Embracing a Banking Ecosystem to Transform and Innovate

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Introduction

In response to evolving consumer expectations and rising competitive pressures, the banking industry is undergoing multibillion-dollar digitization transformation. These initiatives are focused on fundamentally changing the entire banking technology stack, including reimagining the business with a customer-centric approach.

With traditional banks increasingly relying on technology, financial technology (fintech) services adoption is also experiencing rapid growth. Fintechs raised $33.9 billion in venture capital in 2019 alone. In Europe, new entrants in the banking industry such as digital-first banks, non-bank payment institutions and big technology companies have captured one-third of all new revenue since 2005, jeopardizing the competitiveness of traditional banks.

> North American banks risk losing $88 billion in payments revenue through 2025[1].

Underlying this transformative change is a disaggregated value chain that cuts across businesses and industries, leading to increasing interdependencies on a model that relies on networks and the power of many. Through collaboration with external partners such as fintechs, advisors, third-party developers and other technology partners, banks are joining the value chains of different industries to create ecosystems. The goals include a reduced cost to serve, improved efficiency and reduced friction, thus providing customers with new experiences and stimulating their desire for more. If implemented correctly, a banking ecosystem is able to create a customer-centric, unified value proposition that expands beyond what customers could previously get.

In this paper, ISG focuses on the factors that impact the banking industry and how banks can leverage ecosystem partnerships to survive in this constantly changing competitive environment.

Banks Redefine their Role as Trusted Brokers in the New Economy

Building partnerships and developing or operating in an ecosystem can benefit banks and customers in myriad ways. Modernization via partnerships with fintechs or other technology companies is often a more palatable solution than a complete legacy technology overhaul, which can create overwhelming technical debt.

> 67 percent of customers are ready to share personal data with their banks but demand personalization services in return[2].

Banks today also face security and compliance challenges as well as the need for appropriate talent in emerging areas such as data science and innovation. Securing access to skills through an ecosystem mitigates the risk of a talent shortage. For example, by operating in an ecosystem that includes emerging AI technology, banks will have greater power to check fraudulent transactions and stay compliant with the latest regulatory requirements. Access to the latest technology – for example, next-generation virtual assistants and AI-based analytics tools that help predict spending – will help banks create personalized experiences across multiple channels and buying stages. In addition, banks with support from ecosystem partners will find ways to generate additional revenues, which is often difficult to achieve, particularly since the great financial crash of 2008/9.

Standard partnerships with financial startups enable banks to react quickly to market trends and customer demands. The risks and costs of revamping the old, complex IT systems are often too much for banks to bear. Therefore, banks are looking to integrate their core systems with third-party tools, which is a more convenient, cost-effective approach and curtails the bank's downtime risk. This approach allows banks to continue their activities based on their core system and retain customers with innovative services.

Banks Redefine their Role as Trusted Brokers in the New Economy (continued)

For example, Standard Bank, the biggest financial group in Africa, has partnered with Amazon Web Services (AWS) to enhance customer-facing web and mobile applications. The bank will take advantage of the analytics and machine-learning (ML) capabilities of AWS to advance fraud detection and introduce new services, such as ML-based advisor capabilities that will help customers make more informed financial decisions. The following section illustrates ways in which banks, along with their partner ecosystem, can resolve some of the most demanding issues they face today.

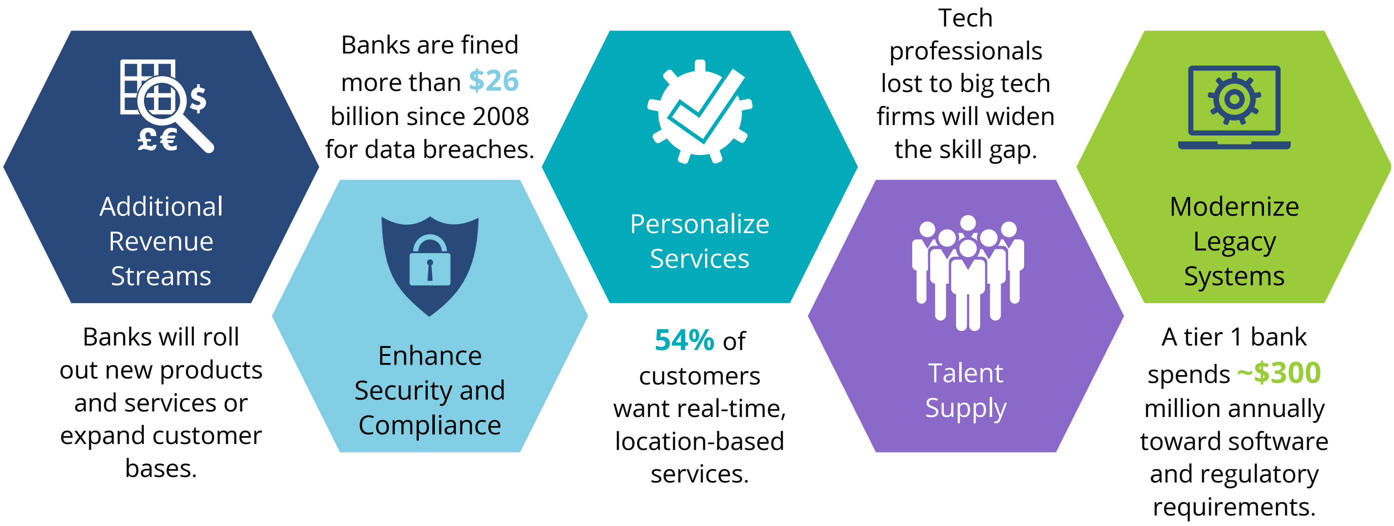

Figure 1 – Key Benefits Banks Accomplish Through Ecosystem Partnerships

Creating New Monetization Opportunities

The majority of banks have not reported sustained revenue or profitability growth for many years, especially in retail banking. U.S. banking sector profits dipped by 1.5 percent in 2019 compared to the prior year, and 7.2 percent of banks were unprofitable[3].

To improve profitability and create new revenue streams, banks are now looking toward an ecosystem of partners that can help them roll out new products and services or expand their customer bases by reaching out to new segments. For example, Goldman Sachs, a traditional investment bank and trading house, launched Marcus in 2016. Marcus is an online platform that expanded the bank's services to target a new set of midmarket retail customers, with offerings such as personal loans and savings accounts.

Banks can also allow ecosystem partners to access their customer data in exchange for a fee. Banks that have successfully built partnership ecosystems and monetized data have been able to raise their return on equity (ROE) from digital customers far above the ROE from their traditional customers. The two online consumer marketplaces launched by DBS – DBS Car Marketplace and DBS Home360 – have made banking more interactive and intuitive for its customers. The number of DBS digital customers has increased, and its ROE for those customers stood at 27 percent, which was 9 percentage points higher than customers in the traditional segment.

Banks Redefine their Role as Trusted Brokers in the New Economy (continued)

Enhancing Security and Compliance

As customers and businesses increasingly transact online, the risk of data breaches grows daily. Financial services companies in the U.K. reported a fivefold rise in data breaches in 2018, and India's federal bank, Reserve Bank of India, announced that online fraud led to more than $20 million in losses to banks during the last fiscal year. Fraud and cybercrime are not just a risk to customers; they are also a significant threat to banks in terms of reputational damage and punitive fines. It's estimated that global regulators have fined banks more than $26 billion since 2008 in relation to data breaches.

> 28 of 40 U.S. banks had lower reputation scores from their customers in 2019 compared to 2018.

Besides enhancing customer experience at the front end, advancements in technologies such as big data, AI and next-generation predictive analytics are also helping banks to meet compliance requirements, detect security risks and ensure adequate risk management. To accomplish that, banks and financial startups have formed strategic partnerships in the areas of payments, trading and transactions during the last few years. Such partnerships enable banks to detect fraudulent behavior by analyzing data streams to identify suspicious transactions from customers. For example, deploying intelligent automation tools in the "know your customer" (KYC) process can reduce data collection time by up to 95 percent while also increasing customer satisfaction by creating greater up-front visibility into the process and providing frequent status updates. Use of technology from fintechs (such as, 'compliance as a service') also drives compliance process efficiencies by streamlining and reducing the chance of human error, while ensuring the latest standards are understood and met.

For example, Citibank has partnered with a data science company Feedzai for real-time risk management and to deploy a transaction monitoring platform. Embedded with machine-learning capability, the system can automatically track unusual payment behaviors, which enables Citibank to manage risk and keep customers away from fraudsters.

Offering Integrated, Contextualized Experiences

Driven by technology, millennials and Gen Zers expect consumer-grade experiences from their banks. Research indicates that 83 percent of millennials are willing to change banks if competitors provide better offers that are more relevant to them.

Nonetheless, banks continually fail to engage with younger customers and do not typically deal well with their changing demands. The U.S. banking industry is also facing a reputational crisis according to the latest annual survey done by American Banker and the Reputation Institute. Twenty-eight of the 40 banks had lower customer reputation scores in 2019 than in 2018.

Increasing levels of customer dissatisfaction suggest banks are not getting the personalization mantra right. This may be partly explained by the complexity of master data management for large banks with multiple data stores that operate across various legacy platforms. The challenge is how to aggregate the data, manage it, maintain its currency, gain insights from it, and ultimately monetize it.

Banks Redefine their Role as Trusted Brokers in the New Economy (continued)

83 percent of millennials are ready to switch to a competitor bank if they find their offers more exciting[4].

Studies indicate that 54 percent of customers want real-time, location-based services and 58 percent want to have information about services exactly when they need it. Therefore, banks are looking to collaborate with partners to carry out mass personalization projects and access the technological capabilities that they lack. Companies such as Optimizely, Braze and Crayon Data help banks personalize their customer experience. The AI-enabled recommendation engine maya.ai from Crayon helps banks create personal digital experience for customers with the help of ML algorithms. It provides a mix of recommendations to customers based on their purchase behavior and matches them to merchants as well as offers based on their taste. These functions lead to an increase in offer coverage, better personalization and ultimately of course, increased revenue for the bank.

Israel Discount Bank launched Didi, an AI-powered digital financial assistant from Personetics, which provides customers with a view of their finances, enables them to manage day-to-day financial activities, and offers insights and advice. Going forward, the bank plans to provide personalized advice for investment and loan decisions using that platform.

Driving Innovation Through Legacy Systems Modernization

Among the biggest challenges for established banks are their legacy systems, which often hinder them in competing with nimbler, digitally native counterparts. The cost of maintaining and upgrading this infrastructure is high; banks typically spend 80 percent of their IT budgets on maintaining legacy technology. A tier 1 bank spends approximately $300 million each year to update software and meet regulatory requirements, according to Financial News[5].

Banks are partnering with third-party providers to overcome the technical issues related to legacy systems. For example, Nomura has partnered with Line to offer online brokerage services; Santander has introduced Albert, an invoicing and expenses app for sole traders and micro businesses; and Sberbank has partnered with the Norwegian mobile payments solution provider Auka to remove the inconvenience of cash transactions and lengthy bank account transfers.

Banks Redefine their Role as Trusted Brokers in the New Economy (continued)

Addressing the Talent Shortage

Banks are increasingly using technologies not only to lower costs but to deliver seamless customer interactions, to get new insights about brands and markets, and to offer more tailored and targeted products and services. This has led to huge demand for application experts (including software engineers), network specialists, and user interface, analytics, and AI professionals. Perhaps the hottest area for recruitment in banks today is data science, with institutions eager to hire resources with the skills to provide insight from their petabytes of data. However, the industry is experiencing a widening skills gap that is expected to increase in the next five years. Moreover, many believe that the most talented professionals are likely to be lost to non-financial big technology firms.

To help address the talent deficit, many large banks are forging fintech partnerships to establish an opportunity for leveling the playing field by replacing manual processes with technology-enabled cloud services right out of the box. Bank of Ayudhya (BAY), Thailand's fifth-largest lender by assets, has partnered with 25 fintech companies to access their tech talent to develop innovative technologies. The bank intends to partner with an additional 15 financial technology firms in the near future.

85 percent of retail bank executives feel that they will face an IT skills shortage in the next five years[6].

Incumbents	Tech Firms	Fintechs	Service Providers
• Strong existing relationships • Customer reach, have large capital and industry expertise • Rich data and customer trust	• Innovative service models • Scale and capital • Industry-agnostic large customer base • Massive network and compute power	• Greater convenience and personalized service • Innovative products • Backed by venture capitalists • Lacks legacy systems and saves cost on real estate	• Highly skilled people, centers of excellence and research/data labs • Strong consulting practice • End-to-end solutions • Partners and alliances • Integrated service delivery model

Figure 2 – Banks and Third-party players bring Unique Advantages to form a Successful Partnership Ecosystem

The New Wave of Banking Partnerships Models

Banks are going beyond a standard working relationship with third-party providers and partnering in more sophisticated ways to accelerate their transformation journey. As banks attempt to set up their alliance ecosystems, ISG observes they are partnering in four different ways to drive their innovation strategy. In the following section, we describe the various ways banks are forming allies and what they accomplish from each type of engagement.

Figure 3 – Four Forms in which Banks Partner in their Alliance Ecosystems

Collaborative Partnerships to Co-develop Solutions and Improve Client Experience

Banks continue to heavily invest in technology and digital transformation initiatives ranging including increasing efficiency in back-office and middle-office processes, improving the workplace experience to drive productivity, and reducing friction on customer journeys to raise loyalty and wallet share. Banks have been addressing all these initiatives by actively working with tech companies and financial startups to co-design solutions. For their part, start-up tech firms relish the opportunity to leverage the scale and trust enjoyed by established banks – both banks and fintech startups have distinct advantages to offer, so partnerships make intuitive sense.

ISG is witnessing partnerships between banks and tech companies to accelerate innovations and to develop solutions for other banks and financial services institutions in the form of a utility service. For example, IBM and Bank of America have collaborated to build a public cloud platform that will help address financial services institutions' requirements for regulatory compliance, security and resilience. Banks are also setting up business units to continuously look for new opportunities to collaborate with partners and find suitable startups. Standard Chartered established SC Ventures, a platform to recommend startups to the bank for future collaborations, and Santander and other banks have their own incubation units for new ventures.

The New Wave of Banking Partnerships Models (continued)

Co-innovation: Developing use Cases and Moving a New Technology into Production

> Banks and technology providers are setting up joint ventures or utility services to share the benefits of pooled costs and shared operations.

Banks are looking to accelerate the development of new ways to use technology and are working with technology and service providers to develop use cases by setting up sandboxes in the form of data labs or innovation labs. This allows banks to simulate a production environment, including testing the responses from the systems it communicates with. The sandbox permits new developments to be built and tested, completely detached from the bank's production environment. Infrastructure as a service is a useful resource for sandbox and other development environments.

For example, Australia-based Westpac Bank launched its innovation hub in Singapore as part of its strategy to increase collaboration between fintech companies in Australia and Asia. The bank will work with financial startups to test and develop solutions in the area of regulatory technology, data analytics, AI and payments. It plans to take advantage of Singapore's leading fintech ecosystem, regulatory landscape and skilled talent pool to create competitive advantages across its portfolio of services.

In another example, banks in a blockchain consortium are working together to try to develop use cases for moving technology into production. Focus areas on the investment banking side include trade finance, funds distribution and bond issuance; on the retail banking side, they include cross-border payments, customer onboarding and payments processing. The Voltron trade finance blockchain consortia, which is led by R3 and CryptoBLK, has 12 partner banks such as HSBC, BBVA and BNP Paribas with the objective of digitizing paper-based letters of credit to reduce fraud and speed up document turnaround.

Using Joint Ventures to Address Common Market Issues

Banks and technology providers may look for opportunities to set up a joint venture or utility service if they can identify a sweet spot for a service that would not only enable sharing operations and technology costs, but also be attractive to others across the industry. This is not an easy path to navigate, which is why we see so few real-life examples. Evidence suggests that commercial and proprietary concerns can only be set aside in what may be considered non-differentiating functional areas such as reference data and regulatory reporting, and to a lesser extent risk management. In these areas, it makes sense to share the benefits of pooled costs and collaboration.

The New Wave of Banking Partnerships Models (continued)

By way of example, with increasing challenges regarding regulation, risk management, and product variance, banks are working together to ensure high-quality reference data. Goldman Sachs, JPMorgan Chase and Morgan Stanley came together with SmartStream, a technology and managed services provider, to create a utility model in this space. The utility will provide accurate and timely reference data for use in regulatory reporting, trade processing and risk management operations. Clients will be able to access a multi-tenant environment that will allow data collection, cleansing and change management based on tailored integration standards to develop a customized and secure master database.

While Least Preferred, M&A Continues to be Prevalent

In some circumstances, banks may prefer to acquire service or technology providers and fintech startups. An acquisition involves plugging the solution into their existing operating model, ensuring it integrates with existing systems and platforms. Acquiring a fintech company increases the bank's digital footprint and can be an effective way to leapfrog the technology development process and gain fintech capability. It is also a shortcut to entering new markets, acquiring new customers and accessing talent.

The largest U.S. banks have ramped up investments to accelerate their transformation efforts and avoid threats of disruption and competitive disadvantage. During the first eight months of 2019, major Wall Street banks acquired 24 fintech companies, with Goldman Sachs being the most active buyer followed by Citi and JPMorgan Chase. Goldman has also targeted consumer financial startups to gain engineering and product teams through its acquisitions of Bond Street, Final and Clarity Money.

However, many banks are still trying to find the best ways to evaluate their purchases, and acquisition is one of the least preferred approaches we see in the industry today. Some of the most common challenges include estimating the right valuation, retaining talent and integrating an entire business into the bank's existing value chain, which is often made more difficult due to cultural differences.

Conclusion

Succeeding in an ecosystem differs in many ways from succeeding in a traditional banking environment. Conventional banking approaches are still centered on product and distribution, while operating in an ecosystem demands a more customer-focused model through the provision of platforms and services to enable targeted, relevant customizations. Ecosystem players can help banks meet the multidimensional needs of customers by providing one-stop shopping for many financial and non-financial products and services. Resources needn't be a prohibitive constraint, because partners in an ecosystem can find ways to best coordinate the total pool of resources and skills to service customer needs and not depend on one company's funds, capabilities or talent.

The use of technology also expands from trying to improve efficiency and reduce cost to building a multifaceted, outward-looking organization focused on customer insight, intimacy and experience. In turn, this will drive differentiation and increase market share and associated revenue. An effective partner strategy enables this change and powers the transformation.

References

[1] Accenture, 5Big Bets in Retail Payments in North America, November 2019.

[2] Accenture, 2017 Global Distribution & Marketing Consumer Study: Banking Report, 2017.

[3] Press Release, Federal Deposit Insurance Corporation, 25 February 2020.

[4] What motivates Millennials to switch financial institutions, Kasasa Survey, 2016.

[5] Banks face spiraling costs from 50-year old IT, Financial News, October 2, 2017.

[6] Peru Consulting, IT Professionals and Consumers Research Study, 2017.

Meet the Team

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As ISG's Lead Partner for Banking & Financial Services, Owen Wheatley has built a decorated career, serving major clients around the world, advising them on a broad range of market trends, emerging technologies and associated strategies. With responsibility for senior client relationships, business growth, go to market strategy and delivery excellence through the management of high-performance advisory teams across multiple regions, he sits on ISG Executive Committees in both the USA and Europe, and continues to be a widely published thought leader in the industry.

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