

Core Strength: FIs Must Modernize to Meet the FinTech Challenge

May 2024

As agile, digital-native FinTechs capture a larger share of the banking industry, traditional FIs are struggling to offer their own digital services due to legacy systems. Modernizing these systems will be a critical step toward leveling the digital playing field.



01 As consumer demand for digital banking technology rises, traditional FIs are struggling to keep pace. FinTechs, however, are rushing in to fill this void, leading to a more competitive banking landscape than ever before.

02 Banks may be eager to embrace digital technologies and compete with FinTechs on their own playing field, but their core banking systems often lack the necessary infrastructure to support such endeavors. Attempts to renovate these core systems are frequently met with high costs and complexity.

03 One promising solution for improving digital services is the progressive modernization of core systems by supplementing legacy technology with application programming interfaces (APIs). Compared to rebuilding the entire core, this approach is both more cost-effective and less risky, allowing for a strategically phased technological transition.

Banks are increasingly aware of the competitive threat posed by digital-native FinTechs, which are quickly gaining market share with innovative digital offerings. Until 2024, only a minority of bankers saw this threat as significant, but that share rose to a majority this year, with 60% of bank executives now seeing big FinTechs as a significant threat to their business, up from 47% in 2023. This concern is expected to intensify as FinTechs continue to attract customers away from traditional financial institutions (FIs).

Banks recognize the necessity of competing with FinTechs by offering digital banking products of their own. However, the implementation of these products is often stymied by their incompatibility with banks' outdated core systems. Updating these systems will be imperative to meeting consumers' growing demand for digital products.

- [Competition Between FIs and FinTechs Intensifies](#)
- [Legacy Systems Impede Banks' Digital Development](#)
- [APIs Make Core Upgrades More Feasible](#)
- [How Banks Can Improve Core Systems via APIs](#)

Competition Between FIs and FinTechs Intensifies

As consumer demand for digital banking technology rises, traditional FIs are struggling to keep pace. FinTechs, however, are rushing in to fill this void, leading to a more competitive banking landscape than ever before.

Consumers have specific demands for their digital banking experiences.

Generation Z in particular wants [personalized products and services](#) that are easier to consume on their mobile devices, according to a recent PYMNTS Intelligence survey. Some of these desired functions include the ability to open accounts, pay bills, send money to family and friends, get financial advice and apply for credit. The demand for these features is so great that members of this consumer segment are willing to switch FIs to access them. Forty-two percent of Generation Z consumers who bank with credit unions have changed their banking relationships over the last 12 months, for example, as have 44% of these consumers that bank with traditional FIs. This serves as a stark warning for FIs that fail to stay up to date in digital banking.

47% ...

Share of [new account openings](#) in the first half of 2023 occurring at FinTechs and digital banks

FinTechs are securing a larger share of new accounts.

In the first half of 2023, FinTechs and digital banks accounted for 47% of [new accounts](#), marking a significant increase from 36% in 2020. Many of these new accounts are held by consumers who also maintain traditional bank accounts, with nearly three-quarters of consumers saying they use an average of two different [financial service providers](#) in addition to their primary bank. However, there is a notable willingness among consumers to abandon traditional FIs altogether. According to a PYMNTS Intelligence survey, roughly 41% of consumers who hold their primary bank account at a [digital-only bank](#) also hold their primary credit card with the same institution — eliminating two of the primary reasons to remain with traditional banks.

Legacy Systems Impede Banks' Digital Development

Banks may be eager to embrace digital technologies and compete with FinTechs on their own playing field, but their core banking systems often lack the necessary infrastructure to support such endeavors. Attempts to renovate these core systems are frequently met with high costs and complexity.

75% of banks say they need to modernize their core systems.

75% ...

of banks [struggle to implement](#) new payment offerings on dated core systems.

According to a recent retail banking report, FIs cite a variety of motivations for [modernizing their infrastructure](#). Eighty-five percent of respondents express a desire to improve the user experience, while 81% want to upgrade their open banking and payments gateways. However, banks' aspirations for modernization often exceed their capabilities: 75% express difficulties in implementing new payment offerings and cybersecurity upgrades due to their dated infrastructure.

Most banks see systems modernization as a formidable obstacle.

A recent survey reveals that 59% of bankers consider their legacy infrastructure a major [business challenge](#), with outdated back- and middle-office processes and technologies being their primary roadblocks to modernization. Seventy-one percent of bankers surveyed describe their core systems as a "spaghetti of legacy systems that are difficult to untangle and update." Other challenges cited include a lack of access to real-time transaction data and the inability to leverage this data to drive new services and products.

APIs Make Core Upgrades More Feasible

One promising solution for improving digital services is the progressive modernization of core systems by supplementing legacy technology with application programming interfaces (APIs). Compared to rebuilding the entire core, this approach is both more cost-effective and less risky, allowing for a strategically phased technological transition.

Incremental core changes leveraging APIs are proving effective for legacy system overhauls.

According to a recent report, 47% of FIs were pursuing an incremental approach to [updating their core systems](#), and 40% chose a similar, progressive modernization approach. Both strategies leverage APIs, digital wrappers and open architectures for a smoother, more scalable core overhaul. One prominent use case for API-driven updates to core banking systems is connecting [enterprise resource planning \(ERP\) systems](#) to payment providers, which 44% of banks reported doing in another recent survey.

44% ...

of banks are using APIs to connect [ERP systems](#) to payment providers.

By contrast, just 13% of banks surveyed chose to undergo a total core systems replacement, underscoring the difficulty and cost of such an undertaking.

Deutsche Bank recently embedded an API-accessible payments orchestration layer in its own core upgrades.

PYMNTS Intelligence spoke with Deutsche Bank's global head of embedded finance solutions, Mattheaus Sielecki, on how these innovations can benefit the entire [banking industry](#). According to Sielecki, APIs can enable client firms and providers to have banking services at their fingertips, particularly for fast and seamless B2B payments. This capability has become especially important as small business owners now expect an eCommerce-like experience from their banks when browsing and selecting products and services.

How Banks Can Improve Core Systems via APIs

FIs face an evolving landscape where digitalization is no longer an option but a necessity. Embracing APIs and embedded finance can significantly augment their core systems, enabling them to offer superior digital services to customers. APIs provide a modular approach to system upgrades, allowing banks to enhance specific functionalities without necessitating extensive infrastructure changes. Rather than undertaking costly and disruptive overhauls, banks can incrementally improve their systems by integrating new features and services through APIs. This approach enables banks to adopt a more agile and iterative development process, reducing time to market for new innovations while minimizing the risk of system downtime or errors.

Embedded finance also offers a pathway to innovation without the need for extensive internal development efforts. By embedding financial and customer touch points into existing digital platforms, banks can access new revenue streams and services without reinventing the wheel. For example, partnering with eCommerce platforms to offer seamless payment options or integrating banking services into mobile apps and social media platforms can extend the reach of financial products and enhance customer engagement without significant investment in infrastructure. In this way, FIs can reap the benefits of innovation while avoiding the risks and complexities associated with a complete overhaul, ultimately driving better outcomes for both the institution and its customers.

About



Galileo is a leading financial technology company whose platform, open API technology and proven expertise enable FinTechs and established brands to create differentiated financial solutions that expand the financial frontier. Galileo removes the complexity from payments and financial services innovation by providing flexible, open API building blocks and a secure, scalable, future-proof platform. Trusted by digital banking heavyweights, early stage innovators and enterprise clients alike, Galileo supports issuing physical and virtual payment cards, mobile push provisioning and more, across industries and geographies. Headquartered in Salt Lake City, Galileo has offices in Mexico City, New York City, San Francisco and Seattle. Learn more at [galileo-ft.com](#).



PYMNTS Intelligence is a leading global data and analytics platform that uses proprietary data and methods to provide actionable insights on what's now and what's next in payments, commerce and the digital economy. Its team of data scientists include leading economists, econometricians, survey experts, financial analysts and marketing scientists with deep experience in the application of data to the issues that define the future of the digital transformation of the global economy. This multilingual team has conducted original data collection and analysis in more than three dozen global markets for some of the world's leading publicly traded and privately held firms.

The PYMNTS Intelligence team that produced this Tracker:
 Managing Director: Aitor Ortiz
 Senior Writer: Andrew Rathkopf
 Content Editor: Joe Ehrbar

We are interested in your feedback on this report. If you have questions or comments, or if you would like to subscribe to this report, please email us at [feedback@pymnts.com](#).

Disclaimer

The Embedded Finance Tracker® Series may be updated periodically. While reasonable efforts are made to keep the content accurate and up to date, PYMNTS MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, REGARDING THE CORRECTNESS, ACCURACY, COMPLETENESS, ADEQUACY, OR RELIABILITY OF OR THE USE OF OR RESULTS THAT MAY BE GENERATED FROM THE USE OF THE INFORMATION OR THAT THE CONTENT WILL SATISFY YOUR REQUIREMENTS OR EXPECTATIONS. THE CONTENT IS PROVIDED "AS IS" AND ON AN "AS AVAILABLE" BASIS. YOU EXPRESSLY AGREE THAT YOUR USE OF THE CONTENT IS AT YOUR SOLE RISK. PYMNTS SHALL HAVE NO LIABILITY FOR ANY INTERRUPTIONS IN THE CONTENT THAT IS PROVIDED AND DISCLAIMS ALL WARRANTIES WITH REGARD TO THE CONTENT, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT AND TITLE. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF CERTAIN WARRANTIES, AND, IN SUCH CASES, THE STATED EXCLUSIONS DO NOT APPLY. PYMNTS RESERVES THE RIGHT AND SHOULD NOT BE LIABLE SHOULD IT EXERCISE ITS RIGHT TO MODIFY, INTERRUPT, OR DISCONTINUE THE AVAILABILITY OF THE CONTENT OR ANY COMPONENT OF IT WITH OR WITHOUT NOTICE. PYMNTS SHALL NOT BE LIABLE FOR ANY DAMAGES WHATSOEVER, AND, IN PARTICULAR, SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, OR INCIDENTAL DAMAGES, OR DAMAGES FOR LOST PROFITS, LOSS OF REVENUE, OR LOSS OF USE, ARISING OUT OF OR RELATED TO THE CONTENT, WHETHER SUCH DAMAGES ARISE IN CONTRACT, NEGLIGENCE, TORT, UNDER STATUTE, IN EQUITY, AT LAW, OR OTHERWISE, EVEN IF PYMNTS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. SOME JURISDICTIONS DO NOT ALLOW FOR THE LIMITATION OR EXCLUSION OF LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, AND IN SUCH CASES SOME OF THE ABOVE LIMITATIONS DO NOT APPLY. THE ABOVE DISCLAIMERS AND LIMITATIONS ARE PROVIDED BY PYMNTS AND ITS PARENTS, AFFILIATED AND RELATED COMPANIES, CONTRACTORS, AND SPONSORS, AND EACH OF ITS RESPECTIVE DIRECTORS, OFFICERS, MEMBERS, EMPLOYEES, AGENTS, CONTENT PROVIDER PROVIDERS, LICENSORS, AND ADVISERS. Components of the content original to and the compilation produced by PYMNTS is the property of PYMNTS and cannot be reproduced without its prior written permission. The Embedded Finance Tracker® Series is a registered trademark of What's Next Media & Analytics, LLC ("PYMNTS").