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Banking-Operations-as-a-Service – An Emerging Revenue Stream for Banks

Abstract

The evolution of banking has become an unstoppable phenomenon driven by the digital revolution and evolving customer expectations. Fintechs and challenger banks are eating into the customer base of incumbent banks and adversely impacting their market position. The advent of Open Banking is offering incumbents an opportunity to retain the market share by creating ecosystems that nurture fintech-incumbent partnerships through new business models for specific use cases. Another avenue open to incumbents is banking operations as a service, where traditional banks can create a digital grid to power the startup ecosystem by leveraging the deep domain knowledge and operational expertise acquired over past decades. Over the years, banks have invested heavily in acquiring domain and operational expertise and the time is now ripe to unlock value by creating a new revenue stream. This white paper explores the banking-operations-as–a-service model and examines its potential to emerge as a new revenue stream that can position banks as an operational service provider, rather than a competitor, to fintechs and challengers.

The BaaS Landscape

Banking-as-a–service (BaaS) is an emerging phenomenon that banks are exploring by creating new business models and evaluating next generation banking platforms. Some of the typical BaaS business models include:

- Creating a next generation banking stack on the cloud by procuring commercial off-the-shelf products and exposing them as application programming interface (APIs) to fintechs

- Integrating digital services through APIs and co-branding products and services to extend customer trust to banks' fintech partners

- Developing APIs to provide access to operational capabilities and domain knowledge garnered by incumbent banks over decades to offer banking operations as-a-service to power fintechs and challenger banks

While the first two business models have attained a certain degree of maturity, the third one is still at a nascent stage in the industry. In our view, the third business model has the potential to open up new revenue streams and deserves closer scrutiny.

Monetizing the Operational Excellence

Fintechs are currently offering a small subset of products offered by traditional banks to a much smaller subset of customers. Fintechs are also launching specialized offerings for specific financial needs resulting in the creation of wealthtechs, lendtechs, insurtechs, paytechs and so on. As challenger banks and fintechs grow their customer base, they will be challenged by operational issues that large traditional banks have already faced and resolved through robust digital operational processes that are both resilient and compliant with local regulations. This paves the way for banks to monetize their domain knowledge and operational expertise by offering *banking-operations-as-a-service* (BOaaS) through APIs to fintechs and challenger banks. In addition, catering to the innovative operational requirements of fintechs will enable incumbents to evolve their own operational platforms in an agile manner. By facilitating modifications to their business and operating models, this model allows banks to embrace the risk associated with market changes induced by new entrants and adopt suitable operational innovations to retain their competitive edge.

Most challenger banks are concentrating on acquiring more customers and providing compelling products and service experience without adequate focus on building the underlying operational infrastructure and establishing robust processes. For example, account closure sounds comparatively simple but

closure triggered by customer bereavement will entail transferring the funds to the nominee's account; the situation becomes more complex in the absence of a registered nominee. Such 'long-tail' use cases are ideal candidates for 'service consumption' by fintechs as they not only require a lot of technology investment but also appropriate domain knowledge to design and implement a compliant process.

Use Cases Suitable for BOaaS

Many use cases exist across lines of business like retail banking, risk and compliance management, and cybersecurity where banks can position themselves as service providers to fintechs and challengers.

Retail banking

Digital on-boarding leveraging optical character recognition (OCR) and face validation using artificial intelligence (AI) techniques, real-time anomaly prediction and prevention using streaming analytics, automated clearing houses and invoice matching using AI tools are some examples of cognitive business operations that banks can expose as APIs to the startup ecosystem. Case management, particularly complaints, disputes, and account closure are involved workflow capabilities that banks have automated and can be exposed as APIs to challenger banks and fintechs. In addition, based on the nature and severity of the case, customer communications can be exposed as APIs as banks have mapped communication modes to case types, time of day and customer segments.

Cybersecurity

Most challenger banks and fintechs are not as yet targets for cyber attackers as they 'hide' behind traditional banks. As new entrants grow in terms of customer base and offerings, they will require next generation cyber security. AI based systems trained with banking services data, transaction patterns and end user behaviour will be key to detecting threats in real time.

Financial institutions have invested heavily in security controls and heuristic fraud management systems to combat such threats. Sophisticated systems built using AI models (intelligent firewalls and velocity controls) to provide multiple layers of security controls are part of the cyber protection armoury of banks. Banks have AI based fraud detection and prevention models that score transactions in real-time by combining transactional data with end user telemetry and subsequently restrict or even block transactions as appropriate.

Regulatory compliance

With fintechs growing in number and economic influence, governments across the world are formulating policies to bring them under the regulatory umbrella. Banks have made huge investments in creating complex platforms with AI based modules and workflow systems to comply with global as well as region-specific regulations such as the Sarbanes-Oxley Act (SOX), Basel Committee standards, Markets in Financial Instruments Directive (MiFID), and Foreign Account Tax Compliant Act (FATCA). We expect new entrants too to come under the ambit of these regulations or their modified versions sooner rather than later. Banks have also established robust anti-money laundering (AML) and counter terrorism financing platforms and processes covering the entire customer life cycle and gained in depth contextual knowledge of the regulatory landscape. A few fintechs are proactively building such capabilities in-house with varying degrees of success. However, a majority of them are yet to move in this direction. This creates an opportunity for banks to develop an API framework and offer regulatory-compliance-as-a-service to fintechs.

Risk management

Alternative lenders rely on AI models to process data from various data sources and determine the credit worthiness of customers. While this route does not pose too much risk during high growth periods, it may expose fintechs to dangerous levels of risk during an economic downturn. On the other hand, incumbent banks' credit policies, models and processes have been tested over a number of economic booms and downturns. While there is need to further improve these models to support financial inclusion and capitalize on evolving market opportunities, it is indisputable that these models have withstood the test of time. Banks can expose their credit risk scoring and management models through APIs with the flexibility to augment the models with external data and business and financial data about the borrower enabling credit risk management on the as–a-service model. This allows fintechs to leverage the robust risk models of the bank while retaining the ability to augment the model with external data to suit their business needs and risk exposures.

Customer segmentation

Traditional banks have created 'personas' of customers based on their financial behavior and mapped the personas to relevant offerings across wealth management, lending, and so on as part of their segmentation and targeted marketing efforts. This information has been gathered over a long period of time and the insights extracted are leveraged to improve the

quality of interactions across channels and provide personalized service. Fintechs are aiming to provide hyper-personalized service to customers and the segmentation created by incumbent banks can offer a great baseline. Banks can offer an API framework to segment fintech customers along with mapping to relevant offerings; subsequently, fintechs can create segment-specific AI models to hyper-personalize customer interactions.

In addition, banks have also deeply integrated specialist eco-system capabilities such as 'out-of-band' authentication, cybersecurity systems with static and dynamic source code analysis, credit scoring systems like Equifax and Experian into their operations platforms. Banks can **leverage partner ecosystems** and build API frameworks to offer these capabilities to fintechs through the as-a-service model.

The Way Forward

In our view, banks must evaluate their landscape and obtain a holistic view of the capabilities they have acquired over the years as well as ecosystem partners' capabilities. Based on such assessment, banks must identify the capabilities that are in demand and adopt API frameworks to expose the functionalities to new entrants on the as-a-service model. Banks would do well to position these services as niche product lines thereby creating an avenue to monetize the enormous domain knowledge acquired over decades by expending huge effort and money.

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