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SEPTEMBER 2022

Embedded Finance Tracker® Series

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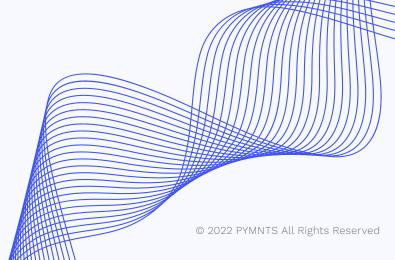
Information on PYMNTS and Galileo.





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Need To Know

Banks Boost Digital Payments With Cloud Technology

Digital services have become par for the course in modern banking, and banks are scrambling to offer the most impressive experiences.

Some of the most common services banks offer include automated account validation, digital lockboxes and immediate transaction confirmation, but these represent just a small fraction of the endless possibilities that digital innovation can bring. Customers want fast, seamless and secure solutions and will reward banks that step up to provide them.

The most common digital solution among banks



89% **Account validation**



82% Digital lockboxes



76% Immediate transaction confirmation

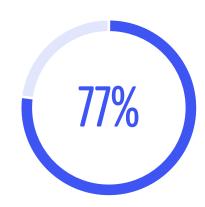


Need To Know

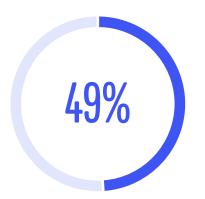
Embedded finance solutions are some of the most efficient ways to enable these digital offerings.

PYMNTS' research found that 92% of financial institutions (FIs) are currently innovating or have plans to innovate embedded finance experiences within their digital suites, with large international FIs taking the lead, as they have a leg up when it comes to available resources and IT expertise. National banks may be following behind but are catching up fast.

FIs currently innovating or planning to innovate embedded finance experiences



Share of large international banks developing embedded finance solutions



Portion of large national banks developing embedded finance solutions

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Need To Know

Outdated legacy systems are a common factor impeding embedded finance solutions, but cloud infrastructure offers banks an efficient way to upgrade.

Large FIs, including JPMorgan Chase, are <u>moving</u> their core systems to the cloud en masse, starting with retail banking and eventually moving on to their entire core infrastructure. Modernizations such as these will be critical to enabling embedded finance solutions and a host of other digital innovations.











Bank of America

JPMorgan Chase

Morgan Stanley

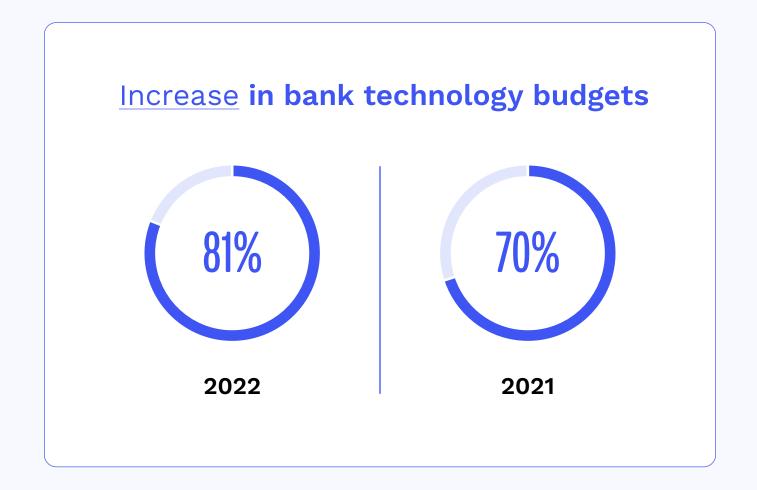
Wells Fargo

News And Trends

Banks Invest In Cloud Technology To Meet Customer Demands

81% of banks increased technology budgets in 2022, study finds

FIs are scrambling to meet customers where they are when it comes to quick and seamless services, namely online. A recent <u>survey</u> found that 81% of banks increased their technology budgets in 2022, an 11% increase from last year. Forty-five percent of these banks reported that their current technology was outdated, resulting in a host of deficiencies. More than half said their biggest threat was small banks and credit unions, and one-third said their biggest threat was not banks but technology firms such as Apple.



Growing generational concerns are also driving this technological push. Just 25% of banks said they have the tools needed to serve Generation Z, and just half said the same about millennials. In contrast, 85% said current technology budgets were suitable for Generation X, and 93% said the same about baby boomers.



News And Trends

Customers desire easier real-time financial services

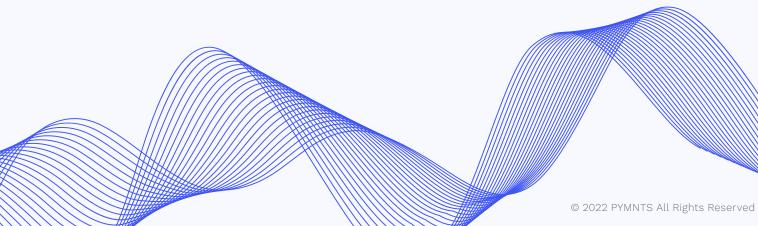
Alacrity is the name of the game when it comes to banking in 2022, with customers forgoing physical bank branches in favor of instant banking services on mobile phones or computers. A recent survey found that consumers desire even easier and faster banking access, with 73% saying they want banking questions answered quickly and 58% saying they have already attained this. Another 15% said they could not complete a loan application remotely, while 57% reported being so unsatisfied with their current bank's digital services that they switched FIs entirely.

Customers desire the option to conduct practically all bank functions remotely, even if they generally would prefer to obtain these services in person. The survey also found that 64% felt comfortable having personal or sensitive financial conversations with their bank via text message, and a similar portion said they prefer to have these talks in person.

Open banking drives digital innovation, financial product development

Open banking is one of the most important innovations for improving banking technology. It allows third-party nonbank FinTech companies to develop new products and services that integrate seamlessly into any bank's systems via application programming interfaces (APIs). A recent report found that as of the end of Q2 2022, there were 1,578 banking APIs available worldwide, allowing tech companies to make 5,564 open banking API products available to customers. This is a vast improvement compared to the 4,831 products available in Q1, signifying a massive increase in the variety of banking products available to businesses and consumers.

There are currently 80 countries that have open banking regulations in place, and another 75 are currently developing or implementing their own mandates. Latin America saw the most significant increase in API products at 56% year over year, followed by North America at 35%.



PYMNTS Intelligence

How Cloud Banking Can Enable Embedded Payments

Customers — both personal and corporate — are more exacting than ever when it comes to digital banking.

Their complaints are as keenly felt as they are diverse, with customers saying their banks fail them in several fields. Fiftytwo percent of customers said their banking experience is not fun, 44% said that their banking services are not personalized and 30% said that they are not as seamless as they would like, according to a recent report.

What customers say they are not getting from their bank



52%

Fun



45%

Value for money



44%

Personalized services



30%

Seamlessness

N = 8,051: Bank customers, conducted 2022.

Source: Vaidya, N; Venkatesan, C.; Ghanem, E.; Thakral, C.; Singh, V.; Pandey, V. The Customer Engagement Imperative. Capgemini Research Institute. 2022. https://worldretailbankingreport.com. Accessed October 2022.

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PYMNTS Intelligence

Even worse, customers are willing to switch banks if their needs are left unsatisfied.

Banks are working hard to fix these deficiencies by deploying embedded banking solutions, but these are often impractical without a complete core modernization, which is difficult without turning to the cloud.

This month's PYMNTS Intelligence explores the risks banks face when relying on legacy banking systems and how cloud banking can enable embedded payments.



PYMNTS Intelligence

Embedded finance solutions are key to providing the digital experiences that customers demand.

Ninety-two percent of FIs said they are currently implementing or planning to implement embedded finance experiences, according to PYMNTS' research, with many different end goals. Fifty-two percent of FIs aim to innovate their payments processing, for example, while nearly 40% plan to improve their credit card offerings.

Share of FIs reporting that they are currently implementing or planning to implement embedded finance experiences



TABLE 1:

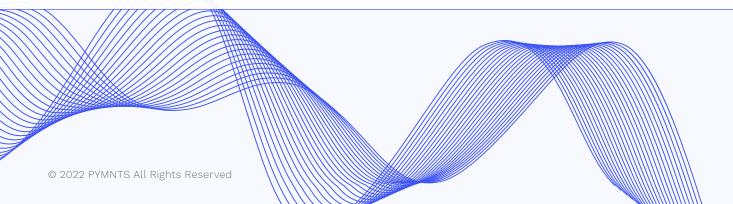
Embedded finance experiences FIs plan to innovate

Share of FIs planning to innovate select embedded finance experiences, by type of FI

		PAYMENT PROCESSING	CREDIT CARDS	LOANS	ACCOUNTING SERVICES	DEPOSIT ACCOUNTS	CASH FLOW MANAGEMENT
A۱	VERAGE	52.1%	39.9%	38.9%	38.3%	37.3%	27.3%
•	Large international bank	23.5%	52.9%	52.9%	58.8%	47.1%	52.9%
•	Large national bank	41.5%	58.5%	73.2%	39.0%	46.3%	58.5%
•	Regional bank	62.5%	47.9%	47.9%	35.4%	33.3%	27.1%
•	Credit unions	44.6%	33.8%	32.4%	36.5%	25.7%	12.2%
•	Community bank	59.5%	32.8%	26.7%	37.4%	41.2%	22.9%

Source: PYMNTS

Meeting The Challenge Of Payments Modernization, May 2022 N = 311: Whole sample, fielded Oct. 28, 2021 - Nov. 30, 2021



PYMNTS Intelligence

Embedded finance systems can be difficult or impossible to implement on outdated core systems, however.

A recent survey found that 58% of banks' mainframe systems were between five and 10 years old, 27% were between 11 and 20 years old and 9% were 21 years old or older. Banks face a difficult choice: Go deep into the red to bring their legacy systems up to par or lose out on customers when they cannot provide satisfactory experiences.

Cloud migrations can offer banks an efficient way to upgrade their core systems and enable embedded finance solutions.

Eighty-two percent of banks plan to migrate more than half of their core systems to the cloud, including one in four that plan to move more than three-quarters. Nearly all of them will do so for cost purposes, with 91% of banks saying the cost to maintain their current core systems has increased in recent years.

Cloud migration can be a challenging task.

Half of the organizations said they had security concerns, 46% said they had difficulties integrating their data into their cloud servers and 43% reported performance challenges with network overlays. As cloud infrastructure grows more mainstream, however, banks can harness institutional expertise and make cloud systems — and by extension, embedded finance — table stakes for years to come.



had difficulties integrating their data into their cloud servers



had performance challenges with network overlays

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Chart Of The Month

Embedded Finance Across A Range Of Industries

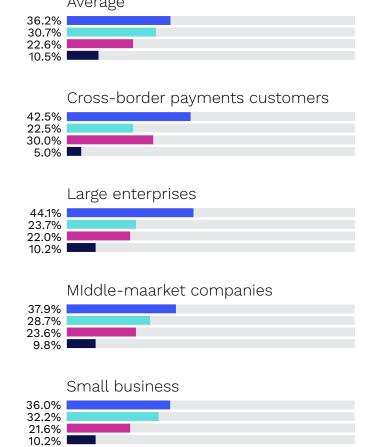
Embedded finance solutions are incredibly versatile and can benefit not only individual consumers but also a massive variety of enterprise customers. The industry most likely to adopt embedded finance solutions is insurance, with more than 44% of FIs servicing large enterprises and nearly 43% of FIs serving cross-border payments customers saying their customers are likely to embrace these systems. On the other end of the spectrum is sports, with just 5% of FIs serving cross-border payment providers saying their customers in this industry are looking for embedded finance.



Industries expected to adopt embedded finance solutions

Share of industries expected to be most likely to adopt embedded finance solutions, by type of corporate customer





Source: PYMNTS Meeting The Challenge Of Payments Modernization, June 2022 N = 287: FIs that are currently innovating or planning to innovate embedded finance experiences for corporate payments, fielded Oct. 28, 2021 - Nov. 30, 2021

Insider POV

Learn From An Insider The Benefits Of Core Modernization And Embedded

The cloud is different from what a typical bank is used to managing. But I believe the future is bright [for cloud systems,] which will allow banks and embedded payments to accelerate and expand.

Finance





An interview with Alex Zerio, head of solution and platform architecture at Green Dot Corporation, on how embedded finance and cloud technology can improve banking.

Consumers have increasingly demanded digital services in recent years, especially due to pandemic-related restrictions.

Seamlessness and ease of use are the names of the game, with customers expecting payments to be just as easy to navigate as eCommerce, social media or any other online interaction in their lives.

"The trend is really about how seamless or simple it is to do banking or to do payments. I think more and more, we are less willing to spend time saying, 'Which card should I take? Where's my wallet?' That notion of seamlessness when it comes to digital adoption is the key trend from a user perspective."

Insider POV

Embedded finance is vital for enabling these seamless and simple banking services.

Customers who shop online, for instance, want the built-in ability to pay for items without leaving an app or webpage, with their bank of choice offering a one-click payment option. Banks would be well-served to allow their customers' favorite brands to be front and center when it comes to digital payments, Zerio explained.

"It's really our partners, the brands, that ultimately have that relationship with the customers, so it's important to allow them to facilitate the lives of their users by embedding payment capabilities within their own services. [Embedded finance is the next step,] where you're not even thinking about the bank as somebody you're having a relationship with. Instead, you're perceiving Amazon or Walmart, and the payment capabilities come as part of the service these entities are providing to you."

This capability is currently out of reach for many banks due to outdated core systems, but cloud technology could help level the playing field.

Upgrading legacy systems can be an expensive, time-consuming process that requires immense IT expertise, but shifting these core capabilities to the cloud outsources the need for these resources. This, in turn, can unlock advanced capabilities such as embedded finance.

"Cloud adoption plays a big role in driving efficiency gains and cost savings, and the outcome of it is that managing the complexity of core systems becomes simpler and easier. This allows mind space, energy and investments to be routed toward the innovation aspects of technology that we can deploy."

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Companies To Watch

Companies Bank On The Cloud

🛕 savana

Companies that aid banks in their cloud innovations are reaping their hard-earned rewards. Financial software startup Savana recently announced it raised \$45 million in a Series A funding round, furthering its objective of delivering customer engagement, account servicing and automated bank operation solutions.

The **co-operative** bank

Another exciting cloud development comes from U.K.-based The Co-operative Bank, which recently partnered with Finastra to upgrade its treasury infrastructure and automate its manual reporting processes. A primary objective of this partnership was to ease access to ongoing core system upgrades.



What's Next

Cloud Technology Is One Giant Leap For Bank Infrastructure

Core banking solutions are expected to get a massive shot in the arm, largely thanks to the growing shift to cloud technologies. Experts <u>project</u> that the core banking solutions market is expected to expand by \$12.1 billion by 2026 at a compound annual growth rate (CAGR) of 15%. This shift to cloud banking, as well as other technologies boosting core infrastructures, is the result of massive investments in digital systems during the pandemic. Although the past couple of years were rough for banks, the sacrifices made during this time have set them up for a prosperous future.

Over the past decade, financial service providers have invested heavily in enhancing the user experience offered by their digital products an effort that has driven significant advances in how such products look, feel and operate on the surface level. But for the evolution of digital financial services to continue over the next 10 years, providers will need to look deeper, focusing on modernizing the underlying core systems that power those offerings. For many financial services providers, that will require making important investments in a proven, digital core technology and reimagining how such products are designed and built to be future-proof. To evolve as the market evolves is essential for those FIs that want to continue to compete and win in the next phase of the digital financial services evolution.



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About

PYMNTS

PYMNTS is where the best minds and the best content meet on the web to learn about "What's Next" in payments and commerce. Our interactive platform is reinventing the way in which companies in payments share relevant information about the initiatives that shape the future of this dynamic sector and make news. Our data and analytics team includes economists, data scientists and industry analysts who work with companies to measure and quantify the innovation that is at the cutting edge of this new world.

(galileo

Galileo is a leading financial technology company whose platform, open API technology and proven expertise enable FinTechs and emerging 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.

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