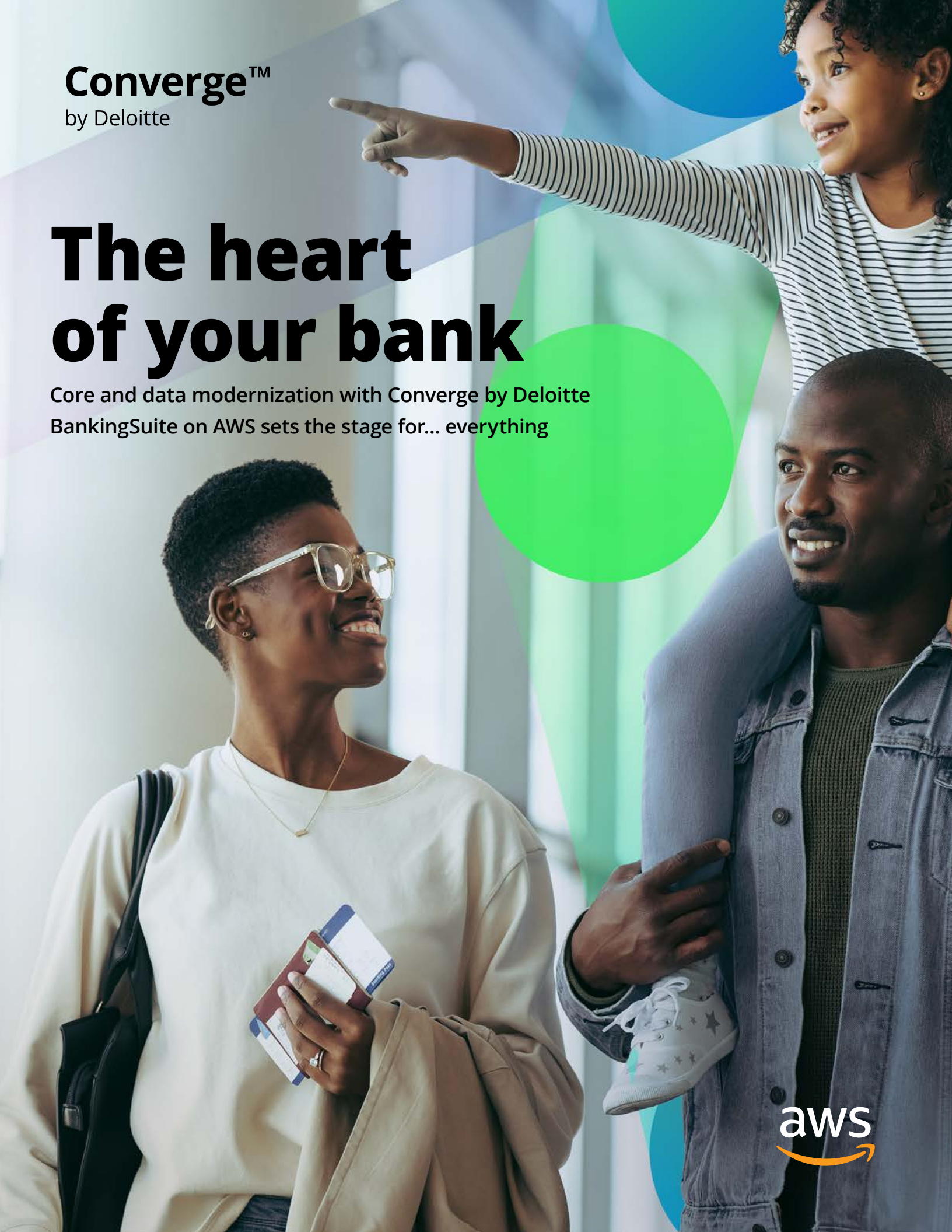
Converge™
by Deloitte

The heart of your bank

Core and data modernization with Converge by Deloitte BankingSuite on AWS sets the stage for... everything



There's seldom a case against modernization. Why should anyone have to lay out the case in its favor? Because when it comes to banking core systems and data platforms, the need is greater, the stakes higher, and the potential rewards greater than some people may appreciate.

Juniper Research has estimated that 4.2 billion people use digital banking services today[1]. Which is to say: more than half of humanity. They want more than just old-fashioned banking delivered in a new way. They're hungry for new products, more personalization, and greater moment-to-moment control. They want the power of artificial intelligence (AI) to infuse their banking experience with analysis, prediction, and support the way it's transforming everything else.

Banks are in business to give customers what they want. Relying on legacy cores that deliver their value in scheduled batches can make that mission more difficult to achieve. For example, they recognize the advantages of using Generative AI, but data tools and architectures that were conceived before AI, limit that potential. Banks want the scale and flexibility of a cloud environment. They want the personalization that can happen when customer and product data isn't locked in place. And they know the challenges of remaining with a legacy core might only grow steeper when the handful of people who know how to maintain it edge toward retirement.

The integrated value chain of core banking products and services are already subject to increasing disruption from new entrants, fintechs, and Banking-as-a-Service innovations. Amid those changes, the challenges noted above aren't new. Why is the need for core and data modernization so timely? Not only because old platforms are less able with each passing day to support modern banking needs, but also because new, more technologically advanced competitors will give customers what they want if banks do not. Customers will see these shortcomings and, with changing banks and shopping for better interest rates easier than before, they will take their business to more able providers.

Answering today's enterprise and customer needs calls for a new, nimble data platform supported by a scalable, cloud-based core. The logic that drives your data architecture should take its cues from business events, not from the limitations of physical systems. And the logic that drives your modernization is shaped by events as well: ones like competition from low-overhead fintechs, regulatory trends toward more required transparency, and the sustained high cost of maintaining a legacy core.

A day in the (new) life

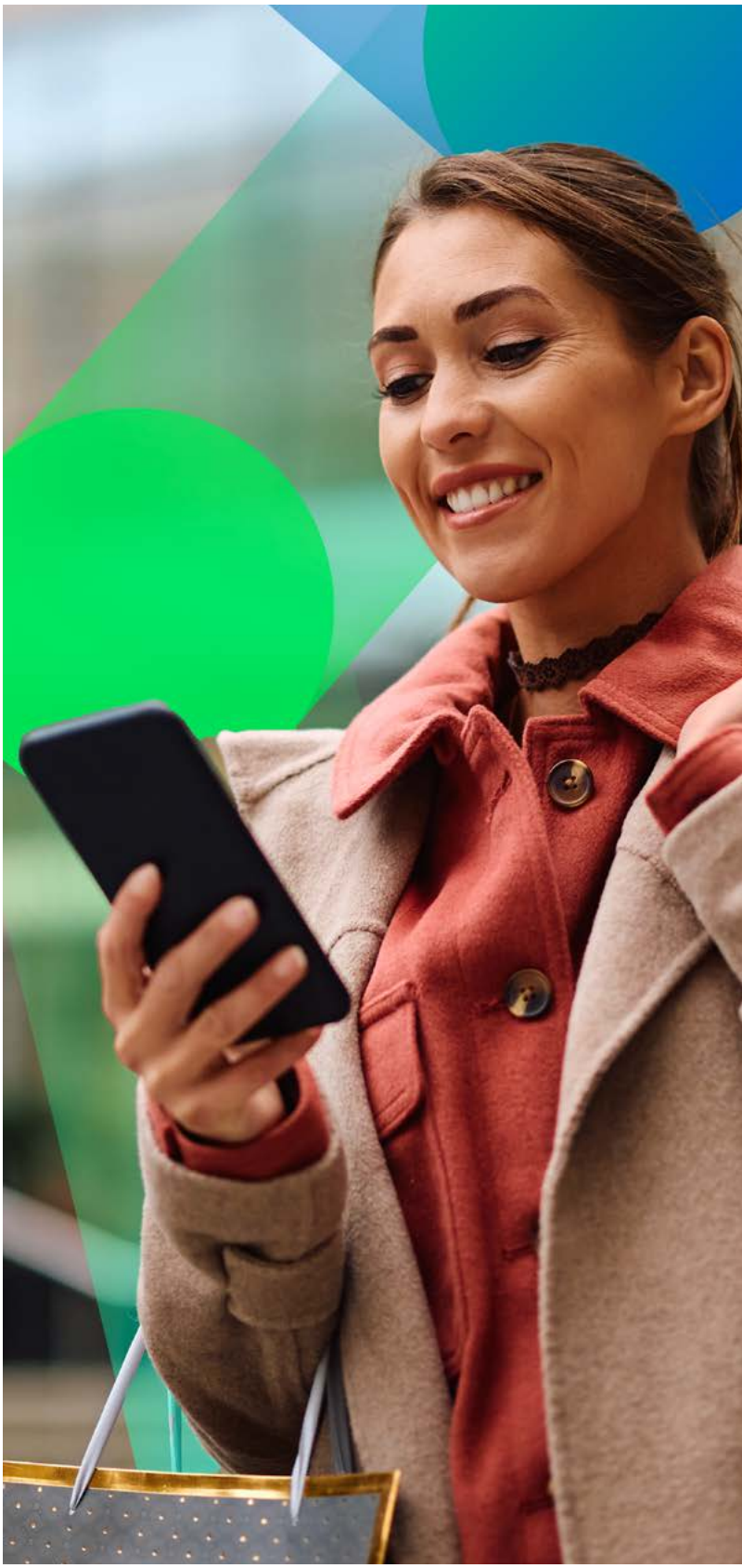
Imagine offering customers a new kind of banking that makes it easy for them to open new accounts on their own, gain instant access to analytics on their own resources, or learn through automated alerts that they're making redundant subscription payments. If the customer contacts the call center, all the pertinent information is already there—along with predictive prompts for helpful action.

But that's only the beginning. Imagine offering customers a new kind of banking that reinvents what a deposit, card, or loan product could be—and makes those products work together in more intuitive ways. Imagine deposit accounts that feel like checking accounts but also offer interest-bearing savings "pockets" with customized rates are based on each customer's personal savings goals.

In the near future, banking may involve talking to a personal digital banker who can ask unique questions and deliver personalized insights based on a customer's own financial situation, then help provide custom solutions to reach that person's goals—whether that involves bundled product offerings, a bespoke savings plan with configurable sub-accounts, or solutions that haven't been invented yet.

All that convenience for customers also represents cost savings for the bank, because self-service and AI-powered interactions cut down the time it takes agents and representatives to intervene. Meanwhile, other internal benefits of an updated data and core architecture include clear, real-time insights into customer behavior and preferences; seamless data integration across departments; more agile and efficient operations; and a quicker, more reliable process for managing regulatory and compliance needs and responding to new regulatory requirements.

The end state of this vision rests on a real-time, scalable, resilient, secure, and cost-effective core banking platform that serves internal stakeholders and external customers equally well. Except it isn't really an end state at all—instead, it sets the stage for a new way of working in the digital era that lets banks respond to customer and enterprise needs in days instead of months. The benefits sound lofty as predictions, but they can have clear, tangible effects—such as allowing banks to serve their customers' unique needs based on real-time information; offering customers unprecedented access to their own information; and making adherence to state, federal, and county regulations clear and unambiguous.



A foundation for innovation

They call it the core for a reason. Everything the bank does, or aims to do, rises or falls on the support it gets from the core—the software and architecture that handles customer accounts, product configurations, processes transactions, and helps manage risk. If you liken a bank's information system to a human nervous system, the core is the brainstem. Many banks are turning to Generative AI and machine learning to streamline employee-facing and internal processes. But these advancements are often constrained by outdated back-end systems whose slow processing times and inflexibility put practical limits on innovation.

What makes the necessary transformation tough? The same limitations that make a legacy system difficult to use can also make it difficult to move past. Legacy systems that lack modularity struggle to adapt as requirements change. Over the years, as new capabilities were required to support customers and experiences, legacy cores have grown in their overall technical footprint, resulting in a monolithic architecture that makes it challenging to access data or modify code in response to emerging needs—especially if the people who know the programming languages are moving toward retirement and legacy providers begin to sunset support for first-generation mainframes. These upgrades can be as expensive as they can be difficult: Modifying or creating a new product in such an environment has a significantly wider "blast radius" in the event a change affects the core. In Deloitte's experience, many banks face a growing backlog of core changes; even a single one can take up to a year and cost six- and seven-figure sums. Meanwhile, banks spend more money on legacy system maintenance and modernization while getting less performance in return.

It takes a renewed core structure and a fresh data architecture for a bank to answer today's advanced customer demands for personalization, access to information, and all-but-instant transactions and approvals.

True digital transformation that reaches outside the bank has to begin with the internal operational processes and systems that make real-time access to data and insights possible. Some pockets of modernization have developed over the past decade, but they already strain the limits of what existing cores make possible—and most innovations around the core don't move the needle on cost-efficiency. The customer-facing innovations that can deliver there, and help build business, rely on a modern core and data infrastructure.

Data and the core: Inextricably linked

If a powerful, state-of-the-moment core is like a newly constructed house, then accessible well-governed data is what fills it up and makes it a home. It's the data that holds the promise to revolutionize customer experiences, risk management, operational efficiency, and product innovation. Data and core modernization go hand in hand and should not be considered separate needs—or processes.

For too long, legacy cores have been sharing batched data jobs that users need to wait for, resulting in siloes of consumable data and actionable insights. Similarly, legacy cores request data extracts from multiple sources at once, which take longer than expected (if they come at all). Only then can the work begin to cleanse and compile that data so it's useful and accurate in reporting. New systems streamline this to one extraction in or near real time.

The same data dependencies affect the value and performance a bank can offer to end customers—and they will notice, in ways that can erode lifetime customer value. It's also becoming more difficult to find and retain people who are skilled in the older programming languages that legacy cores and first-generation mainframes rely on—an operational challenge that can only become tougher over time. In addition, modern cores are thinner and don't always include things like the customer master or customer information files (CIFs). They don't need to solve for real-time event streaming data, which can create opportunities to set the foundations for a new data strategy. Core modernization can be a perfect opportunity to implement a cohesive, enterprise data strategy that can democratize data across your organization.

Migrating to the cloud can be crucial for banks to transform their capabilities. The cloud provides the flexibility of on-demand access to compute resources with a pay-as-you-go structure, which reduces the fixed costs of an on-premises data center.

Customers' expectations have shifted toward an "always on, always available" mindset, and the cloud provides greater resilience against outages and obsolescence compared to on-premises systems. Cloud-based APIs can integrate across an organization's systems to support seamless interactions without having to manage services, and application programming interfaces (APIs) scale automatically to handle millions of calls per second, delivering smooth performance with various security features. AI and machine learning solutions realize their potential on the cloud by deploying where and when they're needed. For these and other reasons, the cloud gives banks the agility and modern infrastructure they need to develop and manage the new capabilities essential for their evolution.

From whether to how

While the case for core and data modernization is clear, the path there may not be. Deciding to act is only the beginning of the challenge. Will you commit to a full transformation or hybridize? How will you keep two distinct processes—implementing a next-generation core and building a next-generation data foundation—aligned seamlessly under a single vision? And what effect will this period of change have on your customer service, regulatory posture, and bottom line?

These questions mount rapidly. Banks can overcome uncertainty by leveraging Deloitte's and AWS's joint products and services for core and data modernization. This takes advantage of their individual strengths in data and cloud platforms, technology transformation, and the unique needs of the financial services sector.

The synchronized modernization of both core and data systems is a substantial task that requires skills beyond a bank's daily foundational strengths. Deloitte and AWS have already solved many of the steps and answered many of the questions, so banks don't have to start from scratch. Together, they can move banks more quickly and accurately to a refined strategy that can help reduce risk, accelerate customer-responsive improvements, and bring confidence to employees whose careers depend on the effectiveness of these systems.

The process often starts with assisting each organization in customizing a core and data modernization strategy to fit its unique needs. With their extensive experience, Deloitte and AWS understand what succeeds and which pitfalls to sidestep. They can guide banks in defining crucial factors upfront, including transformation archetype, solution architecture, operational and technical feasibility, business case, and customer appeal. This process involves all pertinent business and technology stakeholders, addressing key questions, such as: the potential innovations and product propositions achievable through modern core capabilities, the technical modernization patterns that best suit the bank and its risk tolerance, the proper sequencing for cost and benefit optimization, and the delivery and operating model for interim and target states.

The BankingSuite solution

Converge by Deloitte BankingSuite on AWS was crafted to help expedite and mitigate the risks of modernization. As a modular digital banking stack hosted on AWS's cloud platform, it offers extensive adaptability to address your digital banking and core modernization challenges. Deloitte's years of design research, banking experience, solution architecture, and implementation experience are incorporated into its development. This allows banks to innovate for their customers, distinguishing themselves with novel experiences, products, and services.

The pre-integrated solutions of next-gen core systems and data platform products and services, provided as part of BankingSuite, can aid institutions in enhancing customer service, implementing advanced technologies, and transitioning into the future with a more robust architecture and a solid foundation for growth. The potential outcome is not just greater technical efficiency, but also an accelerated time-to-value improvement noticeable in the customer experience, employee experience, and the bottom line.

With BankingSuite, you can gain access to more than just technology solutions. You can also gain the methodologies and functional accelerators needed to solve some of the biggest hurdles in core and data transformation such as how to gain broader buy-in across the bank and precision into the cost to achieve and cost to operate. Some other examples include product and feature libraries enabled by modern cores, a co-existence suite of Strangler Fig patterns to support core modernization strategies, risk and control libraries, business case models, and vendor evaluation frameworks.
The resources and experience that Deloitte and AWS contribute to modernization are concrete; many necessary steps can be executed with one-click deployments, saving substantial design time.
The NextGen Core approach, as facilitated by BankingSuite, tackles the top challenges banks encounter when implementing next-generation cores—monolithic architecture, dual-core coexistence & integration issues, and data silos. Regulatory considerations, data consent, and other operational requirements also gain advantages. With BankingSuite, banks can bypass the learning curve and mitigate risks in their core modernization programs, helping to ensure a dynamic and successful transformation.

Far from a generic approach, this strategy is built for banks' specific needs. It speeds core and data modernization—and, along with it, enhances speed to market—by providing flexible integration options, real-time data access, diverse migration templates, a zero-trust security architecture, and the ability to build directly in a cloud-native framework.

Among the benefits:

Grow

- Accelerate market offerings and grow revenue
- Enhance reach and retention
- Access the best fintech players

Save

- De-risk your investment
- Reduce cost to serve
- Unlock value at every turn

Flex

- Composable architecture
- Retain control over builds and vendor choice
- Custom build when you need it

Secure

- Protect against cyber threats
- Meet compliance obligations
- Keep up with evolving standards and needs

Embrace the future by building one of your own

Imagine a future where your customers receive a "white glove" personalized greeting and interaction—and better results—whenever they call in because your customer service agents have a complete view of the customer. When customers want information or a new service, it's readily available on terms that match their needs and profile. As they use services like smart credit cards, they benefit from previously unknown responsiveness and flexibility. In this future, the bank's operations become more efficient, and compliance with regulatory reporting standards becomes faster and more accurate.

Customers aren't the only ones who will see the difference. Employees can find more ready access to information and a reduction in task complexity, freeing them to focus on more strategic contributions. As an institution, a bank with updated core capabilities will find that adapting to new regulations, adhering to them, and reporting as required is more accurate and efficient.

This is only made possible through the combination of core and data modernization. Investing in the core gives banks the structure to become even better data-driven organizations and unlock value for both customers and the business.

Legacy cores and the limits they impose on data architecture are mounting problems for banking institutions. More and more, their continued function is less a matter of design well realized and more a function of patches, fixes, and bespoke workarounds. The older they get, the more costly they are to keep running, the more they expose the bank to regulatory risks surrounding privacy and data protection, and the less reward they offer in return for the ongoing investment. Dated systems may also expose a bank to regulatory risk if they aren't up to current data protection and privacy standards.

That makes the status quo not only suboptimal, but risky. Meanwhile, another form of risk lurks beyond a bank's four walls: the advantages the competition may already be gaining.

Some readers may remember the first time they saw a PC with a graphic interface, knowing their own machines were still chained to DOS commands. Too old a reference? What about getting a new phone that had Bluetooth connectivity, when you were still driving a car that didn't? Those turning points parallel the ones banks face today. There is a world of new service and growth about to spread across the industry. Technology will give banks new power to reach outward in ways they never could before. But none of it will happen until they roll up their sleeves and look inward, to the core systems and data foundations that make them what they are.

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Authors

Gys Hyman
Principal,
Converge Financial Services
Deloitte Consulting LLP

Tim O'Connor
Principal, BankingSuite
Deloitte Consulting LLP

Shailender Sidhu
Principal, Data Practice
Deloitte Consulting LLP

Tanmay Kumar
Managing Director,
Data Practice
Deloitte Consulting LLP

Stephen Popiela
Senior Manager, BankingSuite
Deloitte Consulting LLP

Sarah Huey
Senior Manager, BankingSuite
Deloitte Consulting LLP

Simon Philips
Principal, Financial Services
AWS

TH Her
Principal, Partner
Solutions Architect, FSI
AWS

Sachin Tandon
Principal, Global Banking
AWS

Endnotes

1. Over Half of Global Population to Use Digital Banking in 2026. Juniper Research. (2021, July). https://www.juniperresearch.com/press/over-half-global-population-digital-banking/

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