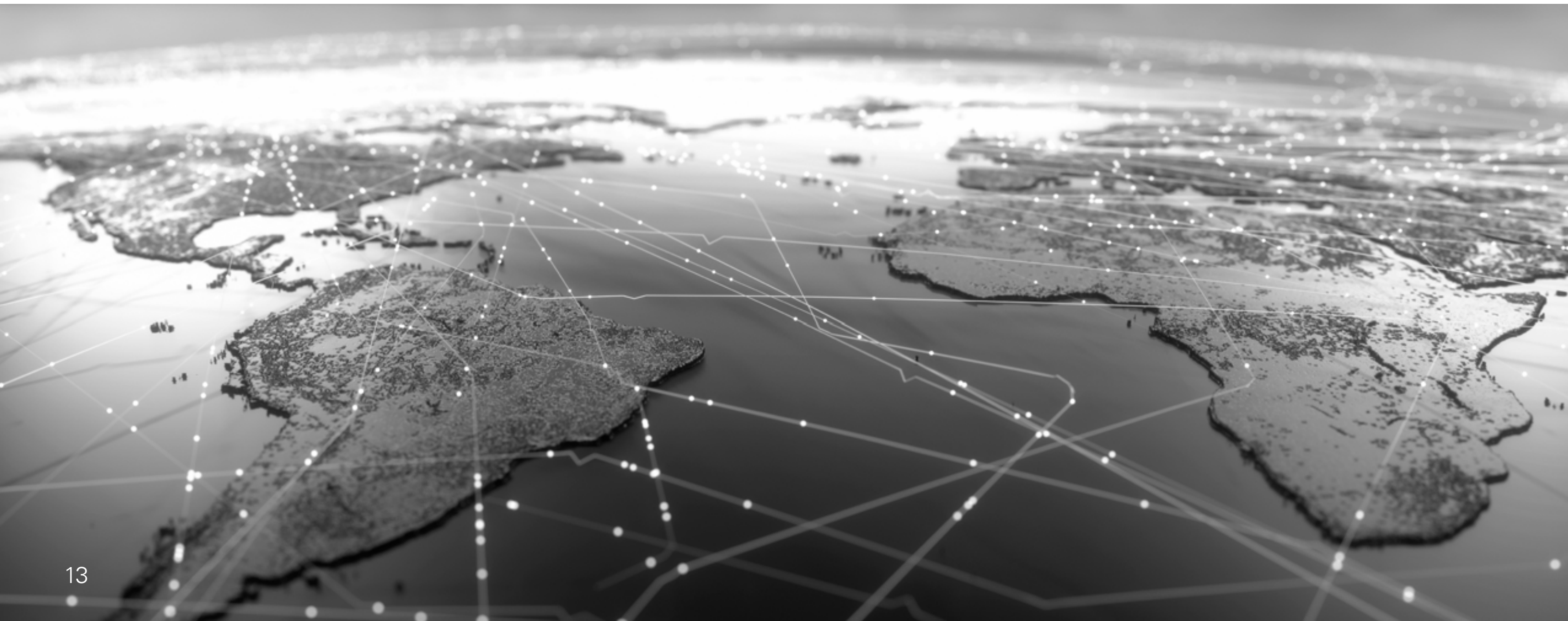
Commitment to Open Banking

Building on foundational components already in place, Fiserv continues to implement its open banking strategy, which involves the following key deliverables:

Developer Workspace: Clients and other Fintech developers can access Fiserv open APIs, documentation and notification cloud steams. This environment will offer a sandbox for testing, support and code validation.

Solutions Marketplace: Clients can use this Fiserv-sponsored ecosystem to explore and purchase innovative Fintech products that are preintegrated to Fiserv solutions.

Open Banking Platform: This Fiserv solution will help financial institutions offer their own open banking portal – enabling them to offer Banking as a Service, co-innovate with Fintechs, deliver financial services through exciting new channels and accelerate time to market.



Banks of any size and appetite for open banking should look for a technology partner focused on:

- Offering complete data through modern methods and in standard formats
- Providing new, easier ways to access and share data
- Offering open event streams from the core and surround channels
- Maintaining data security and transparency
- Supporting faster time to market of differentiating capabilities
- Making it easy to develop, collaborate and test emerging concepts
- Helping financial institutions take advantage of innovations created by others
- Enabling a strategy of selling bank-developed innovations to others in the industry

Open Marketplaces Spur Innovation

It's worth expanding on the last two bullet points regarding what to look for in a technology partner. Integration and data aggregation tools are useful, but will take an organization only so far. Open APIs and API management capabilities may be essential tools when it comes to open banking, but the real payoff of open banking comes from collaboration and the ability to tap into the creativity of others.

Open marketplaces, where financial institutions can access solutions created by others, enlarges the pool of talent, resources and inventiveness brought to bear on market challenges. Ultimately, this can enable financial institutions to deliver greater value to their customers through personalized rather than commoditized services.

By making the sharing of innovation possible, open marketplaces reduce the time, effort and expense involved in bringing new products and services to market.

Open Banking Is Crucial to Thriving in the Future

Banks have a large quantity of high quality data at their disposal. By using open banking to share that data with other entities, they can co-innovate with Fintechs, develop value-added services on top of their solutions, differentiate their brand to drive retention and growth, and explore new, profitable business models.

While many financial institutions are already profiting from open banking, the full potential is still coming into focus. Open banking may become a catalyst to interconnect everything and create unprecedented levels of personalization. It may also spur additional innovations in AI, robotic process automation and data analytics.

As more banks and Fintechs make inroads with open banking strategies, one thing is clear: open banking plays a crucial role in the future of banking.

Changes to the competitive landscape will keep coming faster than ever.

In the end, the victors will not be those who stand back to watch how it all unfolds. They will choose their destiny, take control of the customer experience and test the boundaries of how and where financial services are delivered.

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For more information about how Fiserv can support your open banking strategy, call 800-872-7882, email getsolutions@fiserv.com or visit fiserv.com.

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