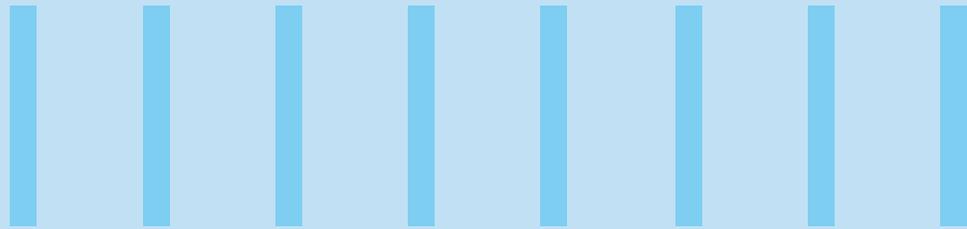




BANKING AS A SERVICE: ENABLING COLLABORATION

A view into how enabling BaaS can create a financial ecosystem beneficial for all the players



Introduction

Since their inception, banking products and services have been very much integral to the banking institutions, with end-to-end ownership of conceptualizing, developing and distributing them to the customers residing within their boundary walls. However, changing customer expectations in terms of seamless buying experience, with embedded finance

supported by digital enablement, have paved the way for banking institutions and businesses to act in a more collaborative manner.

Banking as a Services (BaaS) is one of such models that allows banking institutions to expose their core services using custom-build APIs in a safe and secure manner to FinTechs and businesses, creating

innovative products and services for the customers.

This paper is aimed at understanding how BaaS enables a collaborative ecosystem using different use cases, and the roles that different players perform. The paper also highlights benefits and challenges of this model and what is a likely way forward as it evolves to maturity.

What is Banking as a Service?

With the support for Open Banking rising across countries, embedded finance has become an area of keen interest for Banks, FinTechs, Ecommerce and Technology giants – to the extent that each stakeholder wants to have a bite of the pie in the banking value chain in a collaborative manner. Each stakeholder is trying to participate in an embedded finance ecosystem to create innovative solutions

for their customers while trying to solve real-world problems. Using embedded finance, stakeholders are able to deliver financial and non-financial products to their customers in a bundled way.

Banking as a Service, or BaaS, that has risen under the umbrella of Open Banking helps these stakeholders to create innovative embedded financial platforms. BaaS deconstructs existing traditional

financial services models and turns them into building blocks for its participants to envisage new customer journeys, creating a seamless experience for them. BaaS allows FinTechs and other third-party service providers (TPSP) to partner with banks for accessing their financial services through APIs and thereby building a different and personalized financial approach for their customers.

Evolution of BaaS Models

In its early days, BaaS adoption started with consumer facing businesses offering **co-branded/ white label** products in partnership with a bank to their customers. For e.g., a co-branded debit/credit card for their customers.

Then came a phase when we saw businesses **embedding** financial products like deposits, lending and payments within their own product offering. For e.g., a retailer offering credit products for a recent purchase made by the customers.

In future, we expect businesses creating **tailored solutions** which will cross different traditional product lines currently offered by the banks and are meeting customer's critical business needs. For e.g., a thin file customer getting a business loan from a SIM card outlet, getting credit approved by a third party, to being able to getting a working capital management solution from a bank.

Did you know that Amazon offering Credit line products to its merchants or Uber offering seamless payment and insurance services to the drivers is all enabled through BaaS?

Banking-as-a-Service (BaaS) Market was valued at USD 356.26 Billion in 2020 and is projected to reach USD 2,299.26 Billion by 2028, growing at a CAGR of 26.33% from 2021 to 2028¹

Trends driving BaaS adoption

Not only is BaaS a win-win for all the collaborators in the process, but there are strong levers that are supporting its adoption.



Demand for integrated services

Customers are looking for a complete ecosystem for their business that provides multi-product customer experiences in a simple, omnichannel, holistic and embedded manner



Industry focused applications

Need for industry specific banking applications is changing the way consumers and businesses interact with their banks. Traditionally, banking products and services have been created as one size fits all and are not so nimble to changing customer demands



Support from regulators

Regulators around the world are promoting open banking and pushing banks towards development of banking APIs and enabling universal access of their services



Digital adoption

Increasing use of cell phones and online banking by customers, impact of Covid-19, coupled with acceleration of digitization within banks is enabling banks to provide embedded finance within the reach of their customers



Real time transactions

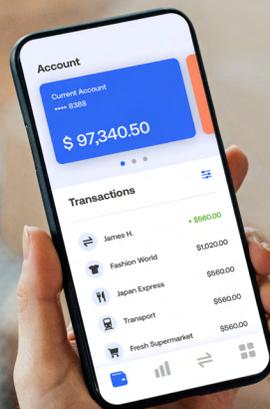
Need for faster transaction processing is pushing banks to move away from traditional core banking platforms which mostly work on batch processing and adopt modular approach to building solutions



Digital transformation by the banks

Banks are creating foundation for open banking by undergoing digital transformation of their internal systems and processes making them ready for adopting BaaS

However, as a collaborator in BaaS ecosystem a player must decide what role they would like to perform. This decision should be taken using the lenses of **Desirability**, **Feasibility** and **Viability**.

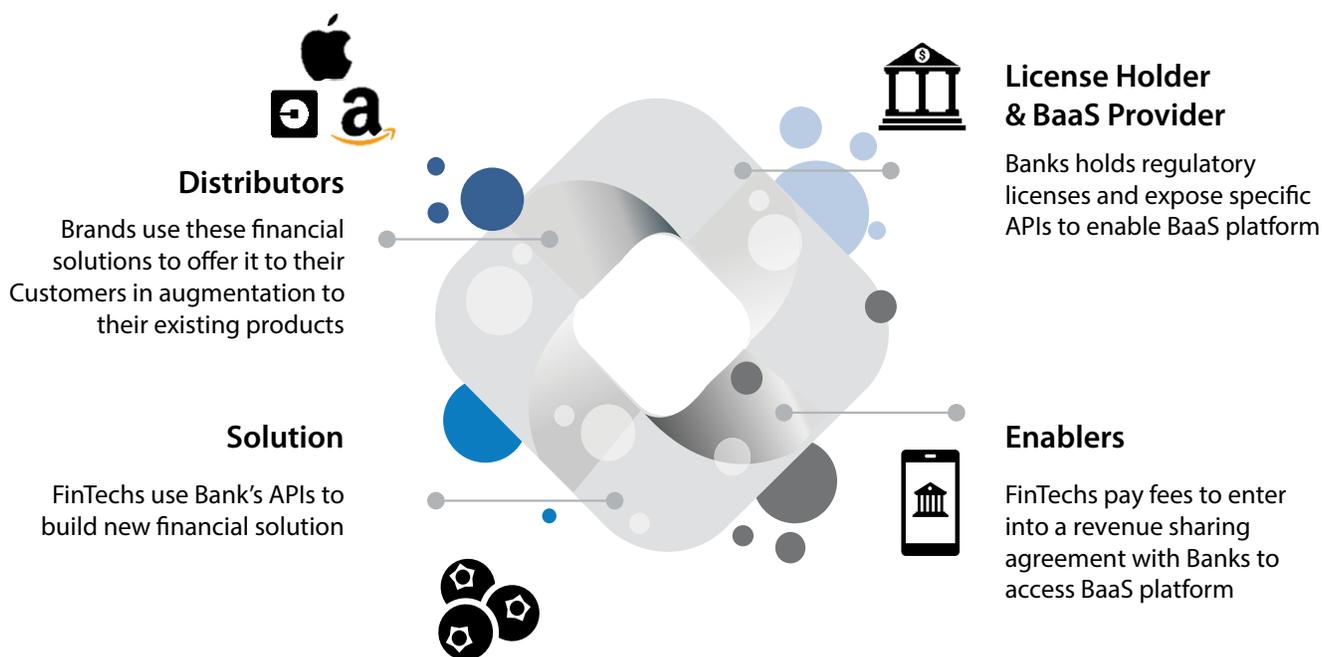


Understanding key players in BaaS ecosystem

A traditional BaaS model involves 4 key players

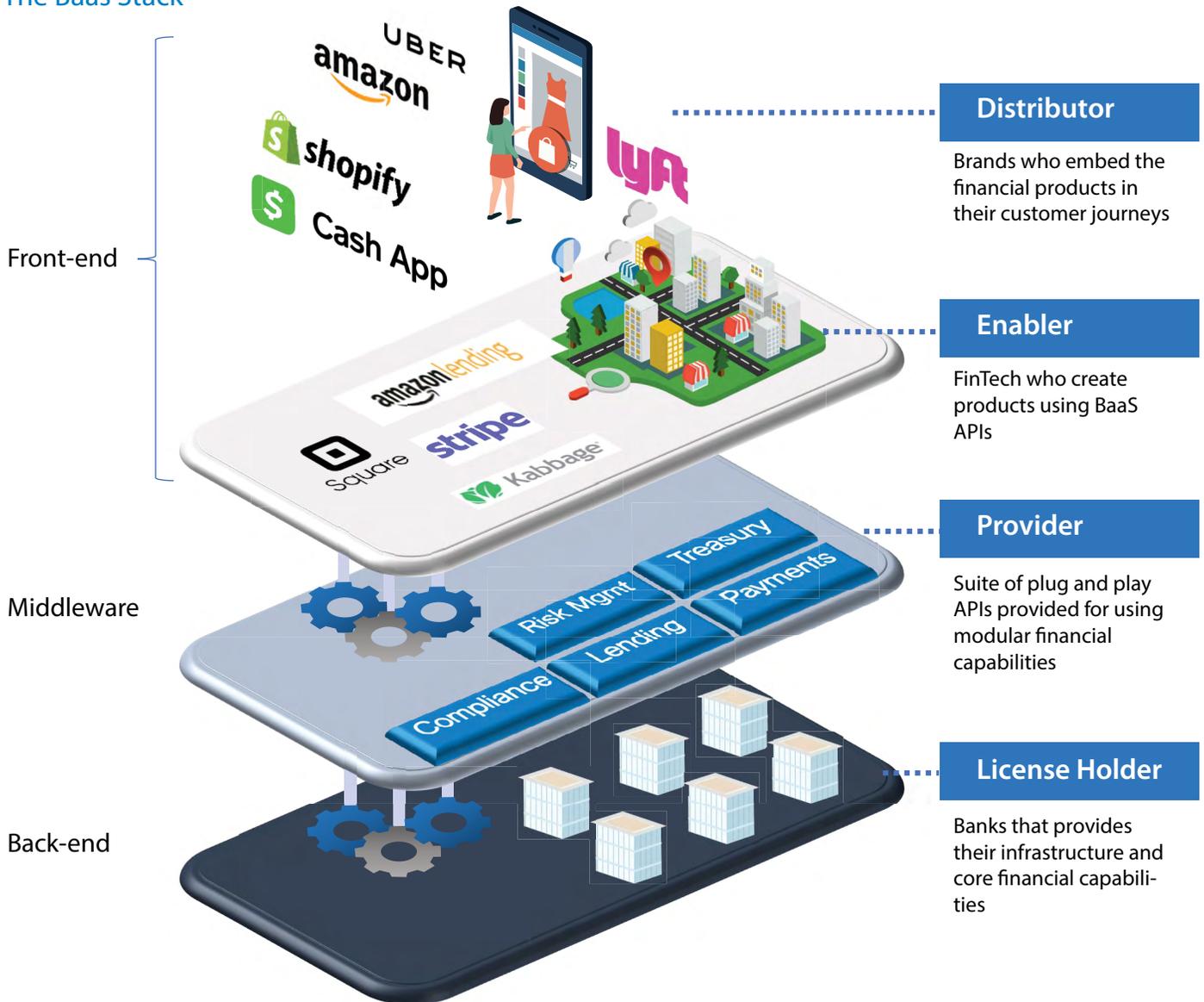
- 1. License Holders:** Financial institutions or banks that possess banking licenses and provide core banking business processes via their APIs. They charge an access fee to use their capabilities on the BaaS platform. Alternatively, they also work on pay-as-you-go model where non-banking companies will pay for every banking service they use or subscription-based model
- 2. BaaS Provider:** BaaS provider gives a platform that brings together different elements of this ecosystem and weaves them into a usable solution
- 3. Enablers:** Technology companies who consume the BaaS APIs and build their own unique or innovative offerings on it based on end consumer's demand or requirement
- 4. Distributor:** These are non-banking businesses that have large customer base and wish to offer financial products to their customers as an extended customer service. They embed the financial solutions into their customer journeys provided by technology companies

BaaS Value Chain



BaaS provides an opportunity to companies from any domain to access banking capabilities as services. The data and insights developed on BaaS helps in building better offerings for customers. To know how these BaaS players interact with each other, let us understand how they come together to create a **BaaS stack** ⁴

The Baas Stack



Banks can also play a role of BaaS platform provider in addition to playing a role of license holder by developing their own BaaS platform. Products built using BaaS are offered to the end customers by FinTechs who act as Enablers and Customer facing brands who act as Distributors in the ecosystem.

SolarisBank, CBW Bank, Fidor Bank, Standard Chartered are some of the examples that act as both License holders and Providers in BaaS Ecosystem.

Synapse, Treasury Prime, Marqeta, Bond are examples of players that act as Providers in BaaS Ecosystem

As per Oliver Wyman analysis, cost of acquiring a customer for any financial institution ranges from \$100 to \$200. The same reduces to an amount between \$5 and \$35 with the help of BaaS Stack⁹



How is BaaS different from Open banking?

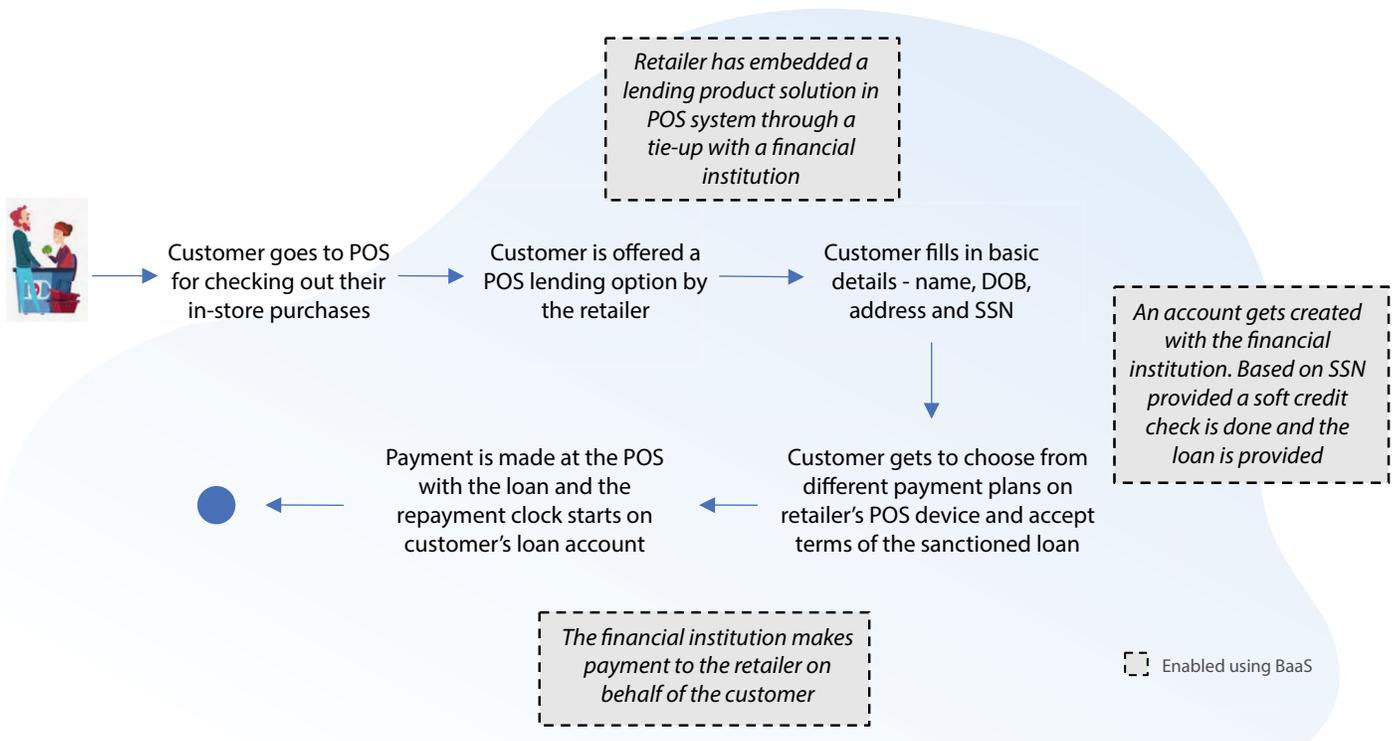
Open Banking

- Allows third-party service providers to access existing **customer's** (financial and non-financial) **data** through APIs without transferring banking functionalities⁶
- Open Banking APIs **do not** allow third-parties to **build** banking services on top of them
- Customers interact only with Banks – **API provider**
- Example: Plaid uses open banking model to provide account aggregation services to its customers where they can have an overview of multiple accounts in a single interface. Here, Banks share only the account data of customers to Plaid through APIs¹¹

Banking-as-a-Service

- Allows non-banking businesses to embed **banking functionalities** into their own products and services by using APIs
- BaaS APIs allow third-parties to **build customized banking services** on top of existing banking services
- Customers interact with FinTechs and Brands – **API consumers**
- Example: Shopify integrates with Stripe using BaaS to provide easy payments setup for Merchants on their websites and Stripe has collaborated with Goldman Sachs, Evolve bank and Trust, Citibank and Barclays to provide Stripe Treasury, a BaaS API¹⁰

POS lending enabled through BaaS



Using BaaS, brands can embed financial services into their existing customer journeys

Illustrative BaaS offerings ⁷

 <p>Credit at Point-of-Sale</p> <p>Pay at POS with a Credit product during checkout</p>	 <p>Shop and Bank</p> <p>Shop at a convenience store, open a bank account through store ERP and make deposits at the same time</p>	 <p>Bundled Mortgages</p> <p>Get mortgage from home buying website/application while buying a home</p>	 <p>On-demand insurances</p> <p>Buy car insurances from car-hiring apps to secure every ride</p>	 <p>Financial hub</p> <p>A digital business banking platform with all banking, accounting, collection, payments, cash-flow management capabilities</p>
---	--	--	--	--

A few instances where BaaS model was used to solve a business problem

Solaris bank provided its BaaS platform to Penta for creating a Plug & Play digital banking platform for Small Businesses ³

Open provides its BaaS platform for SMBs, startups and has onboarded more than 240,000 companies since inception²

Goldman Sachs has launched Transactions Banking as a service (TxB) which includes Payments and Treasury automation capabilities ⁸



Key considerations for Banks while going the BaaS way

Banks need to ensure readiness on multiple fronts in order to participate in a BaaS ecosystem⁵

Senior management involvement/ education

Senior management should be educated about pros and cons of BaaS and there should be a strategic alignment arrived at before starting movement towards BaaS

Existing infrastructure should be ready to support the expected spike in transactional and consumer volumes when going BaaS way. A cost-benefit analysis is required to be done at this point

Infrastructure readiness

Establishing Policies and Procedures

All the internal policies and procedures, like Compliance management and Anti Money Laundering, should be BaaS ready

Any contractual implications for their existing third-party relationships will need to be relooked at when they start offering BaaS

Impact on existing third-party relationships

Fintech Due Diligence

Due diligence of FinTechs will need to be performed, as mandated by the Banking Regulators in order to avoid any kind of reputational and financial risks involved

Partnership agreements with the FinTechs should be legally binding and vetted by internal legal counsels

Drafting of comprehensive agreement

Operational considerations

Increasing operational demands due to BaaS should be supported. Banks should be operationally ready in order to avoid any kind of reputational and regulatory consequences

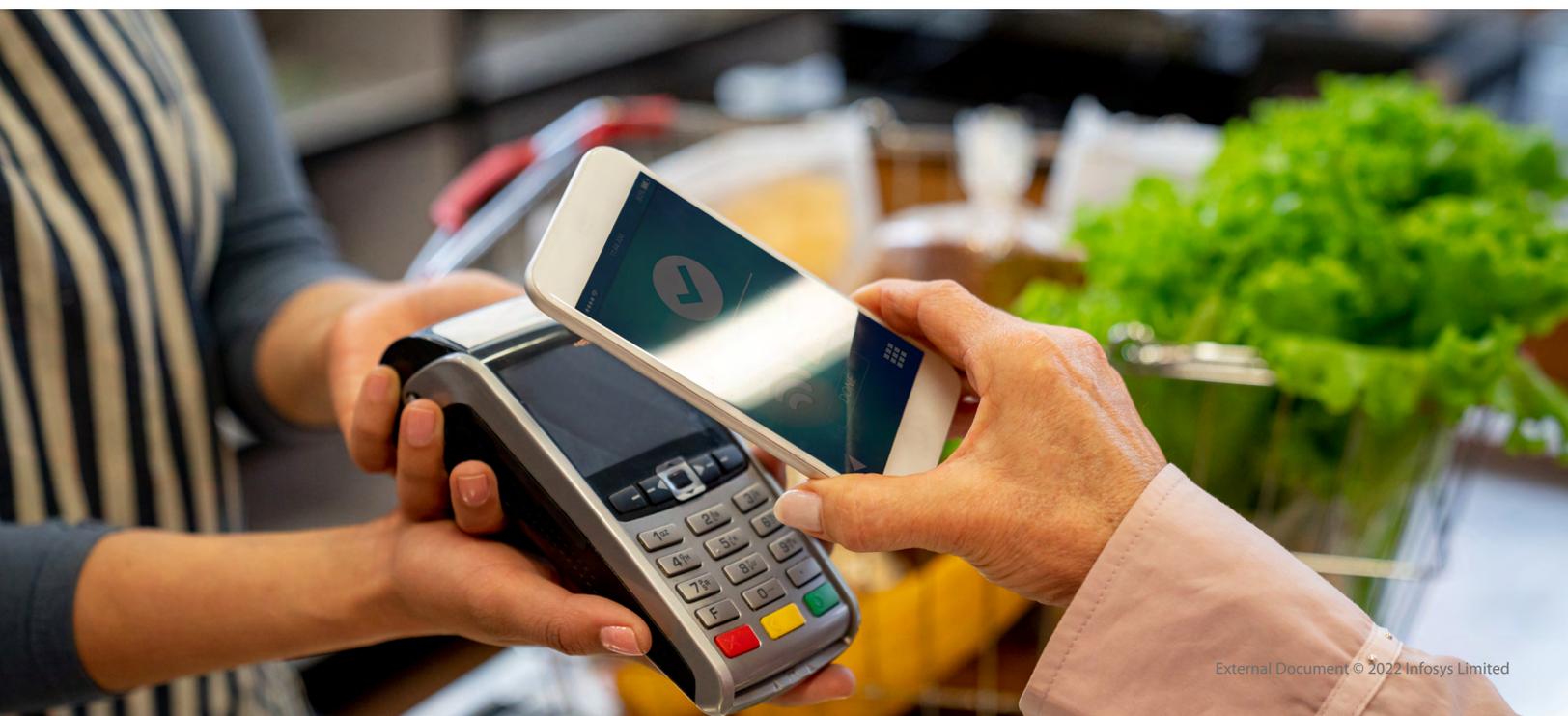
A plan for deconversion, transition and assessment of costs should be thought through for scenario in which a FinTech relationship is not working out as expected

Exit Strategy

Benefits realized by key players through the collaboration

Depending upon the role played in a BaaS ecosystem, participants have been able to reap in additional benefits from this collaboration

Banks / License Holders	FinTech / Enablers	Businesses / Distributors
Broaden Customer Base	Speed to Market	Improved Customer Experience
Banks can leverage extensive customer bases of non-banking businesses and leverage the same to sell their services	FinTechs can leverage bank's core financial capabilities directly and provide differentiating digital offerings in less time	Businesses can provide a seamless experience to their customers without them realizing the switch between purchasing a product and doing a financial transaction
Lower Cost of Acquisition	Agility & Reduced cost	Customer Retention
Using distribution network of non-banking businesses, banks can significantly reduce the cost of acquisition and distribution of their services by adopting BaaS	FinTechs can scale up easily in terms of functionalities as well as different geographies by integrating to banking functionalities without worrying about getting a license or investing in banking infrastructure	Businesses can improve customer retention as the financial service offerings and capabilities drive the stickiness towards the product, also resulting in loyalty points for customers many reward offerings
New Revenue Streams	Better Growth & Returns	Ease of Scale & Integration
Banks can generate new revenue streams by monetizing their existing financial capabilities offering through BaaS platform by charging fees for letting partners use its services	By focusing on their core strength, FinTechs can create innovative products and solutions that can be offered to multiple industries and geographies leading to faster growth and better returns	Businesses can easily integrate any required service through plug & play capabilities provided by BaaS platforms, thereby reducing initial investment in building them as an overhead



Challenges and Way forward

As the BaaS model grows towards achieving maturity, more and more players are going to evaluate the value proposition it has to offer. Players will need to perform a competitive analysis and try to find out areas where BaaS value chain is weak and try to fill that existing void. We expect that operating models of the players will change as they decide to build/ buy/ partner in order to support the BaaS ecosystem leading to strategic shift for them.

In order to embed a BaaS mindset, players in the ecosystem need to start with a transformational thought process at the very onset. Addressing key challenges and defining roadmap and timelines will determine the success of BaaS implementations in coming times. ²



References

1. [Banking-as-a-Service \(BaaS\) Market Size And Forecast, June, 2021, verifiedmarketresearch.com](#)
2. [Banking as a Service - An Objective Analysis, innovation.gomedici.com](#)
3. [Business banking reimaged, solarisbank.com](#)
4. [Overview of APIs and Bank-as-a-service in FinTech, bank-as-a-service.com](#)
5. [10 Legal Considerations When Offering Banking-as-a-Service, January, 2020, bkfn.com](#)
6. [From Open Banking APIs to Banking-as-a-Service: How big is the leap?, October, 2021, finextra.com](#)
7. [Open Banking and The Rise of Banking-as-a-Service, 2021, temenos.com](#)
8. [Delivering Transaction Banking as a Service, goldmansachs.com](#)
9. [The rise of banking as a service, March, 2021, oliverwyman.com](#)
10. [Stripe launches Stripe Treasury in major expansion of financial services, Dec 2020, stripe.com](#)
11. [The safer way for people to connect financial accounts to an app, plaid.com](#)

Glossary of Terms

Acronym	Expansion
API	Application programming interface
BaaS	Banking as a Service
PoS	Point of Sale
TxB	Transactions Banking as Service
SSN	Social Security Number
DOB	Date of Birth
TPSP	Third Party Service Providers



About the Authors



Amritpal Singh Poon

Senior Consultant, FSI practice, Infosys Consulting

Amrit has over 11 years of experience in Business and IT Strategy with expertise in Product Management, Digital Transformation, Program Management, Business Process Improvements and Governance and Control areas. He has keen inclination towards new developments in Digital area and how they can be leveraged to bring in efficiencies across different business functions in financial domain.



Pooja Dandapat

Consultant, FSI practice, Infosys Consulting

Pooja has 5 years of corporate experience and has worked on different roles like application development analyst, credit risk analyst and product owner in banking and financial services segment. She has handled several clients as part of her portfolio for credit risk management across various industries and sectors.

For more information, contact askus@infosys.com



© 2022 Infosys Limited, Bengaluru, India. All Rights Reserved. Infosys believes the information in this document is accurate as of its publication date; such information is subject to change without notice. Infosys acknowledges the proprietary rights of other companies to the trademarks, product names and such other intellectual property rights mentioned in this document. Except as expressly permitted, neither this documentation nor any part of it may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, printing, photocopying, recording or otherwise, without the prior permission of Infosys Limited and/ or any named intellectual property rights holders under this document.