



# DIGITAL BANKING A TIER 2-3 BANK PERSPECTIVE



In collaboration with



**OLYMPIC**<sup>®</sup>  
Banking System

[www.olympicbankingsystem.com](http://www.olympicbankingsystem.com)

---

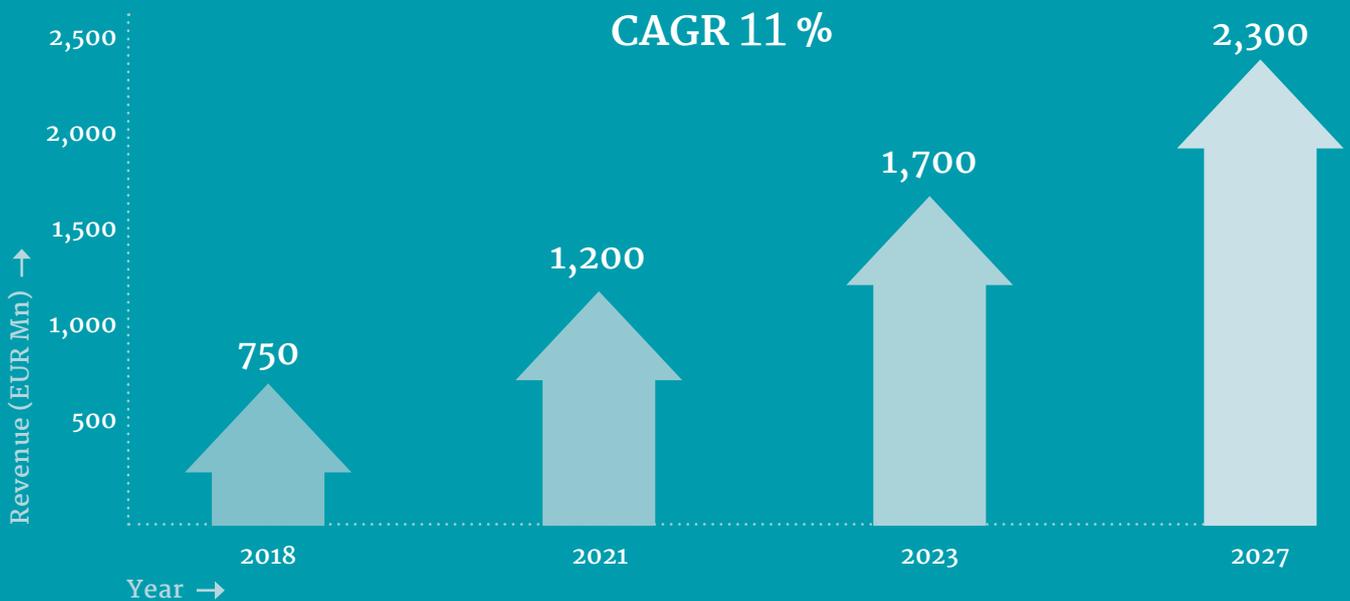
# Contents

<b>1</b>	<b>Introduction   The Digital Banking Context</b>	<b>3</b>
<b>2</b>	<b>Tier 2-3 Banks   The Emerging Digital Architecture</b>	<b>4</b>
<b>3</b>	<b>Key Implications   Speed, Efficiency, Customer Service</b>	<b>7</b>
<b>4</b>	<b>Conclusion   Driving Digital Readiness</b>	<b>8</b>

## Introduction | The Digital Banking Context

Over the last few years, the industry has witnessed several events that have accelerated the surge in demand for digital banking. In addition to the pandemic, the need for real-time services, financial inclusion, and marketplace banking, have all contributed to this rapid growth. Globally, more than 3.5 billion people are expected to use digital channels by 2024.

### Expected Growth in Digital Platform Market in Europe



Interestingly, most Tier-1 banks have already initiated their digital transformation to enhance their digital capabilities. For instance, Lloyds Bank has already launched a phased migration of its Core Banking modules to a digital platform, as part of a long-term strategy. While Tier-1 banks have the wherewithal to invest in technology players offering new-age digital banking capabilities and/or to choose off-the-shelf applications, their Tier 2-3 counterparts need to turn to solutions provided by specialist players to drive their digital capabilities.

More importantly, most Tier 2-3 banks already offer internet & mobile banking services, and many have started their digital banking journey by investing in digital solutions and driving towards cloud infrastructure. However, an end-to-end digital-ready architecture is critical for enhancing core capabilities and competitiveness in the ecosystem. While the technology platform provides the backbone for the digital banking framework, a holistic approach would also include convergence of products, process and channels that offer among other things an improved customer service and smoother on-boarding experience. Being “digital” is not just about technology but also about the culture and whole approach an organisation takes to both its interactions externally with customers, suppliers, counterparts, etc. and how it runs its internal operations.

**“ Banks are already promoting to customers the use of different modes of digital banking. For example, chatbots are now more active than traditional phone banking. ”**

*Karthik Natarajan,  
Head-Corporate Banking, First Rand Bank*

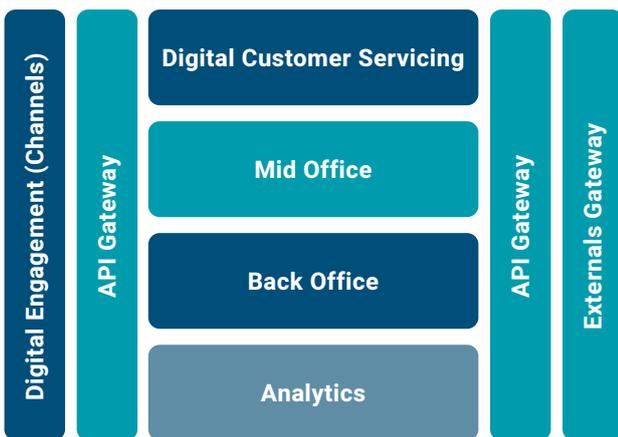
## Tier 2-3 Banks | The Emerging Digital Architecture

The Enterprise architecture helps articulate the logical clustering of all the multitude of applications that enable various business capabilities. It not only furnishes an overview to the user to align business goals effectively and efficiently, but also helps determine the key focus areas to extend the product or service offering. The elements making up an application architecture have significantly transformed in the digital era. While Tier 2-3 banks are seen to be focusing more on the Front-End, the critical success factor would be to develop a holistic perspective across all elements of the architecture, to harness the digital capabilities fully.

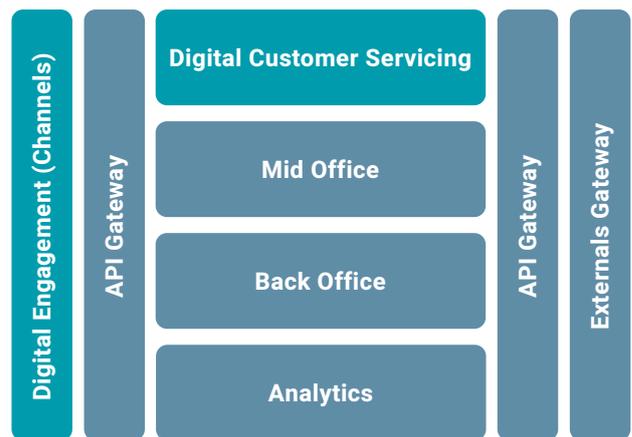
A typical application architecture can be logically grouped under the following categories:

- **Channels & Customer Servicing**
- **Mid, Back Office & Analytics**
- **API Integration & External connectors**

Tier | 1 Bank



Tier | 2-3 Bank



Digital Readiness  
 ● High ● Medium ● Low

### Channels & Customer Servicing

Traditionally, bank branches were one of the most preferred channels, but their relevance has reduced now, and is expected to decrease further in the next ten years. On the flip side, with customer on-boarding services now turning to digital, more than 35,000 branches are expected to shut down in Europe alone in the next three to four years.

Tier 2-3 banks usually need to customise the digital offering based principally on the requirements of their corporate clients. This can also have a significant cost implication for banks because out of the box features included in the solution may not meet the requirements of corporate clients. Banks have traditionally invested more in the internet banking suite than mobile banking. However, the popularity of mobile apps and the preference for on-the-fly banking interaction have accelerated the adoption of digital bank-

ing through mobile. Additionally, the advent of tools such as digital teller, self-service kiosks, mPOS, eCom, QR Code, e-wallets have also increased the number of digital touch-points across the customer's journey.

Cybersecurity is another critical component in the digital architecture of the bank. The National Institute of Standards and Technology (NIST) under the US Department of Commerce created a framework to strengthen Critical Infrastructure Cybersecurity. While most Tier-1 Banks are seen to invest in all five areas of the framework (Identity, Protect, Detect, Respond & Recover), the Tier 2-3 banks face some challenges in investing across all areas due to constraints in investment capacity. But this clearly needs to be an area of specific focus for any Tier 2-3 bank looking to drive its digital agenda.

### Mid, Back Office & Analytics

The Mid Office layer typically addresses areas such as fraud monitoring, automation, credit scoring, and enterprise risk suite. The rise of digital adoption made it essential for banks to invest in these application areas. Many industry solutions now have cloud capabilities, also help driving better synergies.

The Back Office layer consists of the API enabled Core Banking systems, product factory, loan management, collection systems, payment hub, transaction banking & trade finance systems. API enablement has facilitated moving much of the workload outside the Core Banking solution, which was the heart of a typical traditional architecture.

The analytics & support layer typically consists of systems such as big data (or data lake), analytics & business intelligence, rules engine, document management, and digital signature management. Mid Office, Back Office & Analytics systems support banks in achieving operational efficiency while building a robust internal ecosystem. By digitising the Core Banking system, the specific set of key features will empower a differentiated market positioning for a typical Tier 2-3 Bank.

**“ Focusing all the efforts only to improve Front-End experience is insufficient for a bank. The digital customer journey should be end-to-end STP till the last point in the back-end without any paper drops in between. ”**

*Narayan Samant, CIO,  
XAC Bank, Mongolia*

## Digital Core Banking Features

- 
**Modularised Components**  
 A solution is divided into several modules, and each module can be independently added, modified, replaced, or exchanged. Tier 2-3 banks get to choose the best module as per the requirements of the business, which are aligned with their business' strategic objectives.
- 
**Microservices Architecture**  
 Such an architecture provides the advantage of faster time to market and better horizontal & vertical scalability.
- 
**STP enabled**  
 Trade Finance & Payments are increasingly embedded with Straight-Through Processing features. This not only reduces the transaction processing time, but also minimises operational risks and related costs.
- 
**Parameterisation**  
 Banks have their own set of business rules that need to be able to be defined in the system. Extensive parameterisation capabilities are also necessary to allow banks to customise data capture, processing, and reporting capabilities according to regulatory, regional, and local requirements.
- 
**Extensibility**  
 Extensibility capabilities enable developing the required functional features (customisations) based on the organisation's specific requirements, which is key for a Tier 2-3 bank that has a high sensitivity to driving niche focus.
- 
**Continuous Upgrade**  
 Continuous upgrade options enable the bank to upgrade the kernel of the solution without any downtime.
- 
**24 x 7 x 365 Availability**  
 Digital Core enables round the clock operations, even in minor or major upgrade cycles.
- 
**Open API enabled**  
 Open API capability allows the bank to integrate with fintech players as well as the marketplace ecosystem. This is increasingly perceived as a key driver to thrive in a digital world.

### API Integration & External Connectors

The API / Open Banking market is expected to grow to USD 40-45 billion in the next 3 years. It is even promoted in many countries by the regulators themselves, resulting in accelerated fintech collaboration. But to be really successful this approach also depends on the various players in the ecosystem exposing their respective APIs. Tier 2-3 banks should seriously consider joining such marketplace initiatives and leveraging the latest technologies available in the market.

**“ Digital Banking platforms should have the capability of capturing real-time comprehensive contact/action history of a customer. Platforms should be capable of integrating with a wide range of APIs. ”**

*Katarina Boledovicova,  
Head of International Online Banking,  
Raiffeisen Bank*

However, there is frequently a data privacy concern about exposing Open APIs to several partners in the ecosystem. The risks with Open API could again be classified into three categories: Operational, Cybersecurity & Regulatory.

- **Operational Risk:** Unprotected data or weak Open APIs provide back-door access to criminals and expose sensitive information.
- **Cybersecurity Risk:** Open API abuse may lead to data breaches & cybersecurity risk within enterprise applications.
- **Regulatory Risk:** Complex regulatory environment, resulting in multiple regulations from various agencies may drive banks to adopt new operational practices. It may lead banks to expose themselves to regulatory fines and reputational risks if unable to manage requirements effectively and efficiently despite possibly overlapping or contradictory obligations.

### INDUSTRY EXAMPLE # 1 | Overall Digital Transformation

#### CONTEXT:

A Tier-2 Bank in the Middle East, traditionally known to be the pioneer in digital innovation in the market, faced limitations in providing a seamless digital experience. The bank had launched specialised mobile applications for retail and corporate customers. There were challenges because of slower than acceptable response times – due in part to tightly coupled components in core banking & a lack of synergy among multiple surround systems. The bank had also invested heavily in the front-end components.

#### SOLUTION & BENEFITS

The bank invested in a digital subsidiary to offer attractive products and services to retail customers. It on-boarded 5,000 customers every month. It also launched a digital bank for Entrepreneurs & SMEs. In parallel, the bank took initiatives to modernise the legacy core banking system and replaced it with an API enabled core banking platform. API led communication among surround systems increased the efficiency of the overall end to end transaction cycle. The bank is presently exploring Artificial Intelligence enabled product recommendations for its retail customers.

*(Source: IBSI Research)*

## Key Implications | Speed, Efficiency, Customer Service

“ Customers intend to shift towards using digital wallets rather than physical wallet. Even Tier 2-3 banks need to adopt digital banking aggressively. ”

Robert King,  
Board of Directors,  
Bank of us, Australia

The end-to-end digital banking capabilities that Tier 2-3 banks would need to focus on span 3 dimensions: speed, efficiency, and customer service.



### Speed

**FASTER ROLLOUT  
WIDER MARKETPLACE INTEGRATION**

Tier 2-3 banks may leverage speed as a key differentiator to significantly strengthen their positioning vis-à-vis Tier-1 banks.

#### Reduced Time to Market:

Faster rollout of products could be achieved as banks could create new products through extensibility and reusable components.

#### Marketplace Integration:

Enable products and services that are available in the market, with easy and fast integration.



### Efficiency

**IMPROVED PROCESS AUTOMATION  
REDUCED OPERATIONAL RISK**

The level of efficiency provides a huge impetus in driving profitability, a key success factor especially for Tier 2-3 banks that are looking to maximise their Return on Equity (ROE).

#### Process Automation:

Intelligent automation could be used to streamline manual processes to save cost, time, and effort for banks.

#### Reduced Operational Risk:

Bank can mitigate operational risks by leveraging on the digital capabilities across systems and reducing human intervention.



### Customer Service

**HARNESS AI/ML CAPABILITIES  
DIGITAL SELF ON-BOARDING**

Personalised and tailor-made services have always been the USP for Tier 2-3 banks, in their positioning with their target segments. This could be greatly leveraged, by harnessing digital capabilities.

#### AI/ML Capabilities:

AI/ML capabilities may be used to create innovative targeted products & deliver services efficiently.

#### Digital Self On-boarding:

Banks enable self on-boarding for customers with Digital KYC and multi-factor authentication.

## INDUSTRY EXAMPLE #2 | Bank Built for Entrepreneurs

### CONTEXT:

One of the banks in the UK that caters to small & medium-sized companies wanted to offer bespoke collateral-free debt finance solutions to its customers. Management of infrastructure and security was the primary concern as they had several partners in their fintech ecosystem.

### SOLUTION & BENEFITS

The bank opted for an overall platform approach and hosted their infrastructure and core banking solution on a public cloud. Within 11 months of its operation, the bank became profitable, and its loan book increased to GBP 500 Mn. The digital platform facilitated the offer of innovative products as well as a faster launch than its competitors. The degree of flexibility improved as the bank could increase the sizing as and when required resulting in reduced operational costs. Better security, robustness & resilience was achieved because of the cloud-based infrastructure.

(Source: IBSI Research)

“ Banks should invest in digital innovations, but the priority should be to move away from the legacy systems and possibly consider cloud infrastructure to save on costs. ”

Germain Bahri,  
Digital Banking Consultant, Europe

## Conclusion | Driving Digital Readiness

Digital Readiness Levels | Leader vs Follower (Illustrative)

SCALE >	1	2	3	4	5
CUSTOMER EXPERIENCE (CX)	Customer Feedback taken in fragments	VoC Enabled	VoC drive CX initiatives	Customer insights drawn based on analytics	Customer insights drive strategic decisions
DIGITAL ON-BOARDING	Manual on-boarding	Partial/Single channel on-boarding	Multi channel on-boarding	Partial Automation & AI enabled	End-to-End Automation & AI enabled
PRODUCT CONVERGENCE	Fixed products offered in silos	Product Bundling	Product & Services personalisation	Analytics based products offerings	Marketplace Banking enabled
PROCESS FULFILLMENT	Manual Processes	Highly Customised processes	Workflow/BPM enabled	RPA enabled	Automation and AI enabled STP enabled
CHANNEL ADOPTION	Single channel application	Multi channel application	Available for media walls	Omni-Channel Hub with high inter-channel integration	IOT Integration
TECHNOLOGY PLATFORM	Siloed technology platforms High maintenance	Virtualisation enabled Reactive mgmt.	Real-time/proactive mgmt.	API/Open Banking Scalable solutions	Platformification Resource sharing enabled

The above illustration provides a perspective of how banks typically compare, from a digital readiness standpoint, across six key areas: Customer Experience, Digital On-boarding, Product Convergence, Process Fulfillment, Channel Adoption and Technology Platform.

While many Tier-1 banks tend to be perceived as being digitally ready across the six key areas, most Tier 2-3 banks have a much longer

distance to cover from a digital readiness standpoint. An effective digital adoption is key not only to enhance customer experience and services capabilities, but also to drive cost efficiencies. It is therefore important for a Tier 2-3 bank to have clarity both on its current state digital readiness and on the target end-state. The end-state, even once defined, needs to be kept under regular review, and updated as technology and associated capabilities constantly evolve.

- Level 1 | Limited
- Level 2 | Moderate
- Level 3 | Standard
- Level 4 | Mature
- Level 5 | Leader