An Essential Guide To Composable Banking

SHOULD COMPOSABLE BANKING BE THE NEW NORMAL FOR FINANCIAL INSTITUTIONS?

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Overview

In today's fast-paced financial landscape, traditional banking systems need help to keep up with the ever-changing demands of customers and market challenges.

That's where composable banking comes in – a revolutionary approach that enables financial institutions to seamlessly propose and update the required business services to their customers into one fully adapted IT solution, either in the public cloud or as a hybrid model.

From customer engagement to processing across all business domains, including deposits, payments, cards, savings, and loans, composable banking empowers banks to optimize added value to customers and master their IT costs.

Indeed, the main advantage of composable banking is that it is an agile, flexible, and cost-effective system that can be adapted to the individual needs of each bank.

> Composable banking can help financial institutions **create new business models, select the needed business services regardless of the software provider, and simplify their IT landscape** at a speed and scale previously impossible with legacy infrastructure.

01 Composable banking background

> From an IT point of view, banks' existing **legacy systems are no longer suitable, as they are too inflexible to respond to market demand.**

The "composability" of banking solutions is not a new topic. Since the early 1990s, major banking establishments have invested in standardizing their information systems (IS) architecture and defining future-proof reference models.

These reference models notably include:

- A business capability and service model (see, for example, BIAN's standards).
- A global banking data model.
- An application architecture model, including:
  - The inventory and granularity of the application components' repository.
  - The link with the service model (which application components are involved in which application service?).
  - The connection with the global banking data model (which data ownership of each application component?).

Since the outbreak of the COVID-19 pandemic in 2020, the acceleration of digital banking and new use cases for banking services has highlighted the advantages of composable banking. This has led to numerous reports by global research consultancies such as Forrester or Gartner, encouraging retail banks to take the composable banking issue seriously.

Today, composable banking has become increasingly critical for retail banks, even though its implementation is still in its infancy. There are several reasons why composable banking is essential today:

- Macroeconomic and geopolitical uncertainties, such as global inflation and the Russia-Ukraine war, remain high, limiting the ability of banks to anticipate what to expect next.
- Competition between banks and non-banking players – *such as Google, Apple, Facebook, Amazon, and Microsoft (GAFAM), fintechs, and other start-ups* – is intensifying, particularly in the open banking, open finance and payments spaces, making it increasingly difficult for banks to retain customers and acquire new ones.
- A sharp increase in financial risks for banks, such as mastering build and run costs, maintaining solvency, and the ever-increasing pressure of regulatory constraints.

One reason is that numerous small, medium and large banks have chosen integrated solutions – either an "all-in-one" or "monolith" system – that have not been adapted to their specific needs and development requirements.

Largest banks have also built their legacy with a complexity that is difficult to maintain due to specialized components supplied by various software providers, causing numerous developments to be added in-house to meet their needs.

This legacy mindset has failed to give technology leaders an actionable understanding of how to assemble the right technology to serve banking customers in every channel and touchpoint, according to a report by Forrester*.

*Forrester - Understanding the Architect of your Digital Experience Platform

Meanwhile, our research on Key Trends in the Core Banking market

identified commoditization, composability, cloud adoption, ecosystems, and the standardization of architecture as the five key trends that will shape the future of core banking systems (CBS). Here, we explain why:

Commoditization

of business functions. CBS products have comparable functionalities, so most banks are shifting the focus to local expertise as the primary selection criterion. CBS products are differentiating in their architecture, cloud offering, and ecosystem.

Composability

is another important CBS feature, as it can break the "monolith" and drive agility in the bank by easing changes while enabling cloud adoption and integrating the bank into an ecosystem.

Ecosystems

Some CBS providers are building strong communities of clients and tech partners, and banks are considering the effectiveness of CBS ecosystems in their buying decisions.

The cloud

adoption by banks is increasing, and moving mission-critical applications such as CBS isn't an exception, also facilitated by a mature CBS offering in the cloud.

Banks prefer the standardization of architecture

and they are pushing providers to adopt architectural standards, such as the Banking Industry Architecture Network (BIAN), as well as increase the use of APIs to simplify CBS projects.

According to Forrester [1], legacy architectures make digital transformation slow and risky for retail lenders.

However, the switch to composable banking has been slow, as evidenced by Gartner's CIO and Technology Executive Survey [2], which found that only 7% of banking respondents can be defined as working in a highly composable enterprise.

Established financial institutions increasingly need to move at digital speed to deliver start-up-like innovations.

As fintechs seek to scale their businesses, this will increasingly lead to partnerships and collaborations with banks, as well as boosting the use of third-party providers to deliver solutions in weeks and months as opposed to the legacy "annual innovation deployment method".

Yet one could argue that banks should refrain from considering building or buying software solutions to drive innovation in core banking systems (CBSs). Instead, banks have two choices: customizing or composing their CBSs.

> **"Today's typical legacy banking applications are still monolithic, a mixture of systems of engagement and systems of record – and not cloud-ready.** Legacy core banking, for example, is the antithesis of end-to-end digital banking: It is neither flexible nor fast enough to cope with the agility and real-time needs of 'true digital' – seamless, end-to-end – banking"
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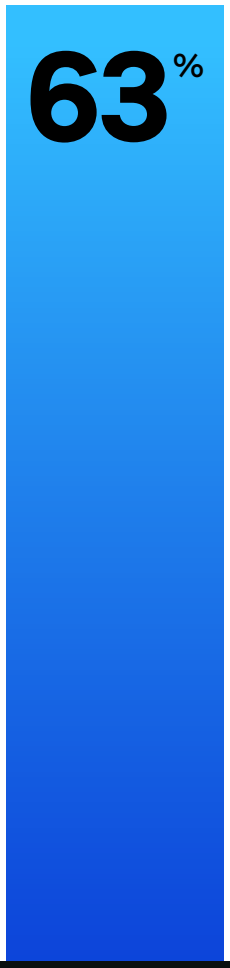
It also found that 63% of CIOs and technology leaders of high composability enterprises rate their overall business performance as ahead or far ahead of their peers.



In comparison, 73% of those polled said they planned to move to become a composable enterprise within three years.

(1) Forrester - Digital Banking Platform Architecture to Accelerate and Derisk Digital Transformation in Banking
(2) Gartner - CIOs and technology Executives survey 2024

02 Composable banking defined

When we talk about "composability," we should consider several angles of analysis:

- A global understanding of the underlined "meta-model," key concepts, and the link between them. For instance:
  - An international definition/ understanding of all the needed business capabilities/features, all the required business services/processes, and the different business domains covering engagement or processing that could or should be necessary for any financial institution.
  - A global definition and understanding of all the needed application services (functional view) to cover a given business scope (business services/ processes).
  - An identification of the application components (IT view) that contribute to the scope of each application service.
  - Depending on each financial institution's chosen business scope, identify the needed application services and the related application components.
- The question of the building blocks' granularity, both at a functional level (application services) and at an IT level (application components). Indeed, one of the main advantages of composability is to facilitate reusability: Build to reuse, reuse to build.
- The question of data: How to conciliate data ownership, which is a key criterion in composable banking and data usage in the context of data and analytics needs that are, by definition, transverse.
- The question of services within a SaaS and "Pay per Use" business model. Thanks to the new cloud era, banks can benefit from new offerings proposed on the market, especially on two main aspects:
  - Via what we could call a "Service Store" approach. Instead of having to choose between different "all-in-one" integrated solutions that are available on the market, they can select only the needed services in a composable manner (full adaptability/flexibility to the bank's needed scope).
  - Based on cloud native and flexible micro-services architecture, and thanks to new pricing models, their consumption of services is also composable and fully adapted to the bank's variable activity, providing strong results in the reduction of run costs.

It is also important to note that the "composability perimeter" applies to the entire IS and all its business domains and is not limited to the traditional CBS scope. These include:

- **Transverse repositories, for example**:
  - A bank's organization, legal entities, employee profiles, identification and authorizations.
  - Third parties (individuals or legal entities) plus customers and prospects related to these third parties.

> Legacy banking systems have been likened to jigsaw puzzles, **but the pieces of these puzzles cannot be moved or swapped out, limiting banks' agility – and ability – to improve their systems when needed.**

- Partners, whatever their roles, in distribution (brokers, for example) or in the bank's offering, such as insurers.
- A bank's offering catalog (products and services, tariffs), including partners' offerings (life insurance, for example).
- Customers' contracts repository.

- **Customer engagement (also known as distribution):**
  - Sales to new or existing customers equate to new contracts differentiated according to the banking product or service concerned, such as deposits, savings, payments, cards or credit.
  - After-sales, including the management of contract amendments or mandates and of the day-to-day orders/operations.

- **Processing (also known as production)**: The execution of daily operations, regardless of the type of products or services to be covered (deposits, savings, payments, cards, and credit), including the production of event and inventory reports for the accounting system.

- **Enterprise Management, primarily**:
  - Accounting (general and auxiliary).
  - Regulatory reporting.
  - Internal reporting.
  - Data and analytics for better bank's performance (revenues and costs).

Keep in mind that the data and analytics domain, as well as the reporting domains (regulatory or internal), raise a key question on the composability topic when considering the data ownership criteria: How can we conciliate it with the need to combine and aggregate data from multiple sources to provide relevant dashboards or real-time recommendations?

This requires a data mesh approach that is able to cope with these contradictory objectives. There are three main parts to consider in this global approach:

- **Data source capabilities**: This ensures the "data ownership" criteria and which application component is responsible for managing and providing data.
- **Data platform capabilities**: This provides the capabilities to ingest, process, and serve data.
- **Data use cases**: Based on the data platform capabilities, this provides the needed analytical business use cases.

Meanwhile, product leaders must be conscious of using the application product interface (API) as an integration approach to enable their products to be more easily implemented in a bank's complex IT infrastructure, according to a recent report*.

However, composability demands that product leaders do more than make their products easy to integrate.

Composable business is a concept in which leaders can quickly build new business capabilities by assembling digital assets, in an organization that is "architected" for real-time adaptability and resilience in the face of uncertainty.

*Gartner - Banking Product Leader Insight: Think beyond APIs to address Composability

According to Gartner, three key characteristics come under the concept of composable business:

Composable business architecture

This framework maximizes the ability to build, assemble and reassemble different business elements for the digital era. Business elements that can be composed include products, services, responses, experiences, and organizations. The framework's scope spans customer engagement, ecosystem partnerships, and all operations.

Composable technologies

These are digital assets packaged as discrete components that deliver independent, clear, and complete business value. The assets are designed as building blocks for the assembly and reassembly of business processes and application experiences.

Composable thinking

Comes from the belief that anything is composable. It leads to a culture that emphasizes the assembly and reassembly of components as the fastest, most flexible path to outcomes.

03 The challenges faced by retail banks: Which topics to address?

The significant topics for retail banks, regardless of their size, customer demographics (individuals, mass affluent, professionals, SMEs, corporates), and product offerings, are multiple and need a global approach to cope with their key challenges:

- Maintain or increase their market share, revenues and profitability.
- Reduce their costs.
- Control both operational and regulatory risks.

We have identified several essential topics for banks to address these challenges:

Agility

Faced with a highly uncertain market environment and a volatile customer base, banks can strengthen their agility from three angles:

- **Time-to-market**: A bank can offer new products and services to existing and potential customers in real-time, including promotional offers.
- **Day-to-day services for their customers**: hyper-personalize services for managing current accounts, payments, savings, and outstanding loans.
- **Incremental changes**: The ability of an IT solution to evolve incrementally, rather than the "Big Bang" logic of cancelling and replacing. This avoids the tunnel effect that is incompatible with the challenge of agility.

Collaboration: Open up an economic and technological model

Depending on a bank's needs, this integrates the necessary businesses or technical partners in a collaborative approach – think ecosystems or marketplaces. Examples of collaboration include:

- Enlarge the offering catalog (such as insurance or investment products).

- Open banking / open finance.
- Digital access (mobile or home banking).
- Cyber-security.

Flexibility in build: adapted target and relevant progressive transformation

- Master the needed business scope to limit costs (no more, no less).
- Optimize the transformation program, considering the bank's business model and priorities and avoiding the "Big Bang" model, which is highly uncertain regarding final results and overall cost controls.

Continuous transformation in run: Always up-to-date

- Consider cloud solutions in a SaaS approach that could permanently maintain the bank's needed solution through regular and seamless updates.
- Consider cloud solutions in a "pay as you use" approach that could optimize the bank's consumption costs, according to the variability of its day-to-day activity.

> One key 2027 trend which has been identified is that **banks will increasingly partner with start-ups, tech giants, and vendors to create and market new co-developed products.**

Control and reduce risks (financial, security, regulatory compliance)

- Deal with the systemic risk of a non-resilient, non-upgradeable IT platform by introducing sustainable or future-proof architecture.
- Deal with cyber-security issues.
- Deal with the risks of non-compliance with regulatory constraints.

Enhance data assets for better performance

- Think about the global data architecture that will allow data ownership as well as the needed transverse analysis, including AI tools.
- Consider all the needed use cases, such as customer knowledge, customer satisfaction, the bank's offering, its operational efficiency, and regulatory constraints.

These key topics involve all Bank's C-suite executives:

- Business managers: CEO, CMO, CSO, CFO, and CRO.
- Organization and IT managers: COO, CIO, CTO, and CDO.

Financial institutions are increasingly looking towards building-block-style solutions that are interchangeable based on market needs*.

Indeed, our research found that technology as a strategic financial services business priority surpassed growth among CEOs and senior business executives for the first time in a decade.

This has resulted in technology investments being split between improving the digital experience for customers to drive revenue growth and making employees more efficient.

That said, CIOs and technology executives say that mastering business composability makes them better prepared to maximize business

*The Financial Brand - The Future of Banking Requires 'Composable' Solutions

> “The complexity and volume of partnerships and alliances will increase as **the banking industry increasingly uses ecosystems and drives new revenue through banking as a service model.**”

value delivery during this period of volatility and beyond.

This will see software products implemented by banks becoming more modular, which means that they can be assembled and orchestrated for easily composable solutions.

According to Forrester*, financial institutions must cope with several pressures, including demanding customers; highly competitive fintechs; increasing levels of supervisory regulation; emerging banking ecosystems in the API economy; and the need for greater process efficiency, cost management, and business agility.

Forrester adds that banks increasingly recognize banking ecosystems as a critical future business model: “The related fragmentation of the banking value chain drives the need for highly componentized, individually deployable banking applications that can collaborate and seamlessly exchange data and functionality between banks, their partners, and their application landscapes”.

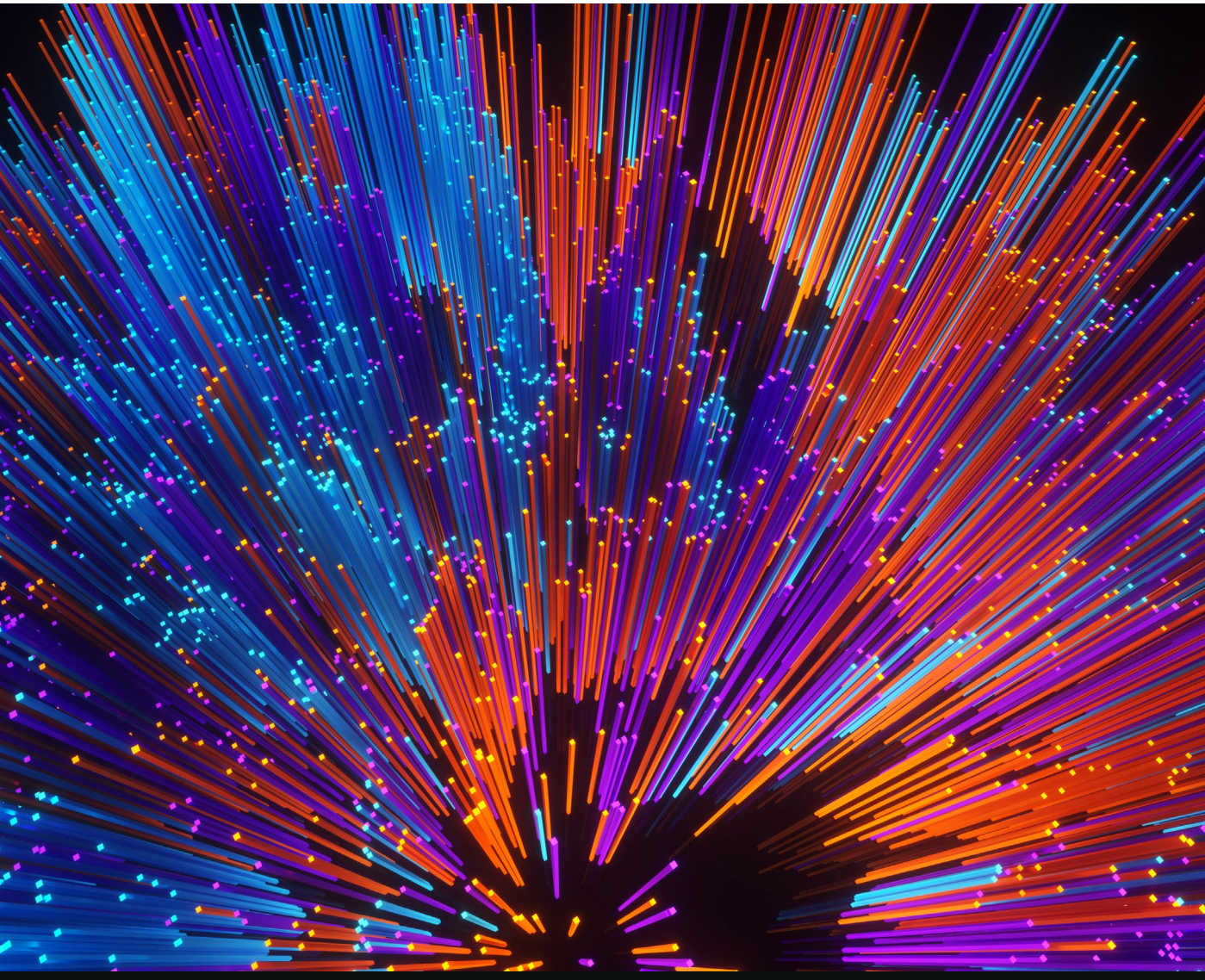
The report also echoes our argument that “Big Bang” transformations are typically unsuccessful as they exceed deadlines, blow out budgets, and often deliver unreliable solutions. Indeed, we propose that banks introduce composable banking step-by-step by deploying a transition stage that co-exists between the existing legacy platform and the composable target.

*Forrester - Digital Banking Platform Architecture to Accelerate and Derisk Digital Transformation in Banking

04 Attention points

Even if it is theoretically suitable for any solution assembly, it does not necessarily correspond to a business objective defined by a financial institution in its strategic plan.

The “cost/revenue” dimension must also be considered for both the bank and its suppliers, such as software providers or operators, regardless of the chosen service model (on-demand or not). Replicability and reusability are, therefore, key issues for all stakeholders.



05 How Sopra Banking Software can help

The composable banking approach is now a “must-have” for retail banks. Over the long term, it’s a critical success factor for banks regarding competitiveness, cost, and risk control, even if it’s not yet identified as a top priority.

Sopra Banking Software offers a composable banking solution adapted to each type of financial institution, regardless of its size and composable banking ambition, be it a business service, a domain or sub-domain, or the entire solution required for the business model to be served.

As of today, we have set up our composable banking Service Store focused on banking operation execution, including deposits, savings, payments, cards, and billing.

This will soon be extended to include all the services required by banks’ business areas:

- **Customer engagement**: All products and services, from catalog management to sales and after-sales activities.
- **Operation execution**: Credit management (servicing and collection, collateral management).
- **Enterprise management**: multi-domain data management for regulatory and operational use cases (optimizing sales, optimizing end-customer satisfaction, optimizing costs, and reducing security risks).

Our key objective is to enable our clients to optimize and prioritize their composable banking transformation decisions and deadlines.

As a key player in the retail banking market for more than 50 years, we can help you implement your composable banking transformation, backed by the capabilities of Sopra Steria and Sopra Banking Software, as well as our business and technical partners.

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To find out how we can help your bank to create market-beating digital transformation strategies:

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Steadman started his career in retail banking in the UK before transitioning to financial services technology providers and now has over 25 years of experience in the sector, having lived and worked across the globe with a broad variety of financial institutions. He has managed global product portfolios for leading global companies driving innovation and change as the industry has transitioned to the digital world. Steadman also spent three years as a Senior Director Analyst in Gartner's Financial Services practice, leading the firm's payments research focus.