



## Guide

# How to build a profitable digital bank?

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Digital Banking in Asia Pacific in 2024

10x

paymentology

## Contents

- 03** Digital banking in Asia Pacific in 2024

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- 04** What to expect from a partner ecosystem

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- 05** A unique partnership

---
- 06** The business case

---
- 07** The roadmap: week 0-5

---
- 08** The roadmap: week 6-8

---
- 09** The roadmap: week 9-11

---
- 10** The roadmap: week 12

## Digital Banking in Asia Pacific in 2024

In the fast-paced era of digital transformation, the banking and financial services sector is experiencing significant changes, especially in the vibrant Asia Pacific region. The conventional brick-and-mortar banking approach is transitioning into a flexible and convenient digital structure. With a keen awareness of the various challenges and opportunities in the Asia Pacific region, there is an increasing need for creative solutions that meet the unique needs of banking customers while complying with strict regulatory guidelines.

This guide serves as a roadmap for those embarking on the journey of building a digital bank, providing insights for both newcomers and established financial institutions. Despite obstacles like regulatory compliance and cybersecurity, our primary objective is to provide practical advice and strategic solutions to building a digital bank. With our proof of concept approach, banks can use a digitally native backend affordably and with reduced risks.

Digital banks in the Asia Pacific region strive to improve financial access for underserved populations, such as individuals and Micro-, Small and Medium-sized Enterprises (MSMEs), which are crucial for local economies. By leveraging modern technologies, they connect the traditional banking sector with the unbanked and underbanked, promoting financial inclusion and empowerment.

It is crucial for digital banks in the Asia Pacific region to navigate through regulatory complexities as each country has its own set of standards. For instance, Thailand's Bank of Thailand (BOT) implements strict licensing and supervision regulations to uphold the stability of the financial system. Adhering to these frameworks is essential, requiring strong governance and compliance mechanisms.

In the face of growing cyber threats, ensuring digital banking platform security is imperative. Digital banks must invest in cutting-edge security protocols and technologies to protect customer data and transactions. Proactive cybersecurity measures, including audits, penetration testing, and employee training, are essential to counter evolving threats.

For digital banks to thrive, modern, API-driven, event-based platforms are crucial. These platforms enable banks to collaborate effectively with fintech partners, leveraging open banking principles to deliver personalized and smooth experiences for customers. Additionally, they simplify the integration of other services, enabling banks to swiftly adjust to market shifts.

When establishing a digital bank in the Asia Pacific region, it is crucial to grasp the forthcoming challenges and opportunities. By leveraging cutting-edge technologies, complying with regulatory requirements, and emphasizing security and innovation, digital banks can be at the forefront of financial disruption. This strategy can enhance inclusivity, efficiency, and resilience within the banking ecosystem. New market entrants thrive with a strong cardholder value proposition, market gap, and effective acquisition/retention strategies.

Digitally native banks have swiftly emerged worldwide, shaking up traditional banking methods with their innovative digital-first strategies. A recent partnership between 10x Banking, Paymentology and Old Mutual in South Africa has challenged the traditional banking model by emphasizing convenience, transparency, and user experience. This is driving significant innovation and competition in the banking industry whilst empowering customers to manage their finances with confidence and ease. Our guide outlines the process of establishing a new bank with 10x and Paymentology - the timeline enables banks to use a digitally native backend affordably and with managed risk.

## What to expect from a partner ecosystem

In the modern partner ecosystem, digital banks need specific key elements to keep up with their customers' changing needs:

### Security

Partner solutions should focus on implementing strong security measures to protect sensitive customer information and transactions. This includes compliance with regulatory standards and defence against cyber threats.

### Real-time Data

Accessing real-time data is crucial for making well-informed decisions in digital banking. Partners need to offer solutions that facilitate swift and precise data analysis for tasks such as risk evaluation, understanding customer behavior, and delivering personalized services.

### Personalization

Digital banks need partners that offer capabilities for personalized customer experiences and products. These services include personalized products, targeted marketing campaigns, and bespoke financial advice based on individual customer preferences and behaviors.

### Tech Flexibility

Partnerships need to provide technological flexibility to quickly adjust and meet changing customer and market demands. This includes the ability to integrate new technologies, scale services efficiently, and customize solutions according to evolving requirements.

### Proven in Production

Partner solutions for digital banks should demonstrate a history of successful implementation and operation in real-world production settings. It's crucial for digital banks to have confidence that partner solutions have been tested and proven effective in providing value and meeting performance standards.

By teaming up with partners who focus on security, offer real-time data capabilities, provide personalized features, ensure technological adaptability, and have a successful production history, digital banks can quickly and effectively establish a strong ecosystem. This will help them achieve their growth and innovation goals while effectively meeting customer needs.

## A unique partnership

The partnership between 10x Banking and Paymentology brings together a unique blend of skills and expertise aimed at meeting the evolving needs of digital banking projects in the Asia Pacific region. By leveraging these combined strengths, 10x and Paymentology empower digital banks to deliver exceptional value and experiences to their customers.

### Pre-integrated and proven solutions

Drawing upon extensive experience in developing and successfully launching digital banking platforms, 10x and Paymentology work together with banks to provide invaluable insights and guidance throughout the process to minimize implementation risks and accelerate time-to-market.

### Evergreen technology

Continuously updated tech that remains relevant and adaptable to evolving industry trends and customer preferences, ensures long-term viability and sustainability to digital banks.

### Out-of-the-box capability

A suite of tooling that uniquely combines the ability to both configure native product features alongside coding specific behavior, written in any language.

### Real-time transaction processing

By ensuring swift and seamless executing of financial transactions digital banks can meet the demands of today's fast-paced digital economy.

### Speed to market

Offering accelerated product launches through streamlined process and pre-configured solutions to respond to market changes and opportunities quickly and efficiently.

### Comprehensive knowledge

Combining best practices from global and local markets and unique insights delivered from service a range of client profiles such as digital banks, spin-offs from tier one banks, telcos and other innovative players in the financial ecosystem.

## The Business Case

Nex10, a new fictitious bank, wants to tap into the unbanked and underserved population. Designed for accessibility at an economical price point, the Nex10 proposition includes:

- A virtual or recycled plastic card
- Fee free BNPL on responsible purchases
- Variable % interest and cashback
- Bill splitting and round-ups
- Fast and efficient customer onboarding journeys
- Scalable infrastructure and operational model

With few competitors in this space, there's a big market opportunity, so speed to market is key. Nex10 wants to launch as quickly as possible to begin capturing market share and proving their business model.

## The Pilot

To deliver a robust and scalable banking infrastructure quickly from a standing start, Nex10 will build an ecosystem of best-of-breed technologies rather than take on the build in-house. 10x's cloud-native core banking platform has been chosen to power the bank's core. With SuperCore ledger at its core, a range of pre-integrated technologies and a robust sustainable product development framework, Nex10 can get to market quickly with a small, agile team.

Opting for an ecosystem model will reduce internal complexity for Nex10 and enable their internal resources to focus on personalizing product offerings (instead of building the basics from scratch), customer experience, iterating product propositions, and acquiring customers.

# The Roadmap

## Week 0-1

### Provisioning the platform

Using public cloud, a global cloud core banking environment is already deployed, where 10x is able to provision a tenant, with dedicated computer and data, in any cloud region available globally, on demand within the first week.

The 10x Banking Platform comes as a SaaS-managed service, which offers hands-on support to banks for the full lifecycle of their projects. In relation to infrastructure, 'managed' means 10x cloud engineers build and maintain the global cloud core banking environment for all customers on an ongoing basis. The required services are already deployed in the cloud for Nex10 so that the platform is functional as soon as a tenant is provisioned.

Running a scalable, digital banking proposition in-house requires significant resourcing, cost, and in-demand skillsets. Opting for a managed core banking platform is much faster and materially cheaper for Nex10, with a small, nimble team.

As the project kicks off, Nex10's internal focus is the banking front-end: a mobile-only application which supports digital customer financial journeys and real-time access to finances.

## Week 1-5

### Integrating with key technologies

At this stage, through a 3rd party System Integrator (SI), the 10x Banking Platform is integrated with key services like issuer processing, payments and customer servicing.

10x has a range of ready-made integrations to make this process fast, remove integration costs, and reduce ongoing complexity. Banks don't have to choose these providers and can use the API-first and event-based architecture to plug in any technology they see fit.

For this project, where the focus is speed to market, Nex10 have decided to use the joint integration for card lifecycle management (Paymentology) and customer servicing.

A Pilot integration will be used across these technologies to test customer journey flows from SuperCore ledger through the key paths Nex10 need to go-live.



### Week 6-7

#### Onboarding and front-end integration

Depending on the requirement, SuperCore ledger can act as a master database that stores the full customer record. Or it can hold a reference to an external customer database, holding no PII data on the platform. This allows for a simple integration into a customer's existing estate, without any risk of data sync issues caused by multiple sources of truth.

Nex10 have chosen to use SuperCore ledger as their master database, integrated with a 3rd party SI, a leading onboarding and identity platform, to simplify onboarding and customer data capture.

The architecture of SuperCore ledger is event-based, giving banks a real-time data stream that can be distributed into their infrastructure using Apache Kafka. Nex10 can consume events as they happen and orchestrate their own processes downstream. The event-based data can also feed real-time risk and decisioning platforms, analytics tools, regulatory reporting, and the general ledger.

With much of the back-end heavy lifting taken care of by the 10x Banking platform, Nex10 have chosen to focus their internal development resources on building stand-out customer channels.

By building an ecosystem of modern technologies, Nex10 benefit from automation and straight-through processing. This means there's little manual intervention from Nex10 during onboarding, providing a slick experience for the customer while reducing the cost of acquisition.

### Week 8

#### Build all banking products

Financial or banking products are created with Virtual Products. They are built or synthesized from built in modules (such as the interest engine or transaction processing modules) and hooks (personalized code modules built in any language that support no impact upgrades) within 10x's polyglot runtime, all fully managed and configured through APIs or the UI.

Paymentology's platform acts at this stage as the card payment processor where banks can craft prepaid, debit and credit offering with a granular level of rules and configuration to suit the precise customer or business needs.

Paymentology's tip: There is a common trend among successful digital banks to launch with a simple financial offering and card product that provides strong and differentiated value. The product portfolio tends to expand as the customer base grows, following a smart product and marketing strategy. It is noticeable that successful FinTechs have intelligently simplified their offerings, using data intelligence from their platform, such as Paymentology's FAST (Framework for Authorisation and Settlement Transmission interface) feed, to adapt their roadmap to the appetite and needs of their customers.

It can be confusing for customers to be offered multiple products, especially those with high financial complexity, considering that in APAC, financial institutions would deal with a diverse audience, ranging from mobile and tech-savvy customers to a large audience of underserved or unbanked populations.



### Week 9

#### Building processes and teams

With the core systems and functionality built and connected, Nex10 can begin mapping processes, training teams, and establishing business resilience.

Throughout the implementation period, banks can develop and refine their operational procedures, using the data and insight to improve processes and create a feedback loop into the product team, improving quality and reducing failure demand.

Where exceptions and manual interventions are unavoidable, Nex10 can fully develop and refine their processes and procedures to be as efficient and effective as possible. Lower environments, replica environments that mimic production using the same codebase, are used to allow Nex10 colleagues to operate the platform in safe, production-like conditions. These environments are used to upskill staff and create training material without impacting live customer data.

When it comes to payment processes, multiple automation practices, smart routing can be applied to ensure both economies of scale, speed and efficiency for financial institutions and their customers. It is important to identify from day one the potential challenges with declined payments or charge backs for example, and work towards ensuring the highest possible rate of complete payment transaction. This is why, beyond technology, relying on next generation providers with experts who understand the dynamics of the market and the behaviors of merchants and customers can be invaluable. Knowledge sharing is key to improve processes continuously and successful launch and grow a digital bank.

### Week 10-11

#### Testing

Multiple tenants are used for testing, connected to the complete up-and downstream ecosystem, enabling Nex10 to test processes, reporting and critical systems. This ensures all critical functions and reports are robustly tested before regulated activity is pushed through the production platform.

At this stage, it's crucial that all teams are comfortable, reporting is working effectively, and the Nex10 general ledger is reconciling as expected.

The modern tech stack is built to be flexible, meaning it's easy for Nex10 to refine and change user journeys, backend functions, and products in real time. Issues can be ironed out quickly and the overall proposition can be quickly and easily iterated.

### Week 12

#### Launch

Digitally native foundations enable banks to be agile and fast-paced while compliant and risk-managed.

It's no longer competitive for banks to build and manage everything in-house, so banks looking to launch new digital banking propositions can use 10x's cloud-native banking platform to test new capabilities and get to market quickly.

And because 10x and Paymentology have created a pre-integrated SaaS-managed platform, banks can spin up a Pilot quickly without having to build and manage the infrastructure environment themselves.

Post launch, it is essential to learn about the behavior of clients and their spending habits at the merchant level and validate the value proposition of the bank. To do so, Paymentology provides rich data insights in real-time feed using the FAST interface (Framework of Authorization and Settlement Transmission). The data gathered is multipurpose: to flair payment trends, customer profiling, to manage risks, to offer cashback and rewards that suit.



The goal of this guide is to offer a roadmap for establishing a bank by presenting a practical timeline and demonstrating how to build a digital bank. The partnership between 10x Banking and Paymentology brings together a unique blend of skills and expertise aimed at meeting the evolving needs of digital banking projects in the Asia Pacific region. With our proven proof of concept approach, banks can use a digitally native backend affordably and with reduced risks.

### Get in touch

- ✓ Request a demo
- ✓ Learn more about our client success stories
- ✓ Chat with us about how to make banking 10x better

**10xbanking.com | hello@10xbanking.com**