# Banking as a Service

## An evolutionary way to enable APIs over the banking platform




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## Executive Summary

**With banking embarking into mainstream FinTech, the legacy stack of banking operations and underlying processes need a revised value proposition of the business and technology**

For decades, Humans as a Service (HuaaS) has been representing the front-facing, first layer of banks as well as backend operations, with or even without any technology assistance. With the strategic and organic growth in banking, this layer gained importance. As FinTech services continue to grow in the financial service market, FinTech operations will take on increased importance. So much so, that in future, the end-user will not be able to differentiate between a completely automated service and one that includes Human as a Service (HuaaS).

## All set to BaaS the world

It always helps to foresee soon enough how the market will evolve and emerging FinTech banks will clearly be the trendsetters. One possibility is that banking as a service and API banking could become as ubiquitous as online or mobile banking, a channel that every bank must build and maintain. In this context, since achieving long-term differentiation with BaaS will be difficult, banks will continue to distinguish themselves based on products, rates, reach, and other dimensions. If this winner-takes-all dynamic prevails, a few BaaS providers that are ahead of the pack in technology, analytics, and cost structure will likely gain from unbeatable advantages in this space

## What is the BaaS Opportunity?

- Banking as a Service (BaaS) is the perfect platform that connects different banking products and services.
- Enterprise-wide adoption strategy caters to non-banking businesses with regulated financial infrastructure, improving those magical three words: time-to-market!
- The new value propositions bring agility and acceleration in transforming business strategy and requirements, which are effortlessly adopted with BaaS and its capabilities.
- While some FinTechs and smaller entry-level smaller banks dominated the market initially, leading banks are seizing on this opportunity to transform their business where technology plays a pivotal role.

## BaaS-Empowered Embedded Finance Offerings

### Convenience Stores as Bank Branches

Retail deposits are accepted in-store by other distributors, expanding the bank's physical footprint.

### Point-of-Sale Loans

Customers can obtain credit for purchases in-store, during the checkout process.

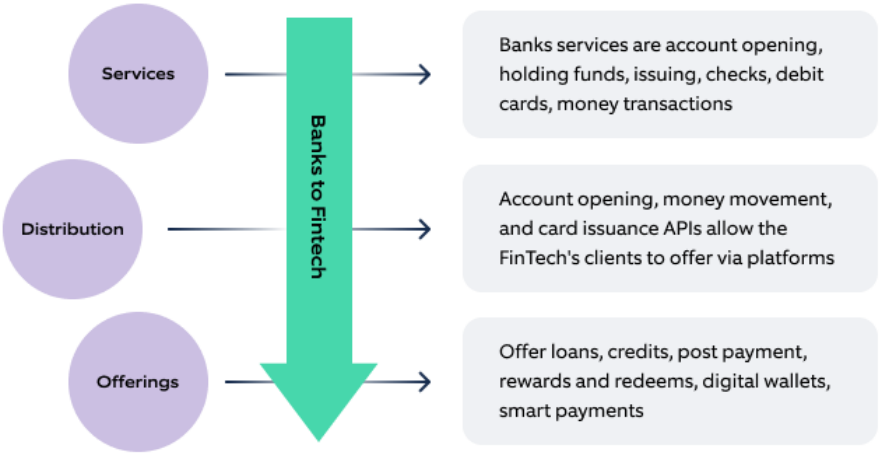
### Cashier-less Shopping

A digital wallet enables the customer to shop without needing any physical cash or cashier, as the funds are withdrawn directly from their bank account, without needing any interaction with the cashier.

# Embedded finance and Banking-as-a-service trends

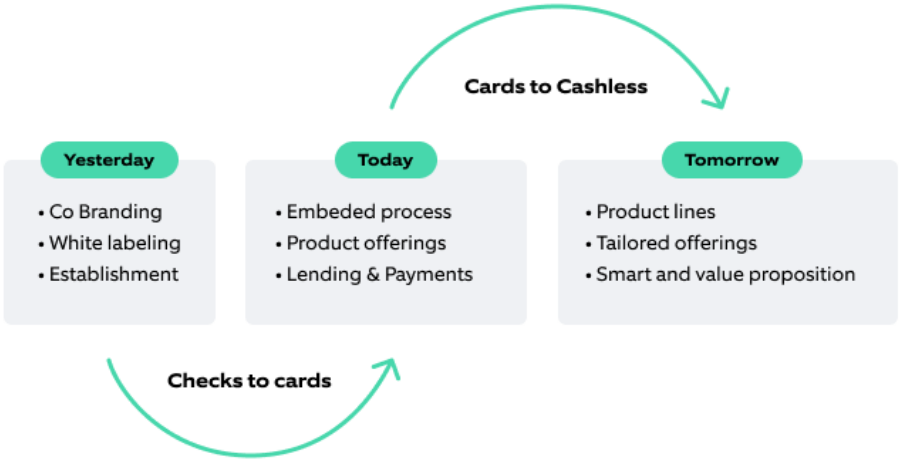
**Financial Institutions and their ecosystems embed financial services in their offerings with mergers, acquisitions, etc. But herein lies a huge opportunity: banks can play a critical role in this model**

The evolution from legacy banking to FinTech Banking has been quite organic. There has been a radical shift in monetary transactions, right from the exchange of hard currency to digital coins. This has invariably transformed the financial institutions.




The gradual process of aggregation and distribution in financial transactions has made the end user's life more convenient. This has also triggered the consumer's purchasing capability to incur better margins and cash inflow to the FinTech. For example, typical legacy banks hold funds, issue debit or credit cards, enable money movements, etc. On the other hand, a FinTech bank is an aggregation of multiple banks that can extend its offerings from a commoditized digital wallet to complete, personal finance tool deposit accounts, through additional institutions.

## Evolution of Banking as a Service




## Enabling Factors

**APIfication**

Enable distributions to natively embed their Baa8 proposition and create marketplace

**Open Banking**

Enable institutions to be compiled with regulatory aspects and become more autonomous

**Cloud and digital**

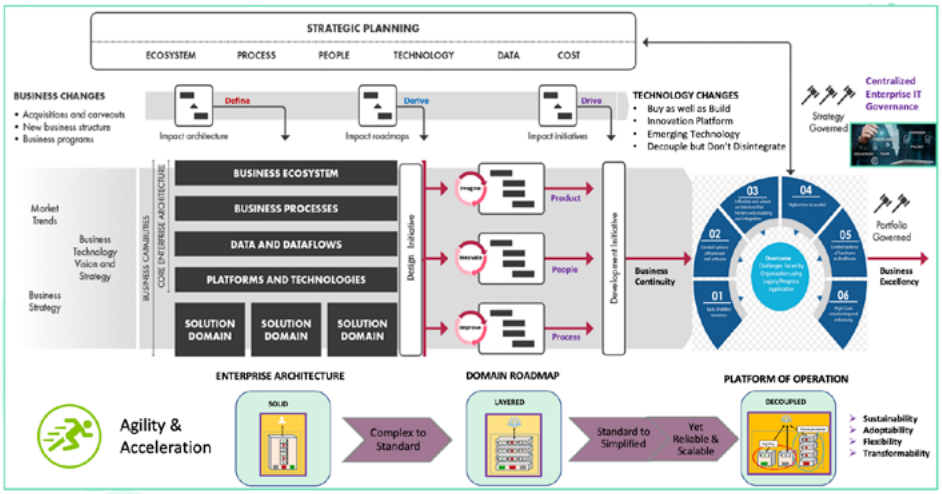
Enable automation, consumption based prioling and rapid scaling

**Analytics and Cognitive**

Enable institutions to be compiled with regulatory aspects and become more autonomous

# Enterprise Architecture and Governance

**Financial institutions can follow a consultative method to identify opportunities for improvement and innovation by continuous evolution process using discovery and reference model implementation.**




Rapid change in the business and drift in the aligned technologies can lead to a deadlock between business continuity and technology modernization. This calls for a sustainable and strategic approach from the business perspective, supported by the aligned technology and its governance to bring agility and acceleration in ensuring radical innovation.

Since businesses are heavily reliant on technology, the business strategy and business technology strategy cannot be separated. The business perspective puts the focus on markets, offerings, competition, customer trends and business models. The technology perspective considers the business platforms, technology opportunities and risks, core competencies and critical vendors. Business Technology includes both the business development and the technology management perspective. Both these perspectives merge into a consolidated business technology strategy, that caters to planning business capabilities, digital transformation, ecosystems, and competency synergies.

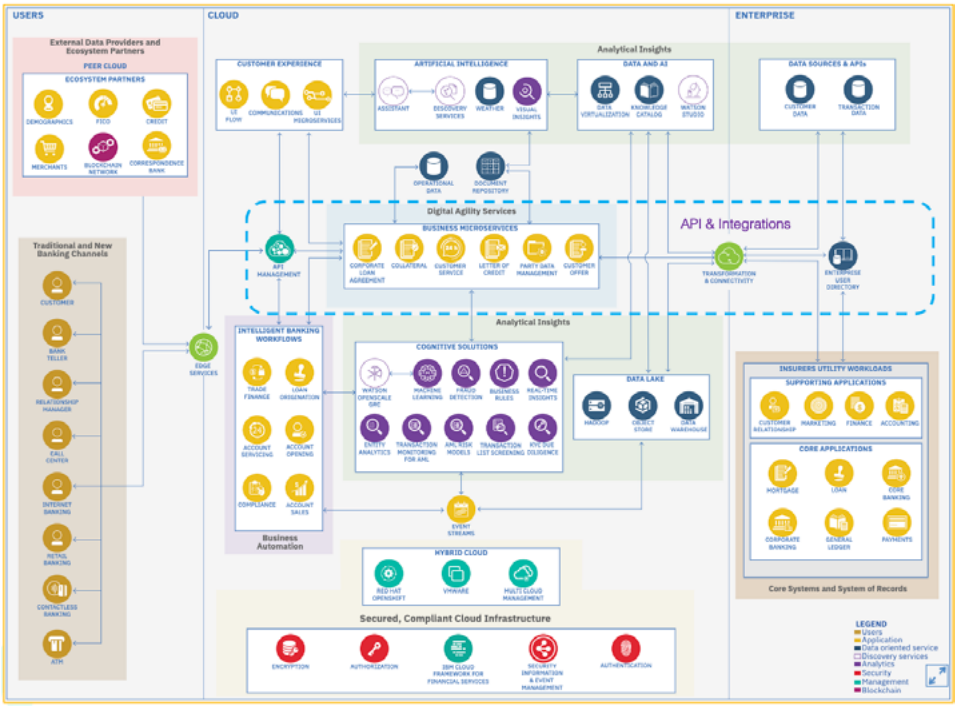
Enterprise architecture enables the planning of capability transformation. Business capability consists of people, processes, systems, data, and ecosystems. Enterprise architecture focuses on

business and technology to cover planning processes, systems, and dat. It usually has less focus on people, competencies, or ways of working.

A feasibility study and a reference model can help derive the financial institution's existing capabilities, identify any gaps, and derive the methodology and model to bridge the gap for better results.

# Reference Architecture for Banking

**Financial institutions must define their reference architecture which uses methods and industry-standard models to drive toward greater IT and business alignment. To address the key business imperatives and to realize the expected business value, an enterprise can adapt a standardized business architecture.**




## Digital agility services

The digital agility services layer provides a microservices platform such as Financial Services Workbench, which creates containers and containerized components running on secured cloud infrastructure. In this platform, new application components are designed and developed by using the Domain-Driven Design method. These loosely coupled components interact with each other, external systems, or both through exposed APIs and messaging by using an API gateway and an enterprise event bus.

### Business automation

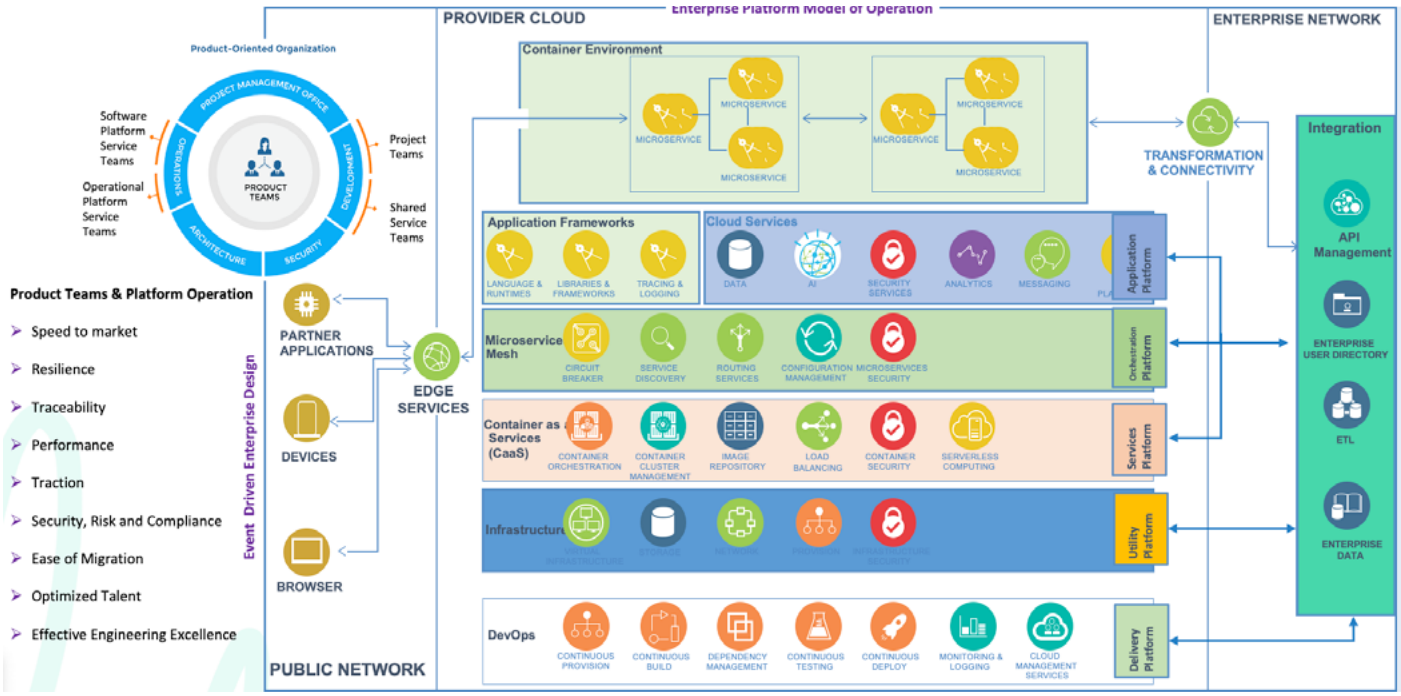
The business automation layer provides a proven set of methods and tools that deliver on a value proposition to support the business process reengineering and transformation. Data and AI capabilities are used to collect, prepare, and govern data and to analyse and infuse insights in applications, processes, and business microservices. These capabilities are used for process automation, process mining and modelling, robotic process automation, content services, document processing, decision management, workflow orchestration, and task management.

### Analytical insights

The analytics insights domain helps financial institutions transform to a cognitive enterprise by gaining the most value from the data in a cost-effective way, irrespective of data origin and data store. Insight services play a key role in delivering differentiated digital experiences to users, achieving higher growth through better insights and predictability. This domain provides capabilities that include an AI and machine learning platform, operational and main data stores, data warehouse and data lake, multi-cloud data access, integration and data virtualization, intelligent knowledge catalogue, and data governance.

## Banking Platform Architecture

**Enables platforms and products rather than engaging people on projects**



Platform focus on making an organization's core systems accessible, reusable, and modern so that they better enable products. This collaborative approach sometimes calls for platform experts to join product teams temporarily.

Often, a platform team adjusts its ways of working to match the state of the underlying systems and the needs of product teams and external partners. On most platform teams, the leader will have a technology background, with the team mainly comprising technology specialists.

Product teams focus on serving the needs of end-users in ways that generate revenue, lift productivity, or directly create value for the company.

## Key Success Factors

**To be accountable and cognitive about the blend of technology and business and to drive success by implementing business activities hand-in-hand, we have identified some key success factors. These factors are derived from the reference architecture of FinTech.**


### API-First Approach

API-First is a product-centric approach to developing APIs. It views the role of APIs as discrete products, rather than as integrations subsumed within other systems. The overall goal is to produce a set of modular, interoperable APIs which, when combined, create an API platform that fosters innovation.

### Event-driven design for digital enterprises

Modern enterprises enable FinTechs to become more agile, more operationally efficient, and more innovative because event-driven architecture makes real-time insights more discoverable and shareable.

### Decentralized IT Integration

Integration should be a universal practice, which should be more loosely coupled to facilitate increased adoption. It should be decentralized so that the principles of integration can be enforced in various formats for various purposes of integration.

### Centralized Enterprise IT Governance

Governance should be defined and enforced centrally by the enterprise architecture team so that it does not create any technical impediment for various platforms while adopting the governance defined for those platforms. That said, only one custodian team should manage it.

### Platform-operating Product-centric mode

Business has to operate, and platforms must cater to technology that is implemented by product teams rather than by a project.

## Conclusion

In conclusion, API-enabled Banking as a Service represents a significant shift in the way financial institutions operate, enabling them to provide more flexible, customer-focused services while reducing costs and increasing efficiency. By embracing this new paradigm, banks and other financial institutions can not only streamline their operations but also tap into new revenue streams, drive innovation, and stay ahead of the competition. As the demand for digital banking services continues to grow, the potential for API-enabled Banking as a Service is virtually limitless, and those institutions that are quick to adopt this new model will be best positioned to thrive in the digital age. Are you yet to adopt API and leverage its benefits? High time you put your BaaSt foot forward!

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## About the author

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## About Nagarro

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