

Driven by AI and cloud adoption, banks are accelerating legacy modernization to boost agility, efficiency, and innovation while navigating regulatory risks, data challenges, and evolving governance needs.

Legacy Modernization in the Banking Industry: New Urgency Approaches

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Questions posed by: Accenture and AWS

Answers by: Jerry Silva, Program Vice President, IDC Financial Insights

Q. What does it mean to "reimagine legacy modernization" these days?

A. I'd redirect the notion of modernization to be more business focused and define legacy modernization today as the modification or removal of any strategic and technological hurdles to business efficiency, agility, and growth. In the past, the banking industry was hyperfocused on costs and subsequently focused on inefficiencies. But behind the urgency today is the incorporation of AI into every aspect of the bank, across all of the lines of business, operations, and IT. IDC's recent survey shows that 80% or more of banks intend to use AI across business processes like customer marketing and services, credit decisioning, operations, investments and wealth, and security, fraud, and risk management. In the next 12 months, AI will fundamentally change everything from how the bank is run to how it interacts with its customers to how it will innovate and bring new products and services to the market (source: IDC's *Banking DX Survey*, 2024).

But to take advantage of this, the institution must reimagine every aspect of its technology with AI in mind. This has to start with strategy, which hasn't always been a part of legacy modernization, as the latter was almost always done piecemeal, one system or platform at a time. Part of any strategy should be an honest appraisal of how the bank's technology infrastructure is helping or hurting its ability to affect those three aspects (efficiency, agility, and growth) and which systems, platforms, or applications are not aligned with business goals.

Last, I'd say that legacy modernization doesn't always mean eliminating every existing platform to move to the "latest and greatest." In many cases, existing systems can be modified or refactored "in situ" to alleviate any obstructions to efficiency or agility without discarding the whole platform or application. In the same 2024 survey, banks cited specialized workloads, legacy integration, and internal expertise in mainframe systems as the top 3 considerations before moving workloads off legacy platforms, among other factors like performance and latency, concerns about cloud reliability, and regulatory compliance concerns. Although, in some significant cases, like modernizing the mainframe, substantial thought needs to go into the changes needed to align the bank's core platform(s) to eliminate barriers to business strategies without undue effort, cost, and risk.

Q. What's driving legacy modernization today?

A. As I mentioned, AI is driving change almost everywhere in banking, but it isn't the only factor affecting the need for modernization. As it has been in the past, costs and the declining availability of skills continue to drive a lot of modernization, especially since the accelerated move to cloud offers the potential to reduce costs and improve security and resiliency. At the same time, one of the biggest costs for the bank is the technology staff it needs to create, operate, and maintain its IT assets. By modernizing their platforms, banks can focus the staff investment on more modern skills to accelerate innovation going forward instead of focusing on the increasingly difficult (and relatively expensive) skills needed to maintain legacy platforms.

The reduction in expenses gained by the move to cloud has resulted in an important, secondary effect. In IDC's May 2025 research on IT spend, financial services institutions cite that they will increase planned spending on generative AI and agentic AI by 105% in 2026, doubling what they will spend in 2025. The challenge of increased spending on AI is to find the funds for increased investments. Legacy modernization, including the adoption of cloud, can lead not only to improved efficiency overall, but by doing so, it frees up the funds the bank needs to increase its investments in other areas, like experimenting and deploying AI-based platforms.

Another critical area where AI is playing a leading role in driving modernization is in the need to transform the bank's data architecture into an enterprise asset that is more easily and safely accessible within and outside the institution. Data management remains one of the most significant hurdles to the adoption of AI as a significant business enabler, so modernization with a focus on improving the data environment will lead to faster benefits for the institution.

Q. What challenges might prevent or slow the desire or ability of banks to modernize their legacy technology?

A. Financial services, and banking especially, is a regulated industry, so risk is always a challenge, particularly when it comes to changing the operating environment. Legacy modernization almost always leads to two significant changes. First, modernization often leads to moving applications and/or platforms to external partners, whether an infrastructure provider or software provider. This increases the third-party risk as defined and monitored by regulatory agencies. Second, new skills are necessary to support the new operating environments, whether in development platforms or operating environments. Regulations governing partner risks in financial services are emerging worldwide, including guidelines set out by the Office of the Comptroller of the Currency (OCC) in the United States; the Digital Operational Resilience Act in Europe, which includes requirements to third-party IT risk management; and multiple authorities in Asia/Pacific focusing on outsourcing and business continuity. As the bank transforms into its "modern" infrastructure, the change to staffing and expertise in new platforms represents increased risks.

This last point is also emphasized by the inherent need for the bank itself to change in non-technological ways to support the governance of new systems and operating environments. AI governance is already proving to be difficult, and now we add data governance, third-party governance, and so on. These kinds of organizational changes aren't always easy, but they can make the difference between a successful modernization journey and one that will suffer through painful setbacks. In IDC's February 2025 *Future Enterprise Resiliency and Spending Survey*, 39% of banks cited "cultural resistance to AI governance–related changes" as the single highest barrier to AI governance.

Finally, it's not trivial to prove the value of any specific modernization project in a concise ROI exercise. Interestingly, the aforementioned points are non-technology-related challenges. As an example, it is extremely difficult to assign a monetary value to data modernization in a broader sense. This kind of effort is often tied to a specific project, burying the actual value of the data aspect within the overall project costs. This challenge of "proving" the value of modernization will often prevent the institution from moving forward on modernization efforts and will arguably lead to a diminished competitive position in the future.

Q. How would you guide those banks to overcome the hurdles of modernization?

A. If the bank is able to focus on what it does best, that is, ensuring a low-risk, safe, and resilient operation, then the changes brought about by modernization efforts can be controlled with little disruption and regulatory scrutiny. This can be achieved through recognizing the role of the bank versus its technology partners and governing the processes and partners more so than the technology. This is why creating an appropriate governance body within the institution can go a long way to reducing the risks involved in transformation. However, an IDC's April 2024 survey showed that only 28% of banks surveyed completely agreed that they had systems and processes in place to ensure the data they use in AI initiatives is high quality (current, complete, consistent, accurate).

There also has to be a mechanism to measure not only the immediate value of any modernization project but also look further into secondary and adjacent potential value from the overall modernization journey. Will the business innovate faster with a modernized platform? Can its data be monetized faster and more securely through external channels by modernizing its infrastructure? Can the bank "fail fast" on innovation projects with less risk if the IT environment were more open and responsive? Can we get some quick benefits by modernizing the analytics platforms before the larger data challenge is solved? These are new ways of thinking about the value of modernization that can't be aligned with previous ROI approaches to transformation projects.

Modernization has an enormous impact on the organization as well. Banks should include human capital impact throughout the modernization journey. The breakneck pace of technological change over the past ten years has forced banks to redefine their role and the role of their technology partners. Acknowledging and responding to this trend by making relevant changes to their IT and operations staffing will reduce the risks that long-term modernization projects may bring.

Q. What final advice are you giving your client banks about modernization? Have you seen any best practices emerge?

A. We need to start with the business. The bank needs to have a clear, top-down strategy about what business it's in. Is it a large national or global bank that uses technology as a competitive differentiator? Is it a small community institution that focuses on closer relationships with its customers while pursuing a "fast follower" technology strategy? Knowing what business you're in should dictate how you approach modernization — either leading transformation from within or

compelling your technology partners to transform on your behalf (e.g., driving software providers to modernize their products to include AI or move to component workloads), or both, to improve the chances of success.

Governance is how the bank can control risk in the face of the changing environment. This is how the bank will carry out the prioritization of modernization projects, create the KPIs used to measure performance against expectations, ensure that internal and external risks are measured and controlled, and provide a change control process, including a feedback loop, which can make course corrections.

Banks need to engage partners that have tenure and credibility in financial services to reduce risks. I'd suggest that the bank consider those partners that don't approach modernization with a one-size-fits-all philosophy. There is not a "best practice" when it comes to legacy modernization — some projects are best suited to refactoring (e.g., COBOL applications that represent competitive advantage), some to replatforming (e.g., moving highly customized workloads to cloud to gain cost benefits), some suited to moving to SaaS models (e.g., commodity applications that benefit from third-party maintenance and improvement), and sometimes "buy" is a better fit than "build."

At the end of the day, legacy modernization has never been more important. I'd consider it to be the new table stakes, particularly in the age of AI. By focusing on some of the approaches here, the bank can travel its own modernization journey with low risk and help ensure business success through modern technology.

About the Analyst



Jerry Silva, Program Vice President, IDC Financial Insights

Jerry Silva is program vice president for IDC Financial Insights, leading the global financial services research programs across banking, insurance, and capital markets. He draws on 40+ years of experience in the financial services industry, covering a variety of topics from digital infrastructures to AI, data management, and IT governance.

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