

Thought Leadership

READY OR NOT?

GEARING THE BANK OPERATING MODEL
TOWARDS DIGITAL AND
OPEN BANKING READINESS

EBA Open Banking
Working Group

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EXECUTIVE SUMMARY

Banks today face intense dynamics of shifting customer behaviour and needs, value chain disruption, new competition, and an increasing availability of data, with an overall “move to digital” strongly accelerated by the Covid-19 crisis. Many of them are starting to undergo transformation of their operating models to be ready to effectively compete in this increasingly digital environment. A growing number of banks also recognises that Open Banking is a critical piece of the puzzle to become “ready for digital”.

The purpose of this EBA Open Banking Working Group report is to provide a reference point for banks’ transition to a digital-ready operating model and, more specifically, to one that provides a fertile ground for their own Open Banking initiatives. To this end, EBA and INNOPAY have interviewed digital and Open Banking experts and executives from digitally advanced banks within EBA’s member community. Their input and views on their banks’ digital challenges, transformation strategies, and operating model implications significantly enriched the analysis of the Open Banking Working Group (OBWG).¹ The report may also provide inspiration and guidance for financial institutions in their digital transformation journeys with a view to reap the potential of Open Banking.

While the banks interviewed pursue different routes to digital readiness, all of them are aligned on the fact that this transformational process is an ongoing journey. This report identifies a range of key design principles that are consistently at the core of transformation: digital-ready banks are consistently **focused on their customers**; they **understand the value of data**; they open up to **leverage ecosystem opportunities**; they are **enabled, rather than constrained, by technology**; and finally, **they are agile** and able

to react at speed and with resolve to changes in their environment (chapter 2).

To understand the operating model implications of these design principles, the report introduces a conceptual operating model framework which analyses the major operating model elements, such as culture, organisational structure, or ways of working, and their relation to the bank’s environment. It also offers an activity-based view on an operating model that helps illustrate the implications of, for instance, launching an Open Banking initiative on the bank’s daily operations (chapter 3).

Digital readiness implies challenging many of the implications of the traditional bank operating model and transforming them in a way to support the design principles above. Several of them are especially critical: **cultural change** is the fundamental enabler for digital readiness, but also its potentially biggest impediment. Values such as impact, speed, openness, and autonomy are characteristic for an enabling culture. **Agile transformation** can enable the organisation to act faster and more directly in order to meet customer needs, where a range of banks have implemented a model based on interdisciplinary teams. The **technology foundation** should be revised to gain flexibility and be modularised in combination with application programming interfaces (APIs) – also as a technological basis for Open Banking. A comprehensive **approach to data** is critical both to protect and leverage increasing amounts of data available. Last, but not least, banks need to succeed in basic **process digitalisation** – a topic still posing challenges in the nexus of regulatory requirements, traditional structures and changing customer needs (chapter 4).

Finally, **Open Banking** can be considered a key capability for digital readiness. As many banks have made progress with Open Banking and expand their API offerings, they also gain maturity in their Open Banking operating model setup. Successfully engaging in Open Banking requires **embedding Open Banking activities in the bank’s daily operations** such that they can be executed effectively. Challenges encountered include API product development, API go-to-market and allocation of budget and development resources, among others. Proper definition of roles and responsibilities, integration with business line strategies and use of key performance indicators (KPIs) are some of the measures to remedy those challenges.

Some of the **key operating model implications** for accelerating Open Banking include the creation of an API mindset throughout the organisation, an organisational setup that involves a centre of excellence while gradually empowering or involving business lines, and a clear mandate from top management to place APIs high on the strategic agenda (chapter 5).

The purpose of this report is to provide a framework for individual institutions for their operating model journeys to digital and Open Banking readiness – by providing insights for being geared at successfully executing their strategies for the digital era.

¹ The report in its entirety reflects the views of the Open Banking Working Group and not necessarily that of any individual expert interviewed.



1. INTRODUCTION

Ready or not? It is a question in the minds of most banks when it comes to preparedness for the external challenges they are confronted with in current times:

- Interaction with customers increasingly happens through digital channels, an area in which banks operate alongside best-in-class companies in terms of user experience and value delivered.
- Value creation, in the financial industry and elsewhere, increasingly happens in ecosystems that organise around specific customer journeys.
- PSD2 has facilitated the unbundling of financial services and the entry of third parties on the financial playing field. Fintech propositions are thriving and established tech players are extending the scope of their services further into the financial realm.
- Finally, the trend towards data sovereignty will continue to impact banks. PSD2 has imposed customer control of payment data and functionality, but marks only the beginning of a path towards transcendence of data across the financial sector and beyond.
- In addition, the Covid-19 crisis accelerated the transition to the digital economy.

Banks' answers to the "ready or not" question will be anywhere between "not really" and "almost there", but the journey to digital readiness is, for most of them, ongoing. Both the journeys and their outcomes may look differently for individual banks. Yet, building on the input of leading experts from major pan-European institutions for this report, there are common denominators which reflect whether or not a bank is really ready for digital. Namely, digital-ready banks are consistently

focused on their customers; they understand the value of data; they open up to leverage ecosystem opportunities; they are enabled, rather than constrained, by technology; and finally, they are able to react at speed and with resolve to changes in their environment.

Open Banking is a key ingredient for bringing these qualities of digital readiness to life: exposing and consuming data, functionalities and products via APIs allows a bank to participate in ecosystem value creation and effectively deal with the unbundling of financial services. It likewise helps meet customer needs by both providing more value through relevant products and services and by reaching customers where they need these most. Open Banking also extends the scope of relevant data beyond organisational borders and helps achieve the agility needed for successful transformation.

On these grounds this report investigates both the implications of digital readiness at large, as well as more specifically the requirements for successfully initiating Open Banking, on an operating model level. Fundamental and holistic operating model transformation is required for digital readiness and, by extension, for successful Open Banking. The latter both implies the fundamental building blocks of the digital-ready operating model to be addressed, as well as specific attention to be given to the practical challenges of embedding Open Banking into daily operations. Both are addressed in this report.

A number of banks have moved ahead on their journeys of digital transformation and honed their Open Banking capabilities, ready to move on and scale up. And while uncharted areas remain to be explored, some of their learnings may help set the right focus or avoid common pitfalls in each individual institution's trajectory. The purpose of this EBA Open Banking Working Group report

is to contribute to this endeavour, supported by various conversations with and presentations by bank executives and experts from EBA's member community.

After identifying current transformation efforts and the design principles of digital readiness in chapter 2, the report offers a primer on a conceptual operating model framework in chapter 3. Chapter 4 discusses the most important operating model implications of digital readiness, while chapter 5 explores how to organise for a successful strategy execution in Open Banking in this context. Chapter 6 presents a brief, concluding outlook.

2. THE JOURNEY TO DIGITAL READINESS

A rapidly changing environment, reinforced by the transformative force of the Covid-19 crisis, motivates banks to respond to changing dynamics. And banks are adapting, at a higher-than-expected pace, even though important hurdles remain. Five design principles, explored later in this chapter, underpin banks' journeys to digital readiness.

2.1 STATE OF THE BANKING INDUSTRY'S TRANSFORMATION

In the face of today's dynamics, many banks have started to re-evaluate their current modus operandi. They have set up digital transformation

programmes to shape their operating models to deal with new digital channels and ecosystems, evolving customer needs and new market participants – as well as to redefine the role and treatment of data in their operations. In their reaction to the Covid-19 crisis, next to a continuous effort to cut costs, banks have also focused on speeding up digitalisation. In fact, in some banks Covid-19 has resulted in a speed of transition that vastly exceeded what was thought possible pre-crisis, including rapid digitalisation of customer-relevant processes or internal use of online collaboration tools – mirrored by the willingness of management and staff to reprioritise and improvise to allow businesses to continue. To illustrate the digitalisation pressure exerted by Covid-19, at a large European bank interviewed,

the number of online transactions increased by 26% and that of mobile transactions by over 60% from 2019 to 2020

And yet, important hurdles remain in the way of successful transformation, starting with aspects of digital culture. Bringing mindset change from innovative cells such as Open Banking initiatives to all areas and levels of the bank remains a difficult and lengthy exercise, as voiced by many of the experts interviewed for this report. At the same time, some banks still struggle with digitalisation in the most basic sense: moving processes such as KYC from paper to digital while dealing with fragmented regulatory requirements across jurisdictions.

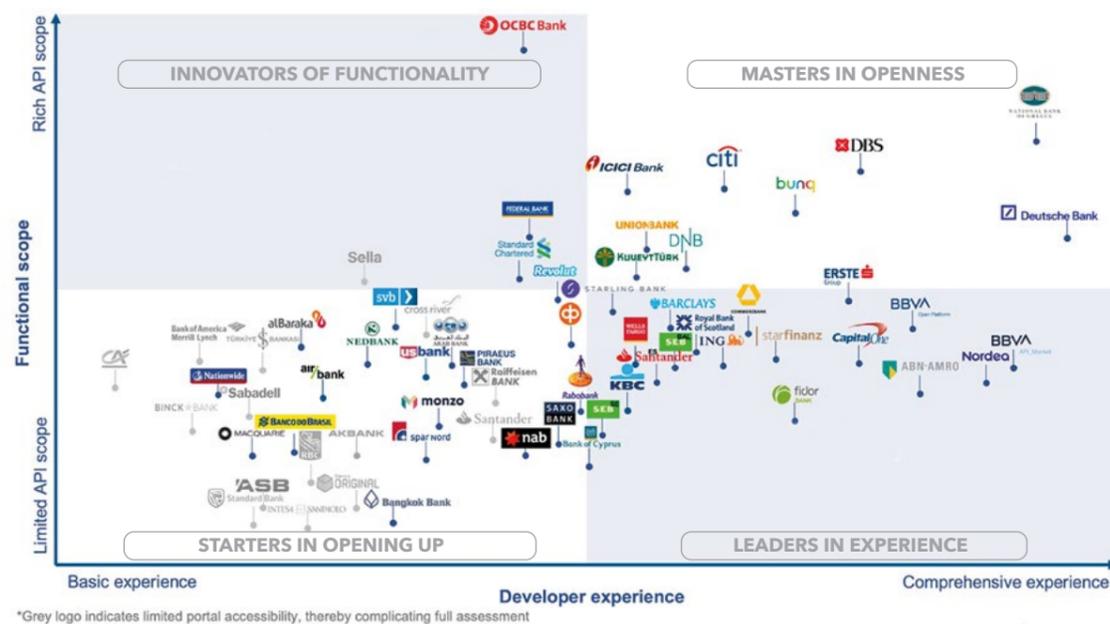
While some banks interviewed note substantial progress in the execution of their transformation strategies in specific areas, the majority perceive themselves as being near the beginning of a longer transformation journey. In fact, as noted by one of the experts interviewed, this journey may be open-ended as banks will need to continue to change and adapt to remain relevant.

Open Banking is an area where differences in the transformation maturity between institutions becomes especially apparent. Some banks have started and nurtured their Open Banking initiatives years ago, independently of the implementation requirements of the second Payment Services Directive (PSD2), while others have leveraged their PSD2 programmes to open up beyond regulation. Others are still evaluating their approach to Open Banking and whether to engage in it as a strategic priority. The INNOPAY Open Banking Monitor shows a global picture of the maturity of API developer portals, reflecting the “banking-as-a-service” side of Open Banking. According to this monitor, few institutions are mature enough to be part of the “Masters in Openness” category, but with every update of the benchmark, more banks enter the field and overall sophistication increases.

Beneath the visible surface of Open Banking initiatives lie profound implications on the bank's operating model. Importantly, Open Banking needs to be embedded in the context of the broader journey to digital readiness (addressed in chapter 4). Furthermore, there are concrete and specific implications to the setup of the Open Banking programmes. In both, important lessons can be drawn from the frontrunners in digital operating model transformation to help financial institutions set the right priorities and initiate and manage change.

Figure 1 INNOPAY Open Banking Monitor (OBM) - Developer portal benchmark (update November 2020)

Increasing numbers of banks develop extensive Open Banking propositions



Source: INNOPAY Open Banking Monitor

2.2 DESIGN PRINCIPLES OF DIGITAL READINESS

The transformational strategies applied by financial institutions to achieve digital readiness vary. But based on the research and the expert conversations for this report, five design principles emerge that underpin frontrunner banks' transformational efforts.

2.2.1 Customer-focused

Above all else, banks need to meet the changing demands of customers to keep their relevance in economy and society. With Covid-19's extreme acceleration of the shift from analogue to online and mobile banking as channels of choice, digital experience and customer journeys must be brought to new levels, starting with onboarding. Most of the bank customers' digital interactions and transactions occur outside the bank's sphere, so financial institutions need to be present where their customers are. At the same time, in corporate

“Financial services enable clients to fulfil their vital needs. Hence, the bank needs to be present in those ecosystems where clients spend most of their time, and where and when their financial needs arise.”

ANA ISABEL CLIMENTE ALARCON
Head of Open Banking Spain, BBVA

banking, clients require seamless integration of transaction banking services in their treasury operations.

Customer focus also involves improving customer intimacy based on data to understand their needs, providing the right services at the right place and time, and evolving their own product offering. Preserving customer trust, as proposed in the

previous EBA OBWG report², remains a major consideration in this context.

Banks' propositions must adapt to the new digital context of their customers' behaviours, lifestyles, preferences and businesses – in other words they must provide 'Contextual Banking' to succeed in a digital era. Customer focus as a design principle implies that all decisions in the bank are taken first and foremost with the customer in mind, in a relentless manner. Ultimately, all other design principles support this first one.

2.2.2 Data-driven

Data needs to be at the core of any bank's transformation. In the words of one bank executive, "five years ago, they said all companies were tech companies. Now all companies are data companies."³ This is valid for banks as much as for most other industries. Individual institutions start developing and executing dedicated data strategies. Underlying those is an evolution from looking at data as a liability to seeing it as an asset, which requires highest standards of protection but also offers immense opportunity in terms of risk mitigation, better decision-making, and superior customer value.

A key priority in creating a data-driven organisation is establishing a sound and future-proof data architecture that governs how data is sourced, stored, shared, and processed inside the bank. Often the starting point is to establish a full mapping and control of existing data flows and proceed to establish a "golden source" and a single view of the customer across systems and

“Doing the right thing for the customer helps you to build trust - meaning we can stay connected with our customers in ways that are valuable and useful to them.”

CHRISTIAN PIERCE
Chief Data and Analytics Officer, Bank of Ireland

channels. Based on this, advanced data use cases applying analytics and AI/machine learning techniques can be developed.

2.2.3 Openness-oriented

Banks embracing openness realise that customer value is more and more being created in collaborative ecosystems of diverse market players, rather than by the bank as a monolith. Engaging in Open Banking beyond PSD2 to provide value adding data, capabilities and banking products to customers via partners is a key component of this. It also includes industry collaboration in areas that are not in scope of regulation but nonetheless profit from cross-bank standardisation.⁴

Ecosystems are top-of-mind for many banks. A recent survey in the German banking market revealed that almost every bank considers

² Digital trust and the banking sector: towards a trust advantage in the digital economy, see <https://www.abe-eba.eu/thought-leadership-innovation/open-banking-working-group/management-summary-obwg-paper-202006/>

³ See <https://home.barclays/news/2020/09/how-covid-19-is-accelerating-tech-trends-in-financial-services/>

⁴ A noteworthy example is the Swiss Open Wealth Foundation, where banks and further market players align to develop common standards for wealth management APIs, which facilitate seamless interaction between wealth managers, custody banks and other market participants.

Figure 2 Design principles of digital readiness

Five factors can be observed underlying banks' digital transformation

DESIGN PRINCIPLES	EXPLANATION
 Customer-focused	<ul style="list-style-type: none"> Understand customers to the degree needed for providing truly relevant offerings Develop transparent products lead by customer needs, personalised and contextualised, simple and appealing
 Data-driven	<ul style="list-style-type: none"> Generate insights on all available (internal and external data) and derive new strategies, approaches and propositions from insights Base decision on measurable, reliable information
 Openness-oriented	<ul style="list-style-type: none"> Embed propositions in external customer journeys and ecosystems or build own ecosystems around service offerings Leverage third party propositions, capabilities and data
 Technology-enabled	<ul style="list-style-type: none"> Facilitate modularity and automation and accessible and usable data through API-based infrastructure Provide flexibility and scalability with cloud-based architecture
 Adaptive to change	<ul style="list-style-type: none"> Prepare for continuous transformation and adaptation to ever changing environmental factors Enable to act in highly dynamic environment

Source: INNOPAY analysis



We believe that collaboration with third parties is one of the keys to competing in this new environment. Our API Market has been one of the drivers of our transformation, enabling us to work openly with the fintech ecosystem. Fintechs are helping us to innovate processes and to improve our value proposition for clients. They defy limits and are catalysts for change, both in their vision and ideas and in the way they execute them.

ANA ISABEL CLIMENTE ALARCON,
Head of Open Banking Spain, BBVA

digital ecosystems as a highly strategic topic for the next five years. Furthermore, a large share of banks considers developing and operating their own ecosystems in the future.⁵ Yet not all bank executives are this bullish on ecosystems orchestrated by the bank. Some question the gravitational power of financial institutions to successfully build relevant customer ecosystems beyond the financial domain and regard a contextual banking-approach to embed financial products in external customer journeys as the more promising approach. As this may entail the risk of banks becoming invisible to customers, balancing it with the concept of “conscious banking” – where the bank remains explicitly visible to the customer – in relevant areas can be a viable strategy.⁶

2.2.4 Technology-enabled

Overhauling decades-old IT systems and modernising technology stack is a prerequisite to successfully operate in the digital age. The major goals in the transformation of IT are API-enabled, modular and cloud infrastructure, automation, and usable data.

⁵ See <https://www.pwc.de/de/finanzdienstleistungen/studie-relevanz-digitaler-okosysteme.pdf> (available in German only)

⁶ As described by Paulo Sironi, global research leader for banking and financial markets at the IBM Institute for Business Value, at Open Banking World Congress '21 (<https://openfuture.world/view/banks-and-fintech-on-platform-economies-conscious-and-contextual-banking/>)

APIs, as a key pillar, enable automated communication inter- and intracompany at speed and at scale and allow an efficient and consistent data flow across the organisation. A modular architecture enables faster innovation and allows banks to react to new requirements at speed. Architecture parts on different “layers” can be customised or changed without heavy interruption of other parts of the architecture. To a certain extent, the modular IT architecture prohibits “future legacy IT”.

With next-generation cloud solutions, businesses can design and implement secure infrastructure cost-efficiently and in a timely manner. Many banks still rely on on-premises infrastructure in combination with private clouds. With increasing momentum, banks are also starting to migrate to public cloud to achieve more scalability and organisational flexibility, while managing regulatory and other risks involved in this transition.⁷

Robotic Process Automation (RPA) enables banks to free up resources, increase process speed, reduce costs and at the same time increase quality. Combined with artificial intelligence solutions, automation offers an even broader area of application, also suitable for less standardised processes and tasks. Finally, the IT stack needs to be designed to support the data architecture and

⁷ Publicly communicated examples are collaborations between Deutsche Bank and Google as well as Commerzbank and Microsoft, among others. See also additional market initiatives such as the ECUC Group – European Cloud User Coalition.



When it comes to products, banking is still banking. The difference is how we position our products. We look at ourselves as being part of the ecosystem and provide products and services to it. Unlike some other banks, we don't have the ambition to own it."

BRITT RIFBJERG
Head of Large Corporates Digital, Nordea

analytics. Different layers such as data lakes, data pools and data warehouses are key technology elements supporting a bank's data strategy.

2.2.5 Adaptive to change

Covid-19 has made abundantly clear that the banks' business environment of the future will hold more uncertainty and less predictability than in past times, and shifts may occur at a rapid pace. As business decisions risk becoming outdated before they are executed, banks need to account for these factors by adopting operating models that enable them to react in an agile manner. They need to read and understand changes in the environment early, be able to take fast decisions and deploy appropriate solutions, ready to scale. Among others, this applies to anticipating new customer needs and requirements, engaging in partnerships, creating the right products more quickly and activating them across channels.

Successful transformation to this state of adaptivity involves new forms of collaborating inside and

across business lines, supporting technology and processes, but also introducing and spreading the right mindset throughout the company. Open Banking, in turn, can serve as a critical enabler to support this change, internally and towards the market.

Provided these design principles reflect the main characteristics of a digital-ready bank, what does this mean for the bank's transition to an operating model level? The next chapter introduces a conceptual operating model framework, and chapters 4 and 5 will explore operating model implications for digital readiness at large and Open Banking operations, respectively.

3. A PRIMER ON A REFERENCE OPERATING MODEL

The operating model translates the organisation's strategy into operations. As strategies of banks can differ substantially, the concrete design and implementation of their operating models will also vary accordingly, but the observed strategic design principles for banks need to be reflected in their operating model. The following chapter presents an operating model framework to analyse and depict operating model challenges in the context of digitalisation transformation from fundamental building blocks to an activity-based view of the organisation.

3.1 INTRODUCTION TO OPERATING MODELS

An operating model can generally be defined as being the representation of all relevant structures that constitute an organisation. It details how a company is internally organised to deliver the agreed strategy and envisioned value. In other words, an adjustment of the strategy needs to go in line with correspondent changes in the operating model to ensure a successful implementation and execution. In this sense, the operating model serves as a bridging function in creating coherence between strategy and what the organisation does on a day-to-day basis.⁸

In the digital age, companies need to be quick and adaptable in the way they are setting, executing, and adjusting their digital strategies. The velocity and adaptability of an operating model is therefore considered to be one of the biggest factors that differentiate the top economic performers from

⁸ See e.g. Harvard Business Review, "If You Want Your Digital Transformation to Succeed, Align Your Operating Model to Your Strategy", 2020, <https://hbr.org/sponsored/2020/01/if-you-want-your-digital-transformation-to-succeed-align-your-operating-model-to-your-strategy>.

other companies.⁹ The strategy must feed into the daily operations on an ongoing basis, and the daily operations must likewise feed the strategy: only then a company gets the chance to become successful.

Adjusting the operating model in line with the strategic ambitions generally starts with having a shared view on the current operations. Employees need to have a shared understanding of how their company operates, and more specifically of how their roles and responsibilities fit into this bigger picture. To represent the workings of a company, different operating model elements should be considered.

The reference model depicted in figure 3 serves to analyse and guide the discussion regarding the design of the digital operating model.

The reference model consists of the following elements:

- ≡ **Environmental spheres:** represent the developments in technology, society, economy, and nature that impact and form the context for the ecosystem
- ≡ **Ecosystem:** sphere in which the firm operates including suppliers, competitors, investors, customers, government, regulators, and public and media
- ≡ **Operating model:** represents the company with its eight operating model elements: culture, roles and structure, tools and processes, capital, people, assets, data and metrics, as well as governance and way of working

⁹ See McKinsey, "A winning operating model for digital strategy", 2019, <https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/a-winning-operating-model-for-digital-strategy>.

The reference model provides the bigger picture to explain how the company works on a basic level and what role the ecosystem and environmental spheres play in this context. For instance, a new development in the technology sphere will eventually have an impact on service or product offerings. This will impact the strategy of the institution and may require adjustments in the operating model to be able to produce desired outcomes. The institution, if required in collaboration with an external supplier, could work on its data and metrics to automate certain processes. The model helps to illustrate the larger dynamics of how an institution operates in the context of its ecosystem. Based on this understanding, risks and opportunities can be identified, and necessary actions in terms of the operating model can be defined and prioritised on a strategic level.

3.2 ACTIVITY-BASED VIEW OF AN OPERATING MODEL

To better understand the impact of a change in strategy and detail the necessary adjustments in the operating model it is necessary to zoom in on the operating model elements and the underlying activities. For this purpose, the Crosslinx Framework^{®10} provides an activity-based overview of the operating model of an organisation.

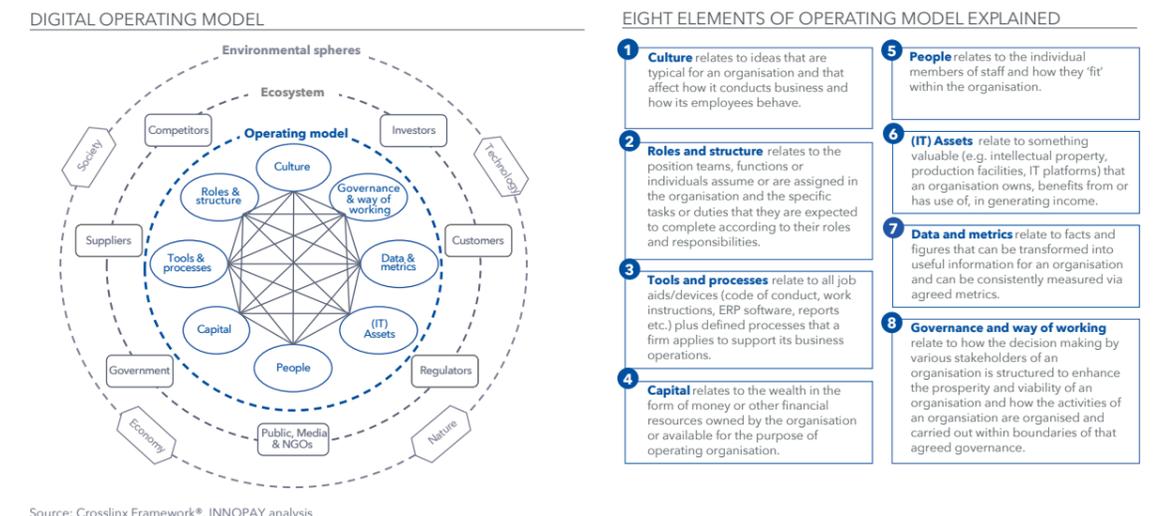
The activity-based view consists of four cycles and a number of enablers, representing all activities of a financial institution:

- ≡ **Customer cycle:** relates to all interactions between the organisation and its clients, including the delivery of products and/or supply of services

¹⁰ <https://www.innopay.com/en/crosslinx>

Figure 3 Integrated view on operating model

Banks' operating model is composed of eight elements



≡ **Product cycle:** captures all activities related to definition, development and ongoing management of the product and/or service offering of the organisation

≡ **Capability cycle:** details how an organisation manages its critical capability (e.g. IT system in case of banks) to deliver products and/or services to its clients

≡ **Management cycle:** details how the cross-organisational management of the organisation occurs: from business plan via recurring management routines to other key cycles or enablers to the approved annual report

≡ **Enablers:** represent those supporting functions and activities that allow the four key cycles to operate effectively and efficiently: enablers can be a function or department (e.g. HR, IT), but also a group of activities (e.g. data management or Open Banking Center of Excellence)

Each cycle contains several phases that represent a group of activities. With a change in the strategy, the company looks at the different cycles to identify key areas that need to be adjusted for the strategy to be successful. For instance, to increase the share of wallet with current clients, one focus area could be the 'Service client' phase in the customer cycle and all activities belonging to product/service delivery and relationship management, that this phase entails. Another area could be 'the qualify and prioritise ideas' phase in the product cycle. By looking at the activities in those areas and comparing them to market best practices or new requirements, the company can identify key gaps and challenges. Based on this understanding, actions can be defined and prioritised. In the example at hand, one conclusion could be that there is a need to redefine roles and structure

of the client facing teams to reduce overlap and remedy undesired inefficiencies.

Using this approach, companies can both build and continuously adjust their digital operating model in the context of their strategy and their ecosystem. Step by step, an operating model can emerge step by step that is characterised by high velocity and adaptability, and that optimally supports the companies' vision and strategy.

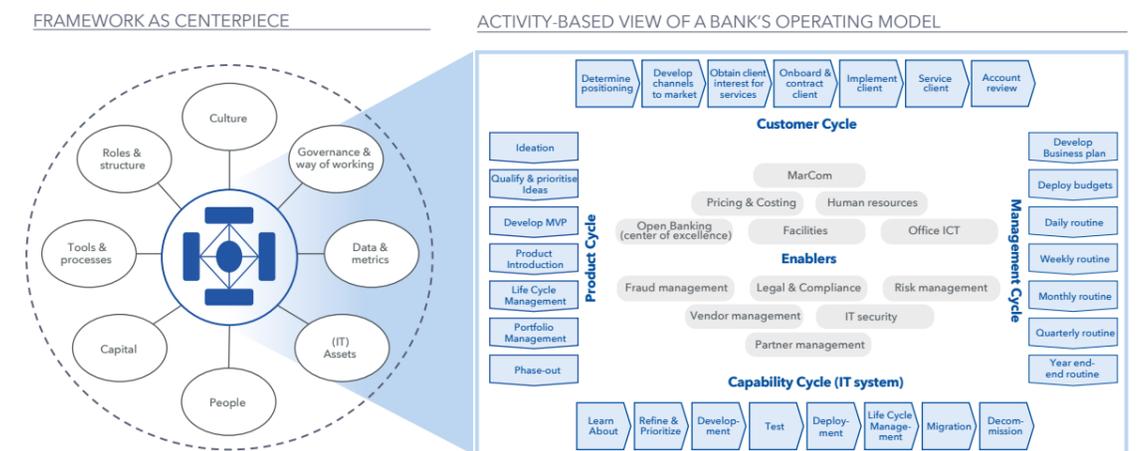
3.3 HOW THE OPERATING MODEL FRAMEWORK IS APPLIED IN THIS REPORT

To analyse and discuss key actions in laying the foundation for such a digital operating model, the approach explained in this chapter is applied throughout the report:

1. Based on observations regarding current developments in the financial sector, this paper has identified key challenges and design principles for digital readiness (chapter 2).
2. The implications of the design principles and change requirements on the operating model elements on organisational level for the banks are outlined and described (chapter 4).
3. Those design implications on operating models for Open Banking are analysed regarding current day-to-day challenges on activity level to identify common gaps and solution approaches (chapter 5.2).
4. Building on those insights, key actions in terms of operating model elements for Open Banking specifically are identified, prioritised and discussed (chapter 5.3).

Figure 4 Activity-based view of an operating model (Crosslinx Framework®)

Banks' operating model can be detailed into activities relating to four cycles



Source: Crosslinx Framework®, INNOPAY analysis

4. TOWARDS AN OPERATING MODEL FOR DIGITAL READINESS

To become a digital-ready bank based on the design principles presented in chapter 2 has profound implications on a bank's traditional operating model. This chapter describes the major operating model challenges and implications of this transformation, informed by the expert interviews conducted.

4.1 CHARACTERISTICS OF THE TRADITIONAL BANK OPERATING MODEL

Traditionally, banks have operated in a vertically integrated manner, covering the full value chain of financial services. This is underpinned by monolithic, in-house IT infrastructures with secure and efficient operations but low flexibility and long development cycles based on waterfall approaches. Likewise, this involves relatively fixed cost structures. Typically, a product-centric view dominates and determines a siloed setup of product and business lines. The approach to data is dominated by risk and compliance aspects. Physical outlets play an important role in the channel mix while (customer-facing) processes feature a high degree of manual steps and face-to-face interaction. And finally, factors such as integrity, stability and rule conformity dominate corporate culture, whereas it may lack a tendency to act with speed, engage in experiment, and base decisions on data.

4.2 OPERATING MODEL IMPLICATIONS OF DIGITAL READINESS

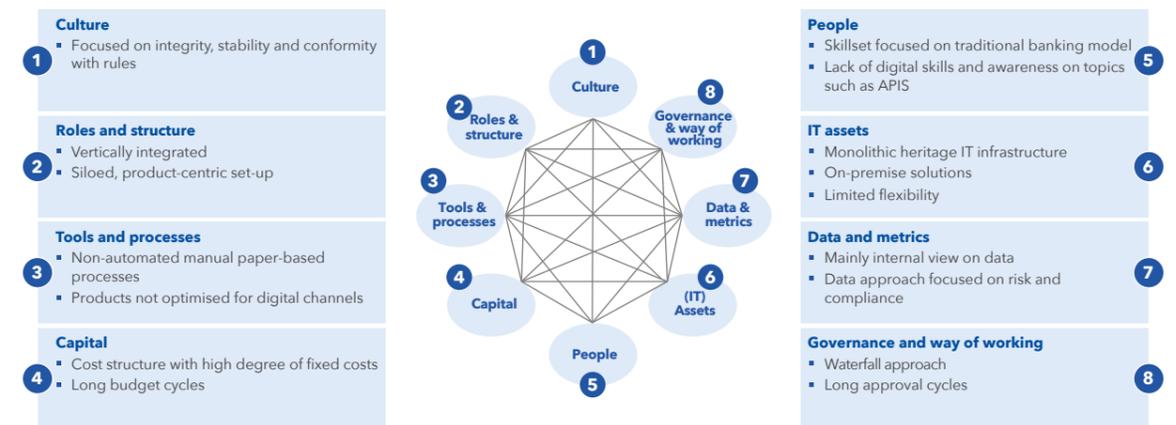
The traditional operating model depicted above fails to deliver an adequate response to the challenges described in chapter 2, and many banks have started their journey of operating model transformation to attain digital readiness,

accelerated by Covid-19. All dimensions of the bank's operating model are impacted by this transformation and, in interaction, form a solid foundation for successful strategy execution in the digital era. Major implications of this transformation include the following:

- Overall, a vertically integrated approach needs to be replaced by more modular one that can flexibly react to and positively support digital readiness.
- This requires an **IT infrastructure** based on modularisation, microservices, cloud and APIs.
- Agile **ways of working** need to be employed to add flexibility and speed to development, as well as allow cross-functional teams to emerge and work in a customer-centric way.
- The **approach to data** needs expand focus to value generation through advanced analytics and AI.
- Products** should be designed and optimised for digital channels including APIs.
- Processes** need to be fundamentally digitalised and automated, including the elimination of physical touchpoints.
- The **employee skillset** needs to be updated and expanded to include new technologies and a deep understanding of "digital", including an open, entrepreneurial and data-oriented mindset.
- Corporate culture** requires a mindset shift to adopt a permanent customer perspective, emphasise speed and rapid experimentation with a culture of accepting failure, self-organisation, and the importance of data-driven decisions.

Figure 5 Traditional banks' operating model elements

Characteristics of the traditional banks' operating model



Source: INNOPAY analysis

Figure 6 Transformation of operating model elements from traditional to digital-ready

Transformation implies change in every aspect of the operating model

	TRADITIONAL OPERATING MODEL	DIGITAL-READY OPERATING MODEL
1 Culture	<ul style="list-style-type: none"> Focused on integrity, stability and conformity with rules 	<ul style="list-style-type: none"> Mindset shift to adopt a permanent customer perspective Emphasise speed and rapid experimentation allowing failure
2 Roles & structure	<ul style="list-style-type: none"> Vertically integrated Siloed, product-centric set-up 	<ul style="list-style-type: none"> Cross-functional teams working customer-centric Vertical integration replaced by modularity and flexibility
3 Tools & processes	<ul style="list-style-type: none"> Non-automated, manual, paper-based processes Products not optimised for digital channels 	<ul style="list-style-type: none"> Fundamentally digitised and automated Physical touchpoints eliminated
4 Capital	<ul style="list-style-type: none"> Cost structure with high degree of fixed costs Long budget cycles 	<ul style="list-style-type: none"> Focus on cost efficient solutions Easy budget allocation for proof of concepts
5 People	<ul style="list-style-type: none"> Skillset focused on traditional banking model Lack of digital skills and awareness on topics such as APIs 	<ul style="list-style-type: none"> Updated and expanded skillset including new technologies Deep understanding of "digital"
6 IT Assets	<ul style="list-style-type: none"> Monolithic IT infrastructure with limited flexibility On-premise solutions 	<ul style="list-style-type: none"> IT infrastructure based on modularisation and microservices Flexible and scalable through cloud and APIs
7 Data & metrics	<ul style="list-style-type: none"> Mainly internal view on data Data approach focussed on risk and compliance 	<ul style="list-style-type: none"> Expanded approach to value generation through advanced analytics and AI
8 Governance & way of working	<ul style="list-style-type: none"> Waterfall approach Long approval cycles 	<ul style="list-style-type: none"> Agile ways of working Focus on speed and development

Source: INNOPAY analysis

“Banco BPM is executing a ‘digital omnichannel transformation programme’. It addresses major aspects of our operating model, such as IT architecture and our data capabilities. It also focuses on evolving our distribution model with a strong omnichannel approach. One of the programme’s key success factors is to have alignment throughout the whole bank and to enact cultural change down to the branch network.”

STEFANO CIOFFI

Head of Digital Services and Open Banking, Banco BPM

“To cite Peter Drucker, ‘culture eats strategy for breakfast’. Culture and mindset truly make or break any digital transformation process.”

CHRISTIAN WOLF

Head of Strategic Partnerships and Ecosystems, RBI

“All employees must be aware of the digital need of the customer and achieve digital mindset, need to challenge the status quo and change the way of working.”

MARCELLO RONCO,

Head of Digital Platforms & Ecosystems, Unicredit

- Finally, all of the above must be approached with the ultimate goal in mind of creating a **relentlessly customer-focused organisation**.

4.3 MAJOR CHALLENGES OF DIGITAL OPERATING MODEL TRANSFORMATION

While many of the banks interviewed are well on the way to tackle several or all of these transformational aspects, a range of key challenges emerged, which are addressed in this section. They span:

- Cultural Change
- Agile Transformation
- Technology
- Process Digitalisation
- Organising for Data

4.3.1 Cultural change

Culture is the fundamental enabler of successful digital readiness – or its biggest impediment. This recognition was shared among virtually all bank experts interviewed. Technology, processes and

organisational structure enable product managers, sales consultants, or developers to make informed decisions quickly and act, but they are up to bank employees to adopt and bring to life.

A broad research conducted by Massachusetts Institute of Technology (MIT) in 2019 on building “digital-ready culture” in traditional organisations identified four key values of digital culture: **impact, speed, openness, and autonomy**.¹¹ Embedding these values in the own corporate culture is likely to increase the chance for success.

More concretely, company culture should encourage and facilitate:

- viewing every new product or initiative from a **customer perspective**, rather than with bank-internal objectives in mind
- engaging in frequent and fast **experimentation**, learning from the results, and applying new insights
- accepting **fast failures** and share learnings
- self-organising** and allowing fluidity across teams and functions
- using and **relying on data** to take decisions

¹¹ see <https://sloanreview.mit.edu/article/building-digital-ready-culture-in-traditional-organizations/>

Vision and purpose are further important cultural drivers. Explaining the “what” and the “why” to employees while providing substantial freedom in finding the “how” has proven to be an effective success factor.

Innovating corporate culture and enacting mindset change is not a simple task. Some recommendations on the implementation of cultural change from our interviews include:

- Enact change from the top and from the bottom:** senior management should advocate and lead by example, while actively encouraging and rewarding application of new practices by employees.

- Educate employees:** beyond training classes, provide employees with hands-on learning and share best practices visibly.

- Focus on areas that matter:** while not the whole organisation may need to undergo cultural change, ensure that mindset shift reaches the areas critical to value generation, including physical branches.

4.3.2 Agile transformation

The functional silos at the heart of the traditional bank operating model have a hard time dealing with the pace of change confronted by banks today. Digitally advanced banks such as BBVA or ING have long engaged in large scale agile transformation involving large parts of the bank’s

CULTURAL CHANGE AT DBS

Asian bank DBS is a global leader in digital banking, as well as ranking as a “Master of Openness” in the INNOPAY Open Banking Monitor. As part of its transformation process, DBS engaged in significant cultural change, resulting in more individual ownership, customer-focus and disruptive mentality inside the organisation. Key features included strong top management commitment, setting a strong vision as guidance, and putting customer experience front and center. DBS supported this change with a broad-scale education programme that focused on hands-on experience. As part of its transformation, DBS also implemented a measure for digital value creation by explicitly differentiating digital and traditional customers and putting clear KPIs on the former.

Source: [Thefinancialbrand.com](https://www.thefinancialbrand.com/), INNOPAY analysis

organisation.¹² Among the banks interviewed, several had already adopted an agile setup for parts of their organisations, while others were running their transformation programmes in an agile mode on top of their yet traditional overall operating structure.

At the core of an agile approach are interdisciplinary, high-performing teams that have ownership of specific business problems, with a mission to solve these problems end to end. These teams have a relatively high degree of autonomy and priorities can change quickly if required. Complemented with solid governance and performance measures, an agile organisation consisting of many such teams may operate in a highly efficient and effective way. In addition, an agile setup itself can be a major driver for cultural change and an attractor for new skilled workers.

Whereas the types of agile implementation differ,

¹² See <https://www.bbva.com/en/agile-at-bbva-a-journey-of-continuous-transformation/> and <https://www.mckinsey.com/industries/financial-services/our-insights/ings-agile-transformation>.

two main approaches can be observed in the banking industry: First, an all-encompassing agile transformation of the enterprise, covering all or most functional areas and processes, and second, a delimiting approach focusing on a few key areas such as IT development and operations and digital product innovation. In the former case, the so-called Spotify model is often used as inspiration.

As stated by one bank's digital transformation officer at an EBA Open Forum event in 2020¹³, after some years of transformation, initial successes could be observed, whereas a final conclusion on the bank's all-out effort to become agile was still outstanding. Generally, while agile can be viewed as a key component for a digital operating model, the starting point (IT or a business line), scope (full or partial) and type of implementation need to be specific to the bank's current position, context, and priorities to turn into success.

¹³ "New ways of working...is agile indispensable for the digital journey? Definitions, implementations and impact." Frankfurt, 11 February 2020.

“ We took a centralised approach to innovation, but it didn't bring us very far. In the past years, we have stopped these large innovation programmes and focused on execution. As a result, we have more traction - maybe in smaller areas, but with clear results. Innovation is now back 'on the ground' in the different competence areas.”

BRITT RIFBJERG,
Head of Large Corporates Digital, Nordea

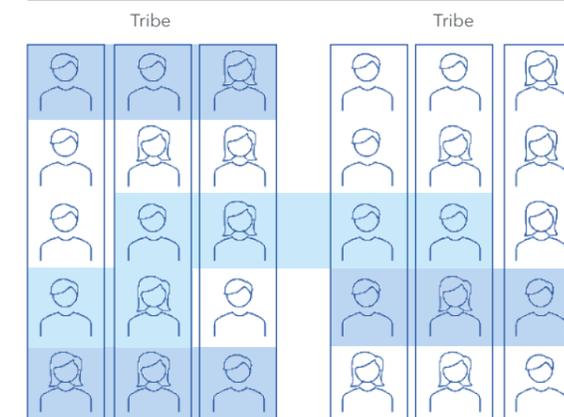
OVERVIEW ORGANISATIONAL TRIBE SET-UP

Tribe structure, also known as the “Spotify organisation”, is a set up in autonomous teams comprising all the different specialists necessary to create a product. The model embraces team autonomy, so that each team (or Squad) selects their way of working (e.g. Scrum). Squads are organised into Tribes and Guilds to help keeping teams aligned and exchange knowledge.

Figure 7 Tribe organisation and explanation

Tribe organisation is a set-up fostering knowledge transfer across cross-functional teams

ILLUSTRATION OF TRIBE ORGANISATION



Source: Atlassian, INNOPAY illustration

EXPLANATION

Squad
Squads are cross-functional, autonomous teams that focus on one feature area. Each Squad has a unique mission that guides the work they do, an agile coach for support, and a product owner for guidance.

Chapter
Even though Squads are autonomous, it's important that specialists (e.g. API Developers) align on best practices. Chapters are the family that each specialist has, helping to keep engineering standards in place across a discipline.

Guild
Team members who are passionate about a topic can form a Guild, which essentially is a community of interest. Anyone can join a Guild and they are completely voluntary. Guilds can cross different Tribes. There is no formal leader of a Guild.

Multiple Squads in the same feature area form a Tribe to promote alignment across Squads. Each Tribe has a Tribe Lead who is responsible for helping coordinate across Squads and for encouraging collaboration. Additionally, each Tribe has a “TPD Trio” (combination of a Tribe Lead, product lead, and design lead) in place to ensure there is continuous alignment between these three perspectives when working on features areas.¹

¹ See Atlassian, “Discover the Spotify model”, <https://www.atlassian.com/agile/agile-at-scale/spotify>.

4.3.3 Technology

The flexibility gained by adopting agile organisational structures and methods may fall short of delivering results if the technology stack applied by the bank cannot accommodate the increased agility accordingly. Decade-old core banking systems with monolithic architectures have worked well to support the vertically integrated bank model in non-dynamic environment for years, but they are not fit to counter the challenges posed by the digital-powered dynamics of today's world. Banks are working on revamping their technological stacks considering modularity, microservices, cloud and APIs. They also set up specific stacks to provide control of and leverage data (see chapter 4.4).

Gaining the required flexibility to act – and manage cost more effectively – implies removing the complexity of monolithic core IT and repackaging it into discrete and manageable modules or microservices. This permits higher speed of development, flexible reaction to changing requirements, but also options to outsource individual components. The use of internal APIs allows seamless interaction and exchange of information between applications, teams and business lines and forms a prerequisite for successful externalisation of APIs in the context of Open Banking.

Virtually all banks interviewed were at least investigating the adoption of hybrid cloud solutions or have started to move in this direction. A 2019 survey of the European Banking Authority confirms this picture: By then, almost 70% of European banks made use of cloud services in production,

and all banks were at least discussing the option. A prominent example is Deutsche Bank's recently announced far-reaching Cloud partnership with Google.¹⁴

Moving to cloud is not primarily a cost case – rather, major benefits lie in improved speed and agility by reducing time to market of new applications or fast activation of new channels; facilitate innovation, including access to tools and innovation capabilities of cloud providers as well as their ecosystems; ability to scale IT operations more efficiently; and mitigate risk.

The move to cloud entails a series of challenges and pitfalls that may reduce its value – including the inability to move beyond peripheral cloud applications only, a transfer of applications as they are to cloud without reaping flexibility benefits, or failure to ensure the security and compliance required – yet cloud is an essential driver for digital readiness and presents ample opportunities for banks.

Technological transformation to support digital readiness also extends to the application and tooling layer. One bank interviewed mentioned significant investments in upgrading its customer relationship management (CRM) system to a more versatile solution supporting optimised views of and interactions with customers across channels. Also, since the beginning of the Covid-19 crisis, deploying tools at speed to collaborate and interact with customers in a virtual manner has become essential.

¹⁴ https://www.db.com/news/detail/20201204-deutsche-bank-and-google-cloud-sign-pioneering-cloud-and-innovation-partnership?language_id=1

“ In the Open Data world there are many ways in which data sets can be combined to add value for both customers and businesses. However, the customer is rightfully the controller of the permissions to enable this. All companies, including banks, therefore need to ensure that there is a positive value exchange, which the customer recognises, to gain and retain their consent to deliver these new outcomes.”

CHRISTIAN PIERCE,
Chief Data and Analytics Officer, Bank of Ireland

4.3.4 Process digitalisation

In the discussions around new frontiers in data, technology, and ecosystem business models it is easy to forget that digital transformation starts with digitalisation and automation of end-to-end processes. So far constrained by multiple manual steps and the use physical paper, in part due to regulatory requirements, process digitalisation and automation is a basic requirement to allow seamless interaction with customers across channels. UniCredit, for example, has declared becoming a “paperless retail bank” as a primary goal of their transformation strategy.¹⁵

The Covid-19 pandemic has significantly increased the speed of process digitalisation within banks and beyond. With waves of customer shifting from physical to digital channels within weeks, banks have to a large degree been able to react with greater speed of digitalisation than was thought possible. Yet work remains to be done in areas such as onboarding to catch up with the new generation of mobile-only banks.¹⁶

¹⁵ <https://www.unicreditgroup.eu/en/press-media/press-releases-price-sensitive/2019/team23.html>

¹⁶ In Q2 2020 64% of new checking accounts were opened through online/mobile channels, compared to 46% in Q2 2019 – though it is , see <https://www.forbes.com/sites/ronshevliv/2020/09/21/new-consumer-research-finds-consumers-open-more-checking-accounts-digitally-than-in-branches/?sh=6a9046fb22af>

4.3.5 Organising for data

Data is at the core of a bank's digital transformation to stay on par with BigTech and other players that have access to large datasets and understand how to use them to better serve their customers. Banks typically sit on large amounts of data – in addition to increasing opportunities to tap into external data, for instance through PSD2 access-to-account. Internal bank data, however, is usually fragmented, inconsistent, stored in different formats and spread across functions and systems throughout the organisation. Traditionally, data was rather a by-product of the bank's core business processes and used for dedicated, clearly defined purposes such as reporting or compliance. While the awareness of data as an asset is growing rapidly, as are the number of projects inside banks that aim to leverage the available data, the latter is often not organised in a way conducive to those endeavours.

To fix this, several banks interviewed have defined and started to execute comprehensive data strategies. These strategies define a roadmap of activities aiming to align data resources so that they can be sourced, stored, shared, and used efficiently to support the bank's goals. As a result, data will be viewed and treated as an asset rather than a by-product.

To get bank data organised, identifying and structuring it is the first step. One bank data expert interviewed shared how the bank went through a long exercise of identifying origins, locations, and structure of existing data to cluster different data types and assigning meta data. It also discovered that different versions of customer data were stored in various systems in the organisation, so that “golden sources” were identified to provide a single truth and view of the customer, irrespectively of the channel. Endpoint of this exercise was the definition of a consistent and comprehensive data architecture. This, together with a powerful data and analytics infrastructure, provides a foundation for leveraging data to improve risk management, business decisions and customer value.

To store data, some banks introduce scalable and multi-layered central data platforms that include data lakes, data pools and operational data stores, serving to store multi-year records of structured

and unstructured data or to provision smaller sets of data for immediate processing. Alternatively, a more decentralised approach can be taken where a data sharing infrastructure allows to provision data that is stored in various locations, rather than in a central database.

Finally, a solid, overarching data governance strategy and model need to be implemented to ensure the continued availability, accessibility, consistency, and security of data, and put in place proper processes and control. Strategy and model need to ensure that data standards and policies are enforced and communicated to all relevant stakeholders. Here, too, company culture is of vital importance to emphasise both the potential of data usage and awareness of proper data conduct.

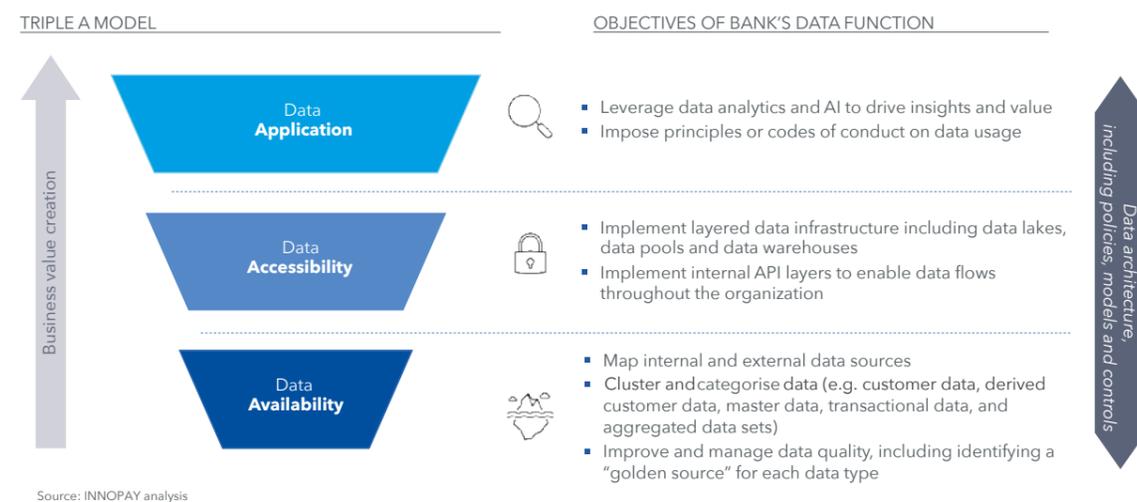
4.4 ASSUMING A HOLISTIC VIEW TO ACHIEVE DIGITAL READINESS

Some of these examples illustrate how the elements of the operating model are interwoven and require a holistic approach to achieving digital readiness: flexibly addressing customer needs requires breaking down organisational silos, which, in turn, presumes a modular tech stack to execute. New technologies and approaches help attract talent, which can support the required cultural change. The sequence and scope of transformation may differ, but narrow initiatives focusing on isolated factors are likely to have little impact.

A holistic approach to operating model transformation also forms the basis for successfully initiating and operating Open Banking. The next chapter explores key challenges of embedding Open Banking in the daily operations of a bank and relates this back to specific implications on the different operating model elements.

Figure 8 Data strategy objectives along the triple A model

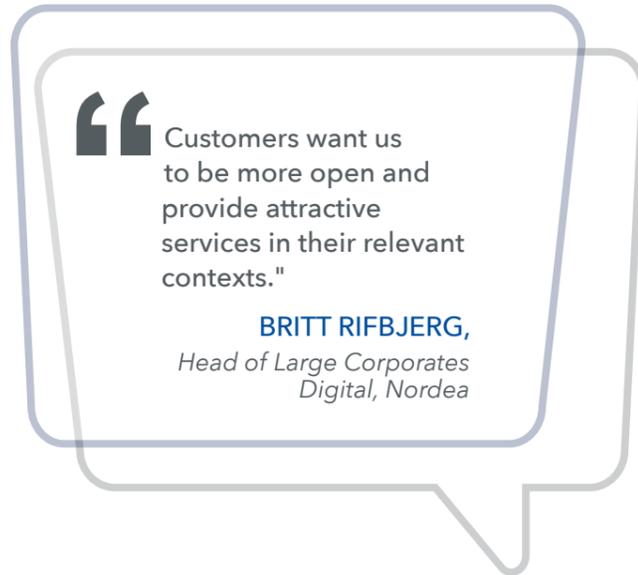
Banks’ data function organise data availability, accessibility and application



5. ORGANISING TO ACCELERATE OPEN BANKING

Open Banking – the exposure and consumption of data, functionality, or products via APIs – is key to the digital readiness of banks. Not only does Open Banking allow banks to collaborate with partners and participate in ecosystem value creation, it is also a central component of achieving customer centricity. Open Banking allows data to be leveraged across organisational borders and enables the bank to react more flexibly to changing customer requirements and position itself for success.

With the operating model implications of digital readiness as a starting point, this chapter zooms in on operational factors that are crucial to successfully embedding Open Banking initiatives in the bank's operating model and make a successful Open Banking trajectory more likely.



5.1 OPEN BANKING MATURITY TO DATE

In the last years, accelerated by PSD2 and other regulatory initiatives, an ever-increasing number of banks around the globe started to open up and expose APIs to provide data, building blocks of core banking services, or full products, to third parties in the market. The rationales include embedding their services into relevant ecosystems and customer journeys outside the bank, providing white-label services to Fintech partners or monetising on data that third parties leverage for value added functionality of their own products. Next to a broad range of APIs being exposed, including in new categories such as insurance¹⁷, digitally advanced banks have worked intensively on maturing their API portal as central destination for their new API channels.

- ≡ An initial focus on retail banking APIs is currently shifting as wholesale use cases gain traction.
- ≡ Banks become more sophisticated in granularly combining “banking-as-a-service” and “banking-as-a-platform” use cases.¹⁸
- ≡ Banks move on from running Open Banking in a “project mode” and increasingly look at embedding it in their operating models.

The Open Banking maturity of European banks naturally differs. Open Banking efforts need to be grounded in the broader transformational context as described in the previous chapter. Yet, success or failure will also be decided in the concrete integration of Open Banking activities in the bank's daily operations.

Among the leaders in the field, several Asian banks including OCBC and DBS have particularly excelled at the “APIfication” of their banking services and exposed hundreds of granular APIs to external parties. Yet, European banks have equally taken a lead in building out their API offerings and Open Banking portals.

5.2 OPERATING MODEL IMPLICATIONS OF OPEN BANKING

Engaging in Open Banking is not limited to conducting developer hackathons and launching an API portal – it has profound ramifications for the bank's operating model. On the one hand, effective Open Banking capabilities rely on many of the digital-ready operating model elements described in chapter 4. Specific implications on the eight operating model elements are summarised in figure 10.

On the other hand, Open Banking needs to be embedded in the overall organisation of the bank in a way that the bank's API strategy can be delivered upon; an API roadmap addressing true customer

A few key observations are representative for the increasing maturity of Open Banking:

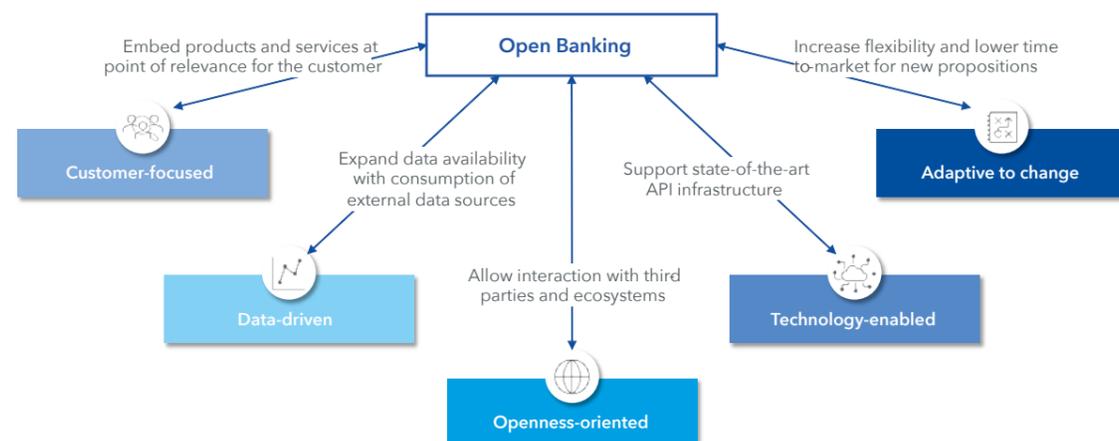
- ≡ The number of banks offering APIs has steadily increased, as has the breadth of API functionalities offered.
- ≡ Banks become increasingly sophisticated in engaging partner communities and relevant audiences therein, while improving their API go-to-market and developer-servicing capabilities.

¹⁸ One bank interviewed decided to provide corporate banking APIs directly to large corporates, embed them in relevant ERP system for mid-sized companies while partnering with a dedicated software provider to offer a platform solution for small businesses.

¹⁷ see <https://www.innopay.com/en/publications/findings-innopay-open-insurance-monitor-front-running-insurers-and-banks-are-making>

Figure 9 Relation between Open Banking and design principles

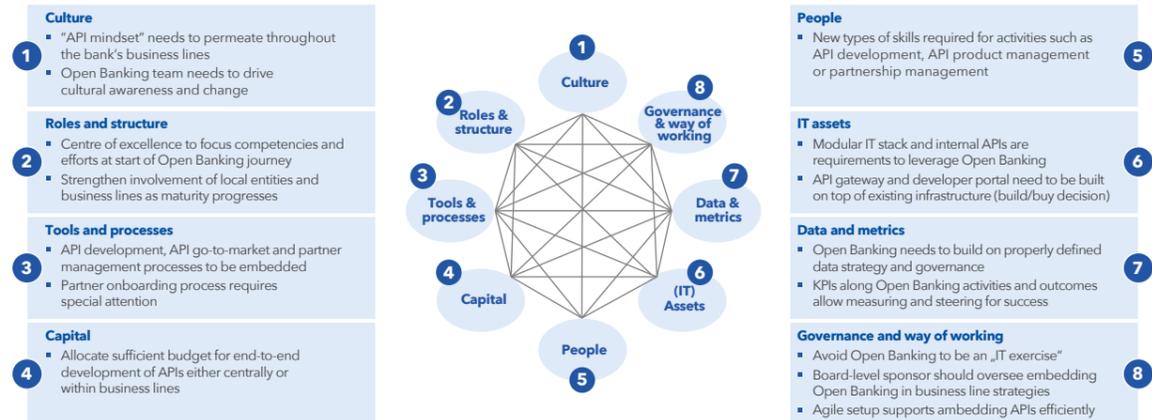
Open Banking and design principles support each other



Source: INNOPAY analysis

Figure 10 Operating model implications for Open Banking

Key considerations on operating model elements



Source: INNOPAY analysis

“ APIs are not just technical components, they are business products with product and maintenance lifecycles that require care.”

MARTINA WALLENBERG,
Head of Open Banking, SEB

“ If you want to innovate, you need to be prepared - and allowed - to fail. In addition, we try to measure everything: that helps us to easily change direction on business and marketing side. If we see something going in a different direction, we can change our scope.”

STEFANO CIOFFI,
Head of Digital Services and Open Banking, Banco BPM

needs is created; APIs are developed and brought to market in a timely manner; and partners are quickly and securely onboarded and serviced. This requires examining the implications of running an Open Banking program on an activity level. In the following sections, the activity-based operating model view (introduced in chapter 3) is applied to identify some common challenges of embedding Open Banking in daily bank operations.

tend to be decoupled from the business lines and lack the mandate to influence product portfolio decisions and prioritisation. This prevents them from helping the business leverage the additional potential delivered through Open Banking and APIs as both a new distribution channel and enabler for new, innovative propositions.

5.2.1 Product cycle challenges

In its core, Open Banking involves the development and management of API propositions. This includes the end-to-end process from initial API ideation to incubation and realisation of new commercial propositions, including qualification and prioritisation process, implementation, and management of the overall API portfolio.

First and foremost, mitigation of this challenge involves measures to create an “API mindset” and raise awareness of the benefits of APIs throughout the organisation. Some banks interviewed have engaged in broad Open Banking training programmes to support these efforts. Beyond this, the bank’s board can mandate a clear API-first approach, where all business lines are asked to set up new products to include APIs by default. Clearly, API product development introduces new variables and uncertainties, including monetisation approaches or the fact of catering to new types of customers. In the end, a shared effort by the Open Banking function and business lines, supported by top management and involving the right customers and third parties, is likely to be most successful in creating the successful API products.

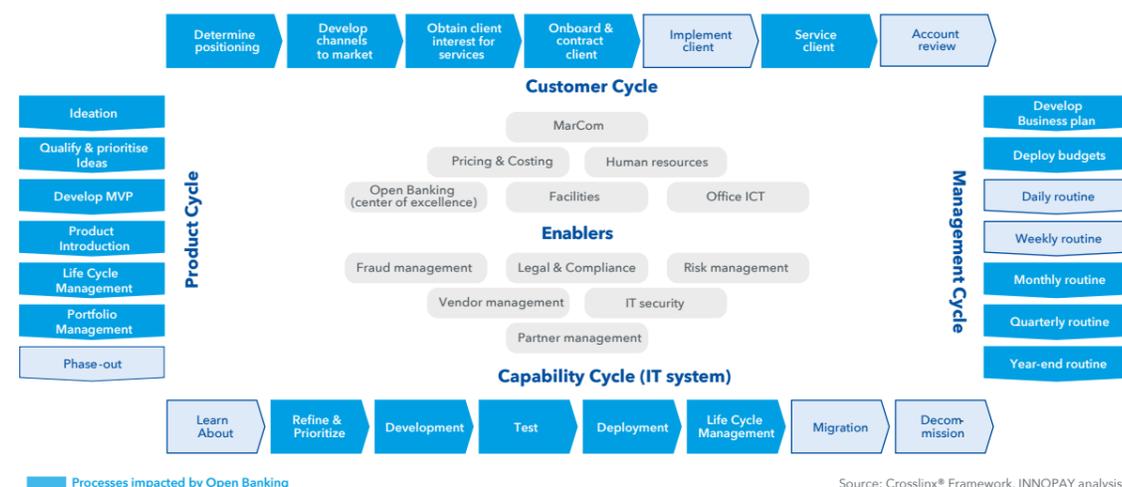
API propositions are often not yet seen as an integrated part of the banks’ full product portfolio management. Revenue-generating business lines are responsible for the definition of the product strategy and own the budget and resources to develop and manage their product portfolio. However, their focus is not on thoroughly understanding the implications and opportunities of Open APIs to drive impact and value creation for their customers and partners. Open Banking teams

5.2.2 Customer cycle challenges

Open Banking requires new forms of collaboration with ecosystem partners. Engaging, onboarding,

Figure 11 Activity-based operating model view with highlighted Open Banking processes

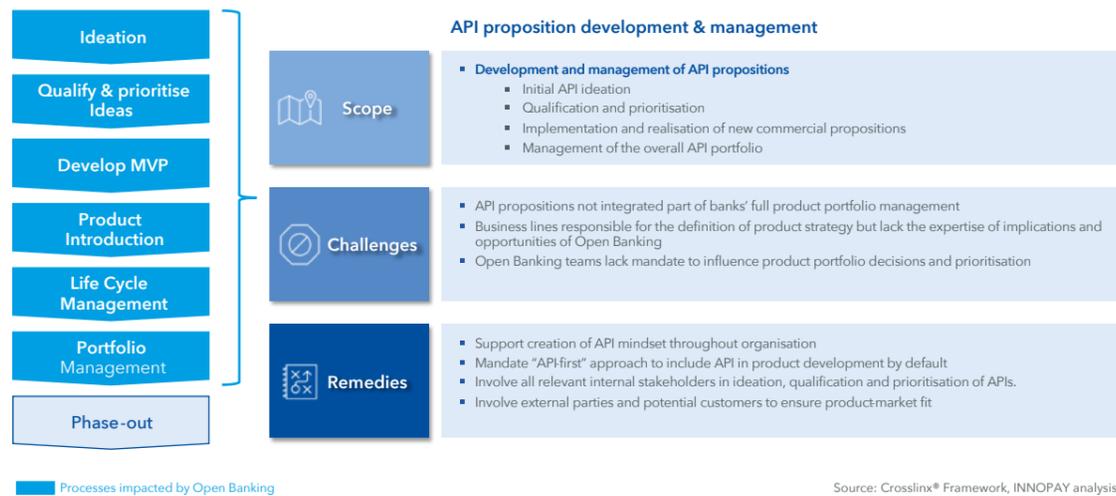
Highest impact of Open Banking is in customer interaction and product development



Source: Crosslinx® Framework, INNOPAY analysis

Figure 12 Open Banking implications for Product Cycle

Product Cycle: API proposition development and management



“ In the early days of our Deutsche Bank API Program, it took several months to onboard new partners. Since then, we have spent considerable effort optimising and accelerating this process. Today, new users can access our test data within minutes, and those who build market-ready products based on it can start working with real data within two weeks.”

JORIS HENSEN,
initiator and co-lead, dbAPI Program, Deutsche Bank

and managing these third parties requires appropriate policies, processes, risk management frameworks, interaction formats and roles & responsibilities definition.

APIs and business development

This set of activities relates to the go-to-market of API propositions. It includes all go-to-market and commercial activities such as API use case development, pre-sales activities to uncover new digital partnerships, and communication of business benefits to customers and partners.

new partners and nurturing communities of developers. They also play a vital role in API use case development, presales activities to uncover new digital partnerships, and evangelisation of the business benefits to new customers and partners.

API onboarding & risk management

API onboarding & risk management spans all activities and decision-making moments from the initial registration of partners on the developer portal to the use of APIs in a live production environment.

Business lines have the go-to-market responsibility for their products and services with related budgets and resources. Open Banking teams typically are not in the same position, which could lead to delays in time-to-market or lack of ambition for Open Banking propositions.

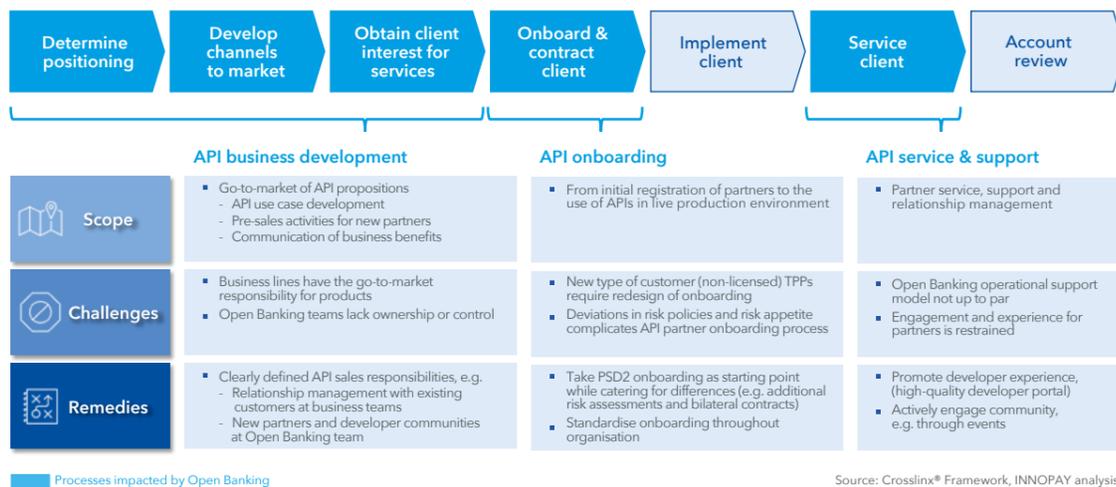
Third party onboarding in the context of Open Banking is a new process for banks. Risk and compliance implications need to be understood and managed, while the process needs to be designed to ensure sufficiently convenient onboarding without unnecessary hurdles. Diverse views by various stakeholders involved may complicate matters further, as do diverging requirements across multiple jurisdictions a bank may be active in. It may take time and effort to optimise this process, as one expert interviewed testifies.

As a remedy, the responsibility to drive API-based propositions should be clearly defined between Open Banking teams and business lines, with an active commitment from the business. A suitable split could be to leave relationship management with existing partners and customers to the business lines while involving API specialists as needed. Open Banking teams, meanwhile, bear responsibility for marketing to potential

One way to approach third-party onboarding can be to take the PSD2 third-party provider (TPP) onboarding as a starting point and adapt

Figure 13 Open Banking implications for Customer Cycle

Customer Cycle: Dealing with Third Parties as new type of customer



to a bilateral contractual setup and additional risk mitigation. Open Banking teams should take to lead to design standardised process and view on third party onboarding across the organisation.

API service, support & relationship management

Onboarded partners need to be serviced, supported and the relationship needs to be managed. Partners seek to engage with the bank and build propositions based on its APIs.

Open Banking teams sometimes lack a solid operational support model and infrastructure to deliver on market expectations for clients and partners consuming APIs, impacting overall service level, engagement, and end-to-end experience.

To enable partners, banks first need to offer a flawless developer experience, offering high-quality documentation, sandboxes, developer tools and seamless access to APIs. Additionally, banks need to build, grow, and nurture their Open Banking community to reinforce their position in the Open Banking landscape. Digitally advanced

banks organise events, such as hackathons, to continuously engage the community and accelerate their commercial efforts. Active communities can support their members when it comes to operational and inspirational issues, in addition to banks' API support.

Often, Open Banking is integrated into the corporate strategy of the bank as part of committing to bank-wide modernisation of the technology foundation. However, it is not always sufficiently embedded in the underlying business plans, with the result that Open Banking goals, KPIs and budgets are decoupled from the 'regular activities' of the bank's business. This leads to Open Banking teams battling for adequate management attention from business lines. The result is a 'push approach', trying to convince stakeholders of the opportunities and value creation potential of Open Banking.

5.2.3 Management cycle challenges

Management cycle challenges touch topics including Open Banking business plan creation, budget setting and setting proper incentives, but also measuring and steering the outcomes.

API business plan, budgets & incentive schemes

Managing Open Banking operations starts with the API strategy definition and prioritisation of strategic initiatives as well as the translation into budgets and incentives for the business lines to support the API business.

Banks are well-advised to link Open Banking with business line strategies from the start by embedding it in the underlying business plans. Open Banking and product teams should work together on how to leverage APIs and partnerships for their respective businesses and define dedicated Open Banking roadmaps. Proper Open Banking KPIs endorsed by top management help steer and track progress of Open Banking strategy execution.

DEUTSCHE BANK'S DBAPI PROGRAMME AND COMMUNITY MANAGEMENT

A strong developer community management can be decisive for banks to reap the full benefits of Open Banking. Deutsche Bank has taken a comprehensive approach to engaging their developer community.

First, it starts with giving community development and management the right priority – embodied through the dedicated role of a community manager within the dbAPI team. This community manager ensures that different internal and external communities are approached in a strategic manner and that the level of engagement remains high.

Second, Deutsche Bank's developer portal addresses different communities with tailored content – the portal does not only provide detailed technical documentation of APIs but also addresses more business-minded audiences through description of use cases and business potential of APIs. Having a clear picture of your target audience and communicate your propositions with tailored content per target group can make a difference.

The dbAPI team also invests in co-creation with partners that are willing to work more closely together with Deutsche Bank: the API partner network enables Deutsche Bank to innovate and co-create new API-based products and services together with partners. This ensures a product-market-fit for the API functionalities offered and provides for a direct feedback loop with partners that are using the APIs. Partners, in turn, can build trust with new clients through co-branding of Deutsche Bank and premium support for their API implementations.

In addition, Deutsche Bank complements their community strategy with events or hackathons to gather broader feedback and generate a large array of ideas quickly.

Source: Deutsche Bank & INNOPAY whitepaper "Into the great wide open: Building blocks for a successful API program" <https://www.deutsche-bank.de/pk/lp/db-api/whitepaper.html>

Figure 14 Open Banking implications for Management Cycle

Management Cycle: from business plan to budgeting and steering



Source: Crosslinx® Framework, INNOPAY analysis

Processes impacted by Open Banking

5.2.4 Capability cycle challenges

In the capability cycle, Open Banking adds the dimension of API platform management and technical API development. This covers all technology capabilities and necessary activities to support the realisation of Open Banking initiatives, including the technical development of APIs.

Technology teams often formally work for the bank's business lines as the primary budget owners. Therefore, Open Banking teams do not always get appropriate support and priority from the technology teams to design and build APIs, or it may be unclear where funding for API development comes from.

One way to remedy this challenge is to build up dedicated developer resources for the API initiative together with centralised funding, as some of the frontrunners in Open Banking have done. Alternatively, business lines need to assume stronger ownership for APIs and drive development with their technology teams.

5.3 KEY RECOMMENDATIONS FOR ACCELERATING OPEN BANKING SUCCESS

With an established understanding of the challenges posed by Open Banking operations, this section concludes with providing some key recommendations to get the Open Banking function "off the ground".

5.3.1 Build on PSD2 compliance efforts

Some of the pioneers in Open Banking have started with intrapreneurial greenfield approaches, independently of PSD2. They had to fight hard to get initial management attention and buy-in and build their operations from scratch. Times have changed and banks are now able to build Open Banking capabilities in extension of their PSD2 implementation efforts. This allows leveraging existing resources, processes, and skills, as well as creating an integrated user experience of PSD2 and "premium" APIs. Likewise, synergies might be obtained by dealing with both API exposure

“ Internal communication throughout the bank must be an ongoing activity to make Open Banking a lasting success.”

ANNE VOS,

Product Management Open Banking, Erste Group

and consumption in the same organisational unit. One bank interviewed has run two coordinated streams for PSD2 API exposure on the one hand, and account aggregation for multibanking on the other. With these capabilities, the bank can work on premium API propositions while seamlessly integrating external APIs.

5.3.2 Develop and spread an API mindset

In line with the establishment of an overall digital culture, without an "API mindset" throughout the organisation Open Banking is bound to fall short of delivering. In initially central Open Banking setups, the API team alone does not have the mandate nor access to the resources needed to convert products into API propositions, activate the most promising partners and drive propositions in the market. Business lines and products teams need to start thinking in API terms and build products with an API-first mentality. Some banks make use of cross-functional ambassador teams that help drive API thinking inside their functions and business lines and deploy extensive API training programmes throughout the organisation.

Most importantly, top management needs to make and communicate a clear commitment to APIs. Combining bottom-up and top-down approaches is most likely to create permanent support from all stakeholders needed. Banks that have employed these methods now start to see exploding interest from product teams in creating APIs, to the extent that backlogs are hard to keep up with.

5.3.3 Align organisational structure and responsibilities with strategic goals

Virtually all Open Banking setups feature a central unit in charge of certain Open Banking functions. They differ in the scope of central versus decentral activities and responsibilities.

“ In our experience, top management support is essential to drive Open Banking. At Commerzbank, our Board has passed an "API First" directive that mandates API development wherever appropriate. We combine this with various measures, such as stakeholder roundtables, to create awareness and align the organisation on the opportunities of APIs. At the same time, we make sure there are clear cross-segment decisions and commitments while leveraging standardised processes from use case identification through prototyping, to actual API development.”

CHRISTOPH BERENTZEN,
API Cluster Lead, Commerzbank

Figure 15 Open Banking implications for Capability Cycle

Capability cycle: API platform capability



Processes impacted by Open Banking

Source: Crosslinx® Framework, INNOPAY analysis



We feel that for a topic like Open Banking, organisations should start with central ownership - and then, at a certain point in time, when the organisation is ready, move to a more decentralised way of managing it."

TANJA IMAMOVIC,
Open API Business Owner /
Tribe Leader, RBI

One archetype concentrates the full responsibility for API ideation, development, deployment and partner management in a central unit. This unit is end-to-end responsible for APIs and possesses all capabilities, including development, necessary for this. Roles like API product managers are typical for this setup, in combination with an API-as-a-product approach. Friction can nevertheless arise with business lines not aligned on Open Banking goals.

Another archetype is a centre of excellence-approach, where the central unit focuses on running central Open Banking infrastructure such as the API portal, establishes group-wide procedures on API creation, coordinates overall API strategy and acts as a partner to the business lines. These, in turn, are responsible for defining their respective API strategies and roadmaps. This approach requires broad alignment on the importance of APIs and actual ownership by business lines. As a result, APIs might predominantly be seen as a new channel for existing products.

Actual Open Banking implementations often combine characteristics of both archetypes. As Open Banking matures within organisations, it can be beneficial to move to a more decentralised model, while concentrating activities in a central unit in the earlier stages of the program. Banks need to find a setup that aligns with their strategic Open Banking goals – and evolves over time.

5.3.4 Put customers and partners in the lead

Successful Open Banking creates win-win situations for the bank, its partners, and its customers. This implies a co-creation approach to APIs together with customers and partners to ensure use cases and their implementations meet their needs in the best way possible.

Many established Open Banking programmes have started to build and nurture developer communities. These are involved in use case ideation, invited to hackathons and provided with sandbox environments to build and test API-based propositions. Likewise, corporate customers and, potentially, service providers should be involved in creating API propositions that facilitate and add value to their usage of corporate banking services.

5.3.5 Make success measurable

Some years back, investing in Open Banking required a leap of faith from top management given uncertain outcomes and rather intangible benefits. However, a broad range of metrics and KPIs is available to make Open Banking success measurable, from developer onboarding time to the number of API calls, number of partners using an API, or the (additional) revenue generated by that API. By implementing a suite of KPIs to track and quantifying the value of Open Banking, leaders will become more invested in dedicating management attention to the Open Banking initiative, gain confidence of its value and strategic benefits, and support its full incorporation in the bank operating model.

6. READY, SET, GO!

The one certainty about the digital future is that it will continue, long after Covid-19, to evolve dynamically. But banks can brace for change and, while possibly never fully ready, pursue a path to digital readiness. And pursue it they must!

As the conversations with the various experts for this report have revealed, strategies for success can and must be different and individual. But at the same time, there is broad agreement on common principles, on operating model challenges to tackle, and on some of the solution approaches.

Customer focus, emphasis on data, openness, technology, and adaptiveness to change are non-negotiable prerequisites for “remaining in the game”, even though they can be applied in different ways. Open Banking is a highly relevant ingredient in support of these principles, as well as an enormous opportunity in its own right.

That said, the purpose of this report is not to present a recipe for success, which does depend on each individual institution’s strategy for the individual bank. Rather, its purpose is to offer a starting point for successful operating model transformation to properly execute this strategy in an increasingly digital environment – and to be able to adapt it more quickly if not yielding the desired outcomes. The report’s purpose is likewise to trigger an ongoing dialogue on challenges and best practices around digital and Open Banking operating model design.

The EBA community’s support of this research through interviews and presentations has been an encouraging signal for the willingness and appetite to share and learn from each other – especially in an area such as Open Banking that, despite all progress, still features plenty of uncharted territory on its map.



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