

Digital Transformation Through an Open API Model

Abstract

The rise of fintech startups, coupled with the digitization of financial services, has exposed traditional banks to the threat of disintermediation. Regulatory agencies are now pushing for an open banking ecosystem to facilitate the entry of new market players. This pressurizes incumbent banks to simplify their IT architecture and develop digital capabilities in order to profitably sustain in the evolving landscape.

The European Commission's PSD 2 regulation, expected to come into force in January 2018, makes it mandatory for banks to allow third-party service providers access to their data and systems, through an application programming interface (API) framework.

The Fintech Threat

Regulatory support for open banking, easy access to funding, and the low cost of setting up a digital bank will reduce 'barriers to entry' for new fintech players. To counter this, banks must migrate to more agile architectures to accommodate digital transformation initiatives that facilitate the design of customer-centric products and omnichannel experiences.

Given that a complete overhaul of complex legacy infrastructure will entail heavy investment, banks should equip themselves for digital transformation by simplifying their IT. To successfully harness the digital opportunity, banks will need to adopt an open API model that allows a diverse developer community to create apps by accessing banks' backend systems and data. An API layer provides a flexible, decoupled interface to help developers access data or functionalities to write new applications.

Benefits of an Open API Model

In addition to growth opportunities, benefits of an open API model include:

- **Ubiquitous distribution of services:** utilizing third-party apps to connect with end customers anywhere will increase customer convenience and retention.
- **Standardization:** incorporation of standardized APIs will facilitate easy integration with internal and partner systems and help reduce integration and maintenance costs for new apps.
- **Data monetization:** exposing anonymized, segment-wise data through APIs in return for a fee-for-data monetization will drive the creation of new products and services based on insights generated through analytics, which could translate into a significant source of revenue.
- **Improved customer experience:** combining bank APIs with APIs of other service providers in niche segments (for instance, payment APIs with retail or travel APIs) will help banks improve customer experience, acquisition, and retention.
- **Enhanced cross-sell and up-sell opportunities:** linking all the accounts and financial products of a customer will provide banks with a 360-degree view of the consumer and deliver insights to identify cross-sell/up-sell opportunities.

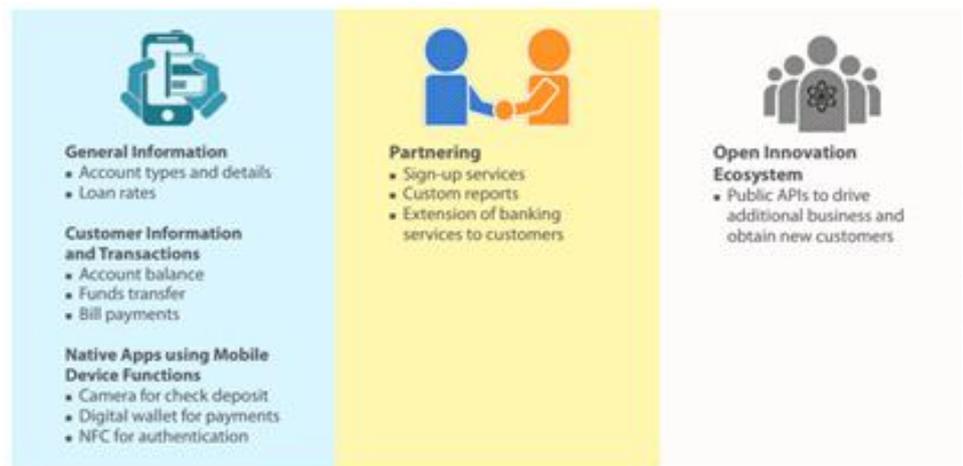
Gartner predicts that by 2016, 25% of leading global banks will launch an app store to facilitate easy discovery of their apps by customers.¹

- **Safety:** by analyzing complete consumer data and identifying anomalies in customer usage patterns, banks will be able to prevent fraud.
- **Improved innovation:** extending the reach of data and functionalities to a wide community of developers will enable banks to innovate at scale.

APIs in the Banking Industry

Banks can use APIs in various areas—mobile apps, partner APIs (B2B segment), device integration (wearables), and so on. Banking APIs can be combined with the data or functionalities of other APIs from disparate sources to create new and interesting mashup apps.

For instance, Savetastic utilizes customers' transaction data to calculate potential saves, guide customers to invest such savings, and suggest alternatives to the services being used by the customer.²



Use Cases in the Banking Industry

Other avenues where APIs can be used in the banking industry include:

- **Social:** banks can consume social APIs for customer sentiment analysis. By analyzing negative posts on social media, banks can determine what remedial action should be taken to address customer satisfaction issues. Also, competition analysis through analytics on company references and social media trends helps identify potential opportunities.
- **Device integration, wearables:** ATMs installed with NFC sensors enable authentication through biometrics or by holding the phone close to the sensor and keying in a pass

An open banking model, underpinned by APIs, is fast emerging as a key differentiator in the industry, and several early adopters including Credit Agricole, Capital One, BBVA and Citibank are set to reap rewards.

Credit Agricole launched an app store in 2012 to drive the co-creation of apps³ while Capital One recently launched a portal, Capital One DevExchange, with three APIs to enable the design of apps with the ability to deliver new customer experiences.⁴

code. This reduces transaction times and enhances security. Banks can offer APIs to empower local businesses to make offers to customers in the vicinity of the bank's ATM.

- **Data assets:** banks can provide APIs to allow enterprises in other industries to access aggregate segment-wise data for managing targeted advertising campaigns in a specific location.

The Way Forward

Banks should note that merely enabling an API layer is not sufficient—efficient API lifecycle management is key to realizing maximum RoI.

Such returns may include: the type of fees charged for using APIs, increased cross-sell and up-sell opportunities through partner integration, and customer loyalty through improved experience.

Banks should keep in mind some key aspects while delivering APIs:

- **Expose API-enabled core services:** banks should focus on exposing their core business critical applications and services through APIs along with the features required to design digital offerings. Depending on the business requirement, banks should identify the target audience for their services.
- **Create a developer ecosystem:** APIs are used by developers, which mean that banks should build and nurture an ecosystem of developers—internal, external, and partner. Engaging with developers provides valuable feedback that can be used to improve APIs and attract more developers.
- **Treat APIs as products:** API implementation should not be viewed merely as a technology initiative. APIs should be treated as products, which will entail putting in place a product strategy, managing its lifecycle, and adopting a dedicated marketing program with RoI objectives. This will require banks to implement an end-to-end API management solution spanning API design build and test; API gateway selection and deployment; portal development; and API governance, management, and security.

BBVA launched its API market in March 2016 with four APIs to allow fintechs to access data and services to create apps.⁵ Similarly, Mastercard has published APIs across payments, security, and data services⁶, while Visa has published APIs across payments, data and analytics, and risk and fraud.⁷

Conclusion

Incorporating an API layer is essential to facilitate the design of digital offerings which appeal to customers. However, an API strategy that ignores the key aspects may fail to deliver the expected results. Further, the administration and monitoring of APIs can be a complex task. Banks should consider collaborating with a strategic partner with the requisite capabilities and experience to successfully execute their API strategy.

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