

The new rules of core platform modernization: seven ways banks must think and act differently



For years, consumer banks have recognized the need to modernize their core platforms. The conventional wisdom held that such initiatives were the only way to enhance offerings and keep up with ever-rising customer expectations for intuitive and personalized digital experiences.

Today, however, the rules of core platform modernization have fundamentally changed due to shifting market dynamics and the promise of new technologies. Even the concept of a core platform – what it is, what it does and how it interacts with other technology – has evolved.

Forward-looking banks are now aiming to create more flexible technology ecosystems that are less dependent on traditional core platforms. These “headless cores” are designed using common integration standards for shared experiences, process orchestration and data platforms. By breaking down the monolithic aspects of the current platforms and isolating the transaction management functions of the core, banks will remove technology constraints so they can innovate at a faster pace and on a larger scale.

Such ecosystems are necessary for banks to enhance the value for their end customers, increase the speed of delivery and provide a more insightful experience. This will require banks to consume more and more types of data and use it more effectively across the business – from the generation of real-time customer insights to better internal decision-making. Ultimately, utilizing the ecosystem will make it easier to launch and bundle new products; enhance digital channels and apps; and deliver the unique, individualized experiences consumers expect in the digital age.

This is not to say that traditional core systems can simply be retired. They still require updating and simplifying in specific ways so they can continue to function and support existing processes. In fact, cores are a critical component of modernization strategies. They still have a role to play in connecting to and supporting different parts of the business; customer-facing channels; and third parties, including external partners and regulators.

In some cases, legacy constraints, regulatory considerations or the business case won't justify a full core replacement. Thus, it's more about positioning the core within the necessary ecosystem to futureproof the organization, rather than getting to the latest version of a monolithic piece of software. Starting with an "outside-in" perspective and approach may yield more immediate value for customers and will do more to prepare and fund the organization to modernize the core. This work requires careful planning, strong program management and seasoned professionals.

But by understanding the new rules of platform modernization and applying them thoughtfully, banks can increase the likelihood of achieving breakthrough ROI and performance gains. Better yet, those benefits will accrue in the areas that matter most to banks – within customer relationships and on the competitive front lines.

What is a core?

Technology evolution and the desire to adopt end-to-end platforms are forcing banks to ask, "Exactly, what is a core?" Traditionally, core platforms promised the "bank in a box" – a single monolithic system that supported and serviced:

- Channel and point-of-sale applications
- Products, pricing and fee configuration
- Core transaction processing
- Product accounting

These platforms were tightly coupled, highly proprietary and expensive to implement and maintain.

A new generation of core platforms has emerged, with the following three main groupings:

- 1 Modernized legacy player:** Traditional platforms are being updated to support modern architectures, cloud hosting and more open integration patterns that allow clients to partner more freely with external providers and increase their operational agility.
- 2 Digital banking platforms:** Developed to disrupt the legacy players, these systems offer real-time processing; cloud-native architectures; and modern, open integration patterns. While still monolithic in design, digital banking platforms allow customers to transact seamlessly with any device, 24/7 and from any location.
- 3 Headless cores:** This model has stripped the core function to serving only as a product transaction and accounting engine. The assumption is that banks adopting headless cores have prioritized an end-to-end digital strategy; enabled common platforms for integration, orchestration and data; and are developing an ecosystem of partners to facilitate a modern banking experience.

1 The objectives are agility and ease of integration.

Today, the rationale for standardizing technology has evolved and pivoted horizontally. That is to say that the main concern is no longer at the level of business applications, but rather on cross-functional platforms that preserve a consistent experience across all points on the customer journey. Common integration standards are a critical aspect to support this strategy. Such standards are important because they make it faster and easier to “snap on” new tools that can benefit customers or “plug in” to external data sources or marketplaces.

Such an approach gives banks smoother and faster access to a wide range of new technologies and valuable data sources. It also promotes business agility by increasing the speed to deliver new products or channels and deliver new services to customers based on new technology and data.

Common integration standards also make it easier to share data across organizational boundaries without losing confidence that security and data privacy policies are being upheld. *See rule 7.*

As banks seek to deliver higher-order value (e.g., financial wellness and product personalization) when it matters to customers (e.g., key life events), they will need the type of agility that common standards enable.



2 Competition has always counted, but the competitors have changed.

Competitive factors used to play a secondary role in core platform modernization as geographic boundaries, economies of scale and regulatory moats provided banks with protection from competition. Those protections reduced the urgency of IT projects.

Today, those competitive barriers are quickly eroding. New and nontraditional competitors – ranging from FinTech startups to tech giants – are encroaching on banks' established lines of business and attracting key segments of their customer bases. Convergence across financial services sectors has also raised the competitive stakes.

As a result, the need to differentiate is now a primary driver of tech innovation – and, therefore, of core platform modernization. Because the competition is different, banks must take a different approach and rethink the role of the core.

It's important to note that the core itself doesn't differentiate banks; rather, it's the ability to deliver personalized experiences, value-adding data and insights, and ancillary services that extend from a modernized core that can make banks stand out. Core modernization plans must account for that reality and focus on removing the constraints to adding those features quickly and tailoring them to specific customer segments.

3 Goodbye monolithic platforms and "big-dig" implementations. Hello open platforms and smart integrations.

Yesterday, banks wanted the biggest and most fully featured software packages they could get. They were typically configured and customized to meet the internal needs of the business, aligning to existing product sets, functional processes and organizational boundaries whether that made sense from customers' viewpoints. Big-dig implementations and rip-and-replace upgrades were the rule.

Today, banks should define their IT needs, including the optimal design of core structures, based on their product and customer growth strategies. They should avoid the trap of letting their existing cores determine which products can be developed and launched. That will give banks a range of options, from several cores within the same product line to multiple adjacent cores to offer unique product attributes, and in a way that eliminates the traditional silos within financial services.

The ideas should be to design core platforms to enable operational agility across the business and eliminate the constraints of legacy architectures centered on monolithic platforms. Smart integrations hold the key, no matter whether banks have individual cores supporting multiple products or individual products supported by multiple cores.

Again, the ability to develop products should be dependent on the business, not on IT. Relative to customer needs, the essential question is how can the various elements in the stack be assembled and connected so banks can deliver attractive products and customers can interact and transact more intuitively and effectively?

4 Flexibility is critical because new technologies typically need updated cores.

Today's most powerful enabling technologies didn't exist when most banks implemented their last core platforms. Many banks have been deploying artificial intelligence (AI) and cognitive services, and managing them in an ad hoc fashion or via targeted pilot programs. The use of native cloud technology has largely been pushed to lower-priority applications, traditional web applications and data platforms.

To generate maximum value from investments in these and other disruptive technologies, banks must learn to embed them across more parts of the business more efficiently. Deploying powerful technologies successfully requires thinking beyond boundaries to enable accessibility and scalability. They must also manage them more robustly as part of everyday IT operations and not as stand-alone science projects. A modernized core platform must be able to orchestrate all of these multiple powerful technologies, even as they become more powerful in the future.

Banks will need to be flexible and willing to manage constantly evolving hybrid environments. Consider how cloud-native technologies provide critical access to storage and computing power on demand. The amounts of data produced and consumed are increasing exponentially. Thus, ecosystems need to scale accordingly. Data and integration fabrics that account for cohabitation of data and services in public clouds, private clouds and traditional infrastructure will become the rule, rather than the exception.

Such models will allow banks to harness the data they need to develop and train AI and machine learning pipelines with increasing complexity and granularity. AI will empower banks to deliver personalization at scale via tailored products and timely insights. AI-enabled recommendations and tips will help their customers make better financial decisions relative to key moments that matter (such as buying a home or planning for retirement). Again, it's about integrating multiple systems and data sets so the richest insights can be delivered at the ideal time.

Time is another critical factor to consider in preparing for evolution. Banks must become as agile as FinTechs (which have the advantage of greenfield IT environments) in deploying the most disruptive technologies. Compare how quickly FinTechs offer new features and tools with traditional core banking transformations, which can take five to seven years. By the time banks complete these huge programs, their business requirements (not to mention market conditions and competitive imperatives) will have changed dramatically. The business case they started with almost surely will be irrelevant by the time the program is finished.

It's easy to see why banks must become more agile, given the technology developments likely in the next five years, including:

- ▶ Fully operational and widely available 5G networks
- ▶ Quantum computing in production
- ▶ Ubiquitous cloud
- ▶ More powerful AI and bots

It is difficult for even forward-looking bank technologists to know how such advanced tech and new capabilities will work in their IT environments. However, it's clear that cores will need to be continuously enhanced and updated in the context of hybrid environments. In other words, core modernization is an ongoing pursuit, rather than a journey with a final destination.

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5 Experiences and open ecosystems trump applications and infrastructure.

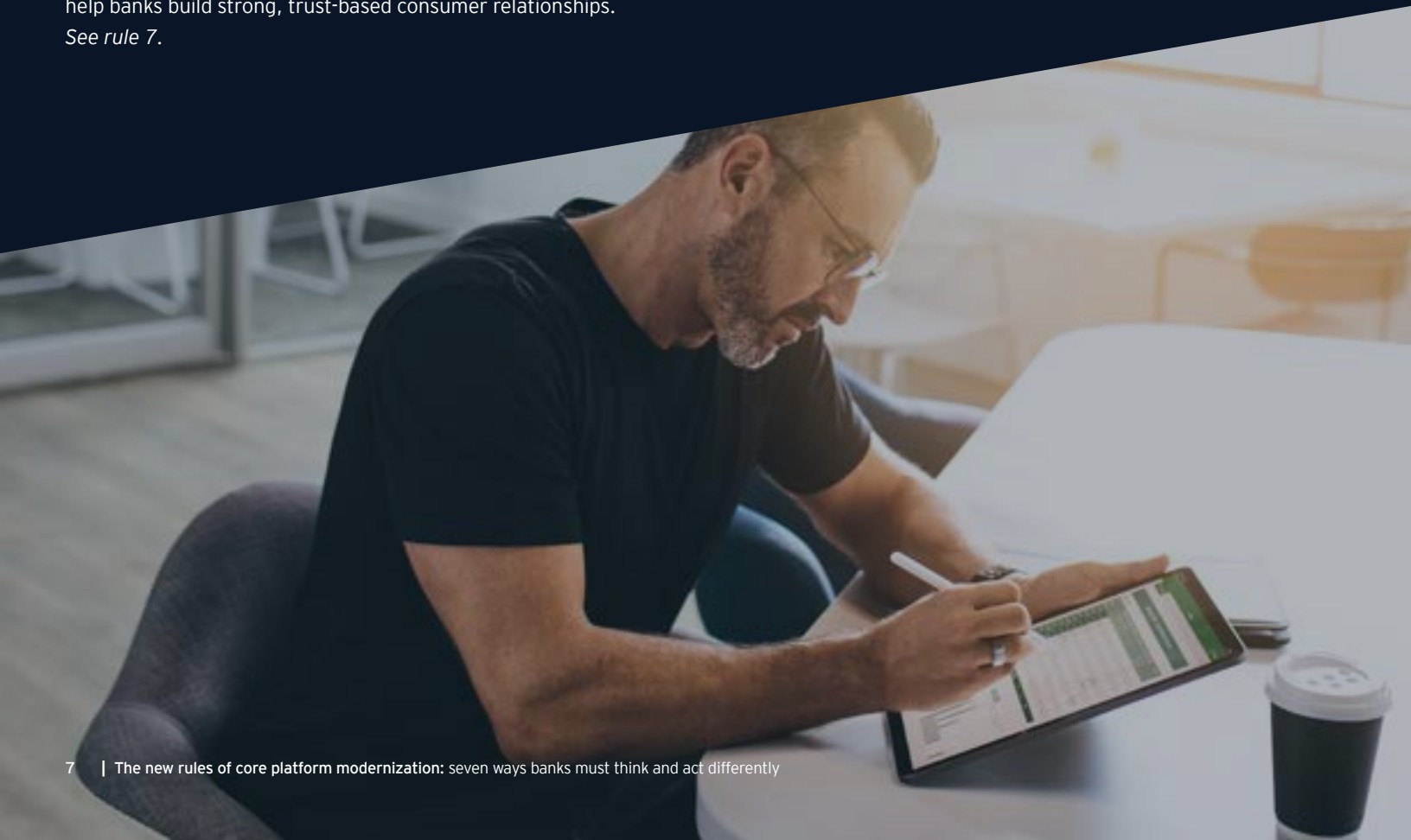
In the past, core platforms supported limited third-party services, using them to enrich internal applications and data repositories, most of which were managed on-site or through corporate data centers. Banking was essentially a closed ecosystem and banks were in full control.

The current drive to open banking standards started with a focus on transparency and data portability. However, it also enables ecosystem experiences by streamlining data sharing with third parties and diverse infrastructures, typically via the cloud. Such external connections – including potential collaborations with FinTechs – represent the shortest path for banks to produce innovation and deliver attractive services and experiences like those offered by Uber, Netflix or other digital leaders. That means core systems are only as good as the tools, data and experiences they enable banks to deliver via open ecosystems.

Core platform modernization is how banks can bring the principles to life. Ultimately, it is about giving customers more control. But it also creates opportunities to deliver more value and provide more options (e.g., for cost-effective products). With the right security protocols underlying these ecosystems, platform modernization can help banks build strong, trust-based consumer relationships. *See rule 7.*

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6 Your data wants to be accessible and useful.

Historically, banks have tried to capture as much data as possible and keep it locked down. They wanted it all to be internal or “first-party” data. Even though data volumes were tiny compared with today, they weren’t analyzed as fully or sophisticatedly as possible. Just having the data seemed to be enough.

Today, everyone understands the massive power of data. That’s why they seek as much as possible and in as many forms as possible. But they also recognize that data must be actively used. Indeed, there is a widespread consensus that tomorrow’s most successful banks will be those that most effectively unlock the value of diverse data – not only their own, but third-party data too. Unstructured external data can greatly enhance analytics and lead to powerful insights, which are among the scarcest and most sought-after commodities in the industry.

Modernized cores must ensure that data can continue to flow to the business stakeholders and systems that need it. Further, they must support visualization and predictive analytics, two proven tactics for generating more value from data.

The most valuable insights are those that are actionable and can be monetized. For example, banks may be able to identify customers shopping for a new home and make a tailored offer for a mortgage loan. A more holistic approach would involve offering a broader range of services across the customer life cycle. These might include a bank’s products (e.g., investments for pre-retirees), but also services (e.g., financial planning) designed to strengthen the long-term relationships rather than boost short-term revenue.

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7 Trust and security are built into platforms, rather than being barriers to accessing them.


Banks have always prided themselves on being trustworthy brands and companies. But in the digital age, trust has taken on entirely new dimensions, thanks partly to cybercrime. Strict security is needed, but banks can't afford to lock down key processes. Instead, they should look to instill trust and strong security principles directly into their ecosystems, experiences and products.

Modernized platforms help ensure banks can instill trust as they share data and integrate with more players and more systems. Beyond a consumer focus, future business models and high-performing ecosystems will be based on such fast and widespread data sharing, even as the volumes of data being shared increase dramatically. The right approach to commercialization requires robust security protocols. The proper controls for proper access, quality, governance and security are also key.

The issues are complex. But as banks shape their plans for core platform modernization and broader digital transformation, they will have to address a range of issues in securing both legacy data and third-party data streams. Banks that excel in this area will operate in terms of an enterprise-scale "data fabric," with unified data management capabilities and appropriate permissions and protections that extend across all points and nodes in the modern data ecosystems.

To make that vision a reality, banks' risk and control structures must be digitized, integrated into software development life cycles and treated the same way as other features or functions. Paper-based, tollgate approaches to managing risks and controls will no longer be possible or desirable. These steps should be regarded as important steps in the overall (and ongoing) process of core modernization.

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A person wearing VR goggles is shown in profile, looking out of a window in what appears to be a cockpit or a futuristic control room. The scene is dimly lit with a blue and green color palette. The person's hands are visible, suggesting they are interacting with a virtual environment.

Bottom line: it's not about the technology. It's about what the business can do with the technology.

In the past, core platform modernization was often about replacing one vendor's products with another and just getting the technology installed (which was a difficult task itself).

Today, lighter-weight technology is easier to deploy and maintain. And, it's certainly easier for customers to use. Thus, it has changed how businesses and their IT groups should think about core systems.

The core's role has been reduced, though it's still important. To a large extent, the main job of a core today is to get out of the way – that is, not prevent businesses from launching new products quickly and delivering the experiences customers expect. The new rules of core modernization reflect that banks must move to futureproof their operations and approach to IT. It's imperative because customer expectations will only rise, the pace of change will only accelerate and the competition will only grow more intense.

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SCORE no. 08143-201US

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