Modernising Banks in Europe

Technology Trends and Challenges for Small and Mid-sized Banks

TEMENOS

in collaboration with

IBSintelligence

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Executive Summary

The European banking industry has been going through a difficult phase over the last couple of years, with declining profit margins driven by lower interest rates and an increase in credit losses. The COVID-19 pandemic has further exacerbated the situation with the European Central Bank (ECB) warning that prolonged impact of the crisis could impact the minimum regulatory capital levels of banks. With revenue slowing down, the emphasis is now, more than ever, on cost efficiency, better risk management, and building a resource-light digital platform for servicing customers. This has, in turn, accelerated the need to scale up technology investments within the banks.

> *Our investigations have shown that some banks are still failing to include IT risk in their general risk management frameworks, and that many banks are reliant on outdated systems to perform some of their most critical activities. And, in general, banks have been rather slow to implement our supervisory recommendations in the area of IT and cyber security.*
>
> *- Speech by **Member of the Supervisory Board** of the ECB, March 2020*

While the spotlight has generally been on the large and systemically important banks in Europe, the banking segments that are in greater need of modernising their technology infrastructure are small and mid-sized banks in the region. This segment of banks has struggled with profitability compared to their larger counterparts. To add to this, these banks are facing significant pressure from new competitors in the form of digital native challenger banks, FinTech startups and big tech companies that have the advantage of a broad customer base and technological sophistication to provide a hyper-personalised customer experience.

5,600+
Banks operating in the European Union

160+
Large banks in the EU, rest are mid-sized and co-operative banks

543
Cooperative banks operating in Poland; **accounting for 99.6% of total banks**

875
Cooperative banks operating in Germany, highest than in any other European country

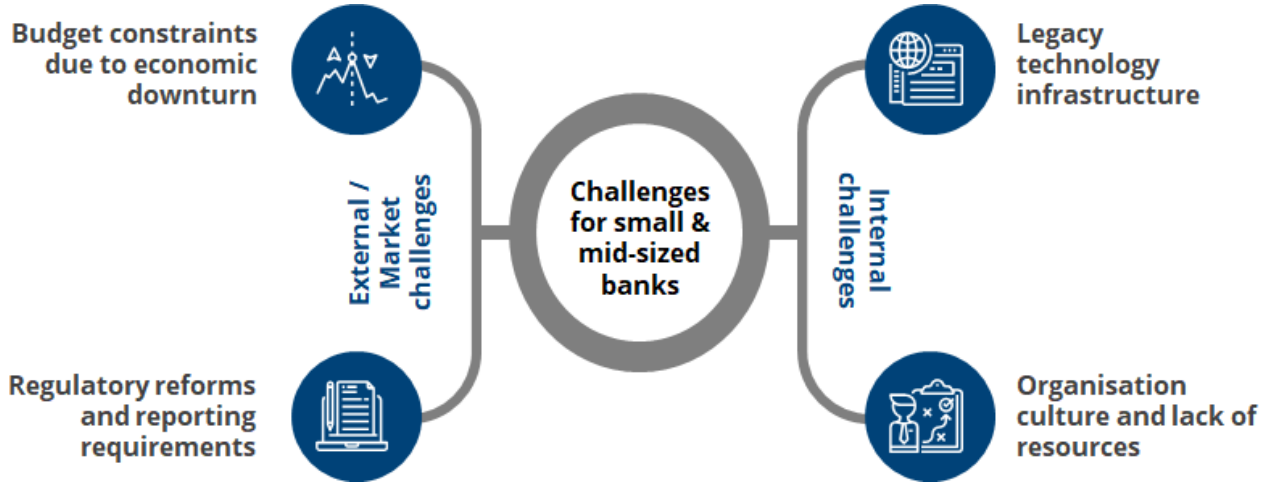
430+
Credit Unions operating in the UK; **50+** building societies

Against this backdrop, modernising the technology infrastructure seems to be the way forward for small and mid-sized banks. However, technology modernisation is always easier said than done, especially when these banks have to work within the constraints of limited budgets, lack of skill sets, outdated infrastructure, and a traditional banking mindset.

With all of this in mind, Temenos and IBS Intelligence take a deep dive into understanding the challenges, trends, and strategic implications for small and mid-sized banks, based on discussions with banks and subject matter experts within the European banking industry.

Key challenges and considerations for small & mid-sized banks

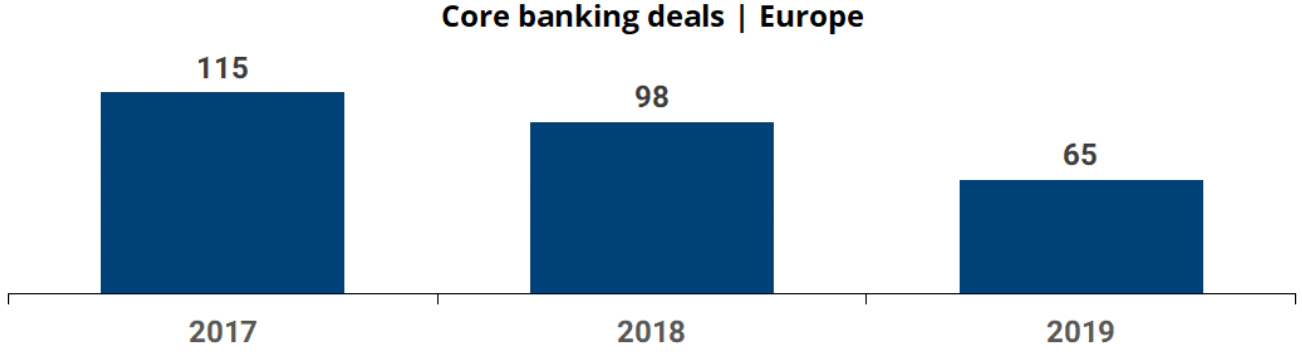
Small and mid-sized banks are vastly different from their larger counterparts. To begin with, a number of these banks are retail-focused with single country operations, while larger banks have a broader universal banking model with a multi-country footprint. This difference in business structure poses specific challenges. Some of the common challenges identified by banks in our discussion with them are as below:



Budget constraints due to the economic downturn

Unlike large banks, net interest income has been the primary source of revenue for small and mid-sized banks in the region. While large banks are able to diversify their revenue stream through income from credit cards, trading account assets and other types of consumer and corporate financing, small and mid-sized banks have to rely on income primarily from their retail loan assets. Additionally, the cost of switching banks for a customer has diminished in today's growing digital banking environment, which in turn, has impacted the small and mid-sized banking segment's reliance on deposits as a source for bank funding.

It is no surprise then that a low interest-rate environment has significantly strained the spending capacity of these banks, especially on 'Change the Bank' initiatives such as technology transformation or system replacement projects. This is also evident in the core banking system deal volume recorded by IBS Intelligence, which dropped by nearly half over the 2017-2019 period.



Source: IBSI SalesVision

Key Considerations: The cost of technology modernisation is, therefore, a major hurdle for banks and a key consideration when deciding on strategy and the solution approach. Small and mid-sized banks that are far more cost-sensitive than large banks should explore alternative modernisation approaches such as a SaaS platform which is capital-light and provides advanced digital banking features without the need for infrastructure investments in-house. The other option is to employ a smart middleware which helps banks with legacy infrastructure to consolidate disparate back-office systems into a single enterprise bus and can integrate seamlessly with its front-office channels or even with external digital platforms. This option, while not a long-term solution, is a starting point for modernisation, that helps banks to replace their legacy infrastructure in a phased manner within the constraints of their budgets.

Regulatory reforms and reporting requirements

European banks, in general, have their hands full in meeting the multiple regulation reforms launched by Central Banks in Europe and the UK. Some of the regulatory actions that have impacted banks' compliance burdens include GDPR, PSD2, IFRS 9 reporting, and the transition from LIBOR to new reference rates, among other changes. Banks using legacy systems are still facing data modelling, reporting, and infrastructure challenges. In IBSI's research, it was found that many banks still use Excel spreadsheets for risk management calculations such as credit risk modelling, cash flow analysis, trading risk calculations, etc. This exposes the banks to data corruption and operational risks.

The Basel Committee on Banking Supervision's BCBS 239 standard for effective risk data aggregation and risk reporting has compelled banks to make data architecture and IT infrastructure changes to improve the governance, accessibility, consistency and transparency of data. BCBS 239 has also been integrated into the upcoming BASEL III regulation on the Fundamental Review of the Trading Book (FRTB), which is another major regulation requiring banks to reassess their market risk capital requirement framework.

The ECB has set the third quarter of 2021 as the deadline for all banks in the region to align their reporting requirements as per FRTB guidelines. According to a recent report by ECB, 15% of small and mid-sized banks made negligible progress in implementing the new rules, while 10% admitted to facing delays in meeting the 2021 reporting requirements.

> *In a bank, around 70% of the resources are used to just manage regulatory compliance, 20-25% spent in maintenance of existing systems and with 5% spent on other projects. And even then, this 5% are not innovation projects.*
>
> ***- Head of SWIFT,** Leading Cooperative Bank, France*

Key Considerations: With the multitude of new regulations and reporting requirements, banks need to focus on the availability and quality of data and the development of their IT infrastructure. Most of the banks running on legacy systems and manual risk reporting processes will either have to outsource or rely on third-party software to manage the new reporting calculations and requirements.

Legacy technology infrastructure

Many small to mid-size banks in Europe are still struggling with legacy core systems, some of them reportedly over 20-30 years old. Back in the '90s, the majority of core banking systems in the European region were deployed and maintained internally. Over the last 15 years, there has been a strong trend of moving the core banking systems and their servicing to third-party providers. The global financial crisis of 2008 triggered many core banking replacement programs, and banks that bucked the trend are today struggling because of the intense regulatory burden that translates to complex and costly changes to IT systems along with increasing market competition. Monolithic legacy systems with low to no parameterisation capabilities and a slow time-to-market with new changes, in turn, impact the front-office layers of the banking architecture. The most evident impact of this constraint is seen in the customer onboarding experience of a small bank which still involves manual processes and is time-consuming. Despite these limitations, most of these banks are reluctant to replace their legacy core due to the complexity of the data migration process as well as the cost of switching to a new vendor.

> *Generally speaking, every core banking system replacement is a very costly exercise due to the immense complexity which it entails by definition. Existing contractual frameworks that banks are having in place with their legacy core system providers are often unfavourable for the banks which then only further increases the financial burden when a bank decides to undergo a core banking transformation.*
>
> ***Marian Formanko,*** *Head of Core Banking Development & Operations, VUB Banka (Intesa Sanpaolo Group), Slovakia*

Key Considerations: Similar to the 2008 financial crisis, the current COVID-19 driven environment is once again changing the banking technology landscape by accelerating the digital-first banking model. Banks will need to ensure that their systems are prepared for the operating model to avoid struggling in the future with a legacy system. Digital onboarding and the overall customer experience have become the critical success factors to acquire and retain customers. Banks need to ensure that their infrastructure is flexible enough to meet these expectations. A modular and open architecture that is easy to integrate, scale and upgrade is essential for banks. It is also highly recommended for banks to clearly position and to negotiate the strategic contractual conditions for a new system, including the aspects of a potential future decommissioning so that the bank avoids or at least minimises future lock-ins with a specific vendor and its technology. It is also advisable for banks to utilise services of consulting houses that possess a detailed understanding of the contractual and licence-related specifics of the future core banking vendor that the bank intends to select and contract.

Organisation culture and lack of resources

A common challenge highlighted for most small and mid-sized banks is the traditional mindset of the top management. Domestic banks tend to be more conservative and traditional in their approach to technology modernisation. Most are still reluctant to explore new operating models such as moving to a cloud infrastructure or building a digital-first servicing model. The most successful digital

transformation projects in banks have been those that were driven from the top with a clear vision of the future operating model and positioning for the bank.

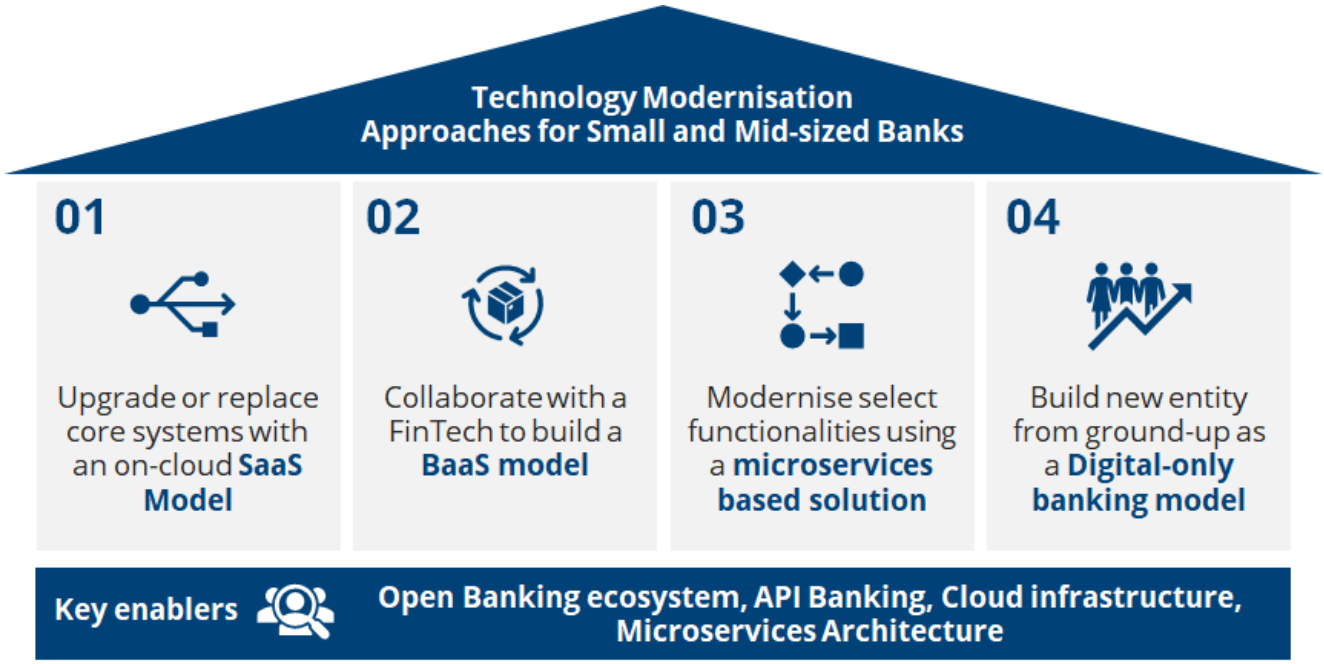
It is no surprise that small and mid-sized banks struggle to attract and retain the right skillsets to manage their technology transformation as well as to maintain it over the longer term. The absence of the right skillsets also inhibits the bank from exploring emerging technologies such as cloud, AI and analytics, among others.

Key Considerations: The support of top management is imperative to drive a successful technology modernisation initiative within a bank. While the management may have their reservations around exploring new technologies and operating models, it is important to initiate a bank into this journey by exploring these technologies in a controlled environment. For example, in the case of banks in the middle of a technology transformation program, they can utilise the cloud for specific types of test environments which are often temporary. This way, the bank management and staff, have an excellent opportunity to learn about the specifics of the cloud. The internal approval processes for such a use case are significantly easier to secure compared to a cloud-based production usage scenario.

> *A key success factor is ensuring the engagement of the management from the start of the transformational change, which helps in adapting to the new system capabilities rather than building customisations. The trend is now shifting from consolidation of systems into the core banking system towards integrating the core banking system with specialised surrounding systems.*
>
> ***- Jonathan Caruana**, Chief Technology Officer, APS Bank*

Key market developments and implications for IT modernisation strategy

For many small and mid-sized banks, technology modernisation is not a straight-up upgrade or replacement of core and digital banking systems. That being said, the process is likely to be easier for those domestic banks that have a limited number of branches with few or zero acquisitions, thereby limiting the number of legacy system silos.



Based on discussions with banks, some of the key market developments and trends that are influencing the modernisation approach adopted by banks are as below:

Rise of BaaS Platforms

The European and the UK markets have witnessed a rise in Banking-as-a-Service (BaaS) platforms in recent years driven by Open Banking and the growing FinTech ecosystem. Popular BaaS platforms such as Solaris Bank, Fidor and Bankable have ushered in a new operating model with FinTech startups collaborating with these white-labelled platforms that offer the advantage of a banking licence.

For small and mid-sized banks, operating as a BaaS platform presents a smart way to augment the banking products and services available to their customers. The model is popular in the US, with community banks powering popular FinTech platforms. The trend is catching up in European markets as well with a handful of cases where a small bank acts as the servicing bank powering a modern FinTech platform. A notable example is Raisin, the German FinTech which acquired a local bank called MHB-Bank, thus gaining a full banking licence. With this acquisition, MHB Bank (renamed to Raisin Bank) was able to offer a broader palette of services with the modern interfaces in digital retail banking business.

The BaaS platform model forms an effective way for small banks to mitigate legacy risk, remain competitive and offer a superior experience to customers. It also allows banks to unlock new sources of revenue by charging a fee to bank and FinTech partners who access their BaaS platform.

This model also allows small and mid-sized banks to offload some of their banking products – accounts, debit and credit cards, credits, mortgages, which are generally standard products. Offloading these basic services to a common BaaS platform can be an approach to bring down costs for the banks and allowing them to stay competitive and freeing up funds to invest in proper customer front ends.

Microservices architecture

Banks with monolithic core systems struggle with the upgrade process as it is time-consuming and often requires many dev-test cycles before going live with the system. In contrast, a microservices architecture breaks down the application into its smallest components, which are independent of each other but work together to accomplish the same tasks. Software solution providers such as Temenos, as well as modern banks, are increasingly adopting this architecture, due to its ability to make fast iterations from prototype to a live version for large and complex software applications. The implication of this development is the ability for small and mid-sized banks to carry out the complete overhaul of their technology infrastructure in a phased manner. A microservices architecture also ensures that these banks can frequently upgrade their software applications and keep the technology up to date without many complexities.

Open Banking and FinTech collaborations

The Open Banking regime ushered in with the enforcement of PSD2 regulations, was expected to pave the way for FinTech and bank collaborations in Europe. While banks in Europe have APIs published in some shape or form, the end objective of Open Banking is yet to be realised. While small and mid-sized banks are selective in their partnership with FinTech startups, they are also faced with the challenge of attracting the larger FinTech firms, who would rather partner with a large bank that offers better performing APIs and access to a wider customer base.

Active collaboration between FinTechs and banks, especially small banks, across the region has been slow. However, various market developments such as the emergence of marketplaces and financial data aggregation platforms are facilitating the partnerships between banks and FinTechs. Marketplaces provide banks with the comfort of partnering with a FinTech that has been screened and vetted by the marketplace provider.

> *Banks are not really keen on partnering with small FinTechs. The risk of providing customers with immature or instable services or even the FinTech disappearing makes many banks hesitant to push down this road. On the other hand, larger FinTechs are interested in getting access to customer accounts of a bank without the burden of a bank licence and the associated compliance and risk issues, thus allowing them to focus only on the customer front-end. In this scenario, banks risk losing its customer contact and becoming a sole service provider.*
>
> ***- Beat Jackottet**, Head of Business Development & Core Banking Transformation, Post Finance*

The go-to-model for banks is to have a clear set of ready APIs at the backend. A notable example is Raiffeisen Bank, which has branches in multiple countries in Central and Eastern Europe. The bank introduced a single API structure for all branches across the region, enabling customers to access their accounts from any region. It is important for banking groups to be able to offer uniform API structure so that FinTechs can utilise and offer services in not just a single country but rather throughout the entire region. An open and responsive API infrastructure is imperative here, and banks would need to invest in building this infrastructure inside out.

Digital-only banking models

This is a trend that has been more popular amongst large banks but is soon catching up within small and mid-sized banks as well. The strategy is to approach bank modernisation as a greenfield project and set up an independent digital-only entity from scratch, offering either the core products or a new set of products. In the current environment, when digital banking is becoming the new normal, this strategy is particularly relevant for small and mid-sized banks that are burdened with complex legacy infrastructure and want to build a scalable and enhanced digital offering. With many solutions providers offering a native cloud-based digital core banking architecture, the time to build a digital-only banking platform is very short. There are examples of digital-only or mobile-only banks having launched in just 4-6 months. The subscription model offered by suppliers also provides cost flexibility which is critical for small banks with budget constraints.

> *Small and mid-sized banks should carefully consider core banking replacements. One-to-one migration sometimes replicates the complicated processes of past decades onto the new platform resulting in complications. A radical approach would be defining a new streamlined approach, a 100% digital core to get rid of outdated requirements.*
>
> ***- Beat Jackottet**, Head of Business Development & Core Banking Transformation, Post Finance*

The way forward

For small and mid-sized banks in Europe, the need to invest in a modern technology infrastructure has never been greater than now. The COVID-19 pandemic has already altered the way consumers access their banking services, with digital banking and contactless payments becoming the norm.

Small and mid-sized banks will need to focus on end-to-end digitalisation and the ability to integrate with the external digital ecosystem to deliver on customer expectations and stay competitive in the market. It is important to note that there are many small banks in Europe that did not offer any card or online payment services earlier. For such banks, scaling up their operating model to offer basic online banking services will be the first priority.

> *Every crisis changes the behaviour of clients. The COVID-19 pandemic will speed up digital adoption and we can observe 3-5 times higher adoption rate of mobile banking solutions.*
>
> ***- Katarina Boledovicova,*** *Head of International Online Banking, Raiffeisen Bank International*

As a first mover, Europe is relatively more mature as an Open Banking regime than other markets. Banks are now opening up to the idea of Open Banking being more than just a compliance requirement. Once banks leverage Open Banking, they can enter the same playing field as large banks and disruptive FinTechs, offering their customers products and services beyond their portfolio. However, many small and mid-sized banks are still working on developing Open Banking APIs and have either just reached the compliance stage or are in the process of getting there. While the road to compliance is a milestone in itself, banks that aim for more than just compliance are set to benefit from the opportunities that Open Banking presents.

The technology modernisation journey for small and mid-sized banks starts with having a clear vision of its future operating model and selecting the right solution partner, one that invests in innovation and offers a flexible and scalable future-ready banking solution. Banks that are not already preparing for this journey are at risk of being obsolete or subject to consolidation by a larger counterpart.