

## 645 Ventures Research – Nnamdi Okike

### Investment Opportunities in Banking Software and Fintech Banking Applications

This research report covers the history of banking software, the evolution of the banking software stack, how the mobile and cloud waves drove innovation and resulted in large banking exits, and the rise of neobanks and the drivers that catalyzed their growth.

I also address the AI wave and how it creates opportunities both for banking software startups as well as full stack AI-driven banks and banking applications, applying learnings from previous tech waves.

Here are key takeaways from the research:

- **Large banking software companies are highly entrenched and have had long staying power, despite new entrants attacking components of the banking software stack over the past decade:** The top 5 public banking software providers (Jack Henry, Fiserv, FIS, Q2, and Temenos) have a combined enterprise value of \$196B and total revenue of \$36 billion.

On average, these 5 companies were founded 40 years ago, reflecting their staying power and the challenges new startups have had in dislodging them.

They provide very broad software suites encompassing core banking, loan origination, online banking, payment processing, risk and compliance. These stacks are often the result of many acquisitions.

Their software offerings are largely written in old languages (e.g., Cobol); include mainframe, client-server and cloud components; and are expensive for banks to maintain. Traditional banks spend up to *70% of their IT budgets* just maintaining legacy banking software.

Despite these major shortcomings, these players are entrenched because it is very painful for banks to replace core banking systems. This process has been compared to “open heart surgery” for a bank.

These incumbents also typically aim to acquire new startups before they can reach large scale. For example, First Data acquired Clover for only \$56m, and then Fiserv acquired Clover when it acquired First Data. Today, Clover generates \$3.5 billion (!) of net revenues and over \$300 billion of total payment volume for Fiserv, making it the largest U.S. cloud POS firm.

New AI software entrants may pick off pieces of the market, like the mobile and cloud entrants did over the past 10-15 years. This may result in exits greater than \$1 billion, or even in the \$3-5B range, similar to nCino and Q2. However, they are unlikely to fully dislodge the incumbents anytime soon. We should factor this in when assessing RTFEs for Seed and Series A deals.

- **Several of the best banking software outcomes of the past 10-15 years came from founders with deep experience in the banking sector before founding their tech companies:** [Hank Seale](#) (founder of Q2) and [Chip Mahan](#) (founder of nCino) are examples of banking veterans who saw the need for better software. These founders fit the “earned secret” paradigm, where their insights came from encountering challenges in their own banking operations and believing tech could solve them. They were able to test software internally at their banks before selling it to bank customers.

New software companies leveraging AI that reach large scale may come from founders with similar deep backgrounds as bankers or financial services professionals. Our investment in **Meridian** follows this pattern in private equity software.

- **New AI banking software companies will need to be highly strategic to capture market share from incumbent competitors:** Tidemark’s article on [Control Point Patterns](#) is especially relevant for assessing opportunities for new startups in this category. It’s nearly impossible to replace a core banking software system as a young company. A better strategy is to capture one piece of the pie early by offering a product feature that is greatly superior (better, faster, cheaper) to that offered by the incumbents.

Mantl did that with account opening in the cloud wave, for example, and was eventually acquired for \$400m by Alkami. We have seen a similar approach applied by prospects like [Glide](#) for AI account opening and [Fuse](#) for AI loan origination.

Over time, a software company might be able to apply the “integrate and surround” strategy and eventually replace the incumbents as a system of record. This approach was applied successfully by nCino, which began as a loan origination system and eventually built a full software suite via both organic and inorganic growth.

- **The largest banking tech exits of the past decade were not software companies selling to existing banks, but instead neobanks that offered new banking services atop their own proprietary tech infrastructure:** Fintechs such as SoFi (\$17B market cap), Nubank (\$59B) and Chime (\$13B) built their own tech infrastructure in-house or acquired it and leapfrogged legacy banks by rapidly rolling out innovative products and services that existing banks couldn’t or wouldn’t offer.

For example, Chime runs on [Chimecore](#), Chime’s in-house payment processor and ledger that handles transaction messaging (deposits, transfers, withdrawals) and serves as a system of record for proprietary transactions.

Nubank [built its own core banking infrastructure](#) from day one. Sofi [acquired Galileo](#) and [Technisys](#), both for over \$1 billion, providing it with both a powerful API and payments platform as well as a core banking system.

New software companies that sell into existing banks reached moderate to large exit events over the past decade, with the largest being Q2 (\$5B market cap) and nCino (\$3B market cap). These companies are still relatively small in comparison to the largest incumbents. For example, *nCino has less than 3% of Fiserv’s revenues*. This could mean that these businesses will appreciate meaningfully in the public markets as they grow market share.

The largest M&A's within banking software over the past decade were not incumbents buying upstarts, but instead incumbents acquiring each other (for example, FiServ acquiring FirstData for \$22B).

- **AI will be a game changer for many aspects of the banking process for end customers:** Almost every area of banking will be transformed by AI over the next decade. Below are some of the primary areas of value. Even more than mobile and cloud, which introduced new banking services and changed how customers interact with financial services companies, AI will transform the banking experience for consumers, small businesses and enterprises.
  - a. AI will provide increased personalization of the user experience
  - b. AI will enable dramatically improved customer support and service
  - c. AI will enable banks to better manage risk and compliance
  - d. AI will significantly improve the process of applying for and being approved for financial products and services
  - e. AI solutions will solve important problems for underserved customer segments
- **AI introduces the prospect of building an AI bank (or AI banking application) with a radically better cost structure than a traditional physical bank:** I originally began this research report to explore opportunities for software companies selling into existing banks to replace software incumbents.

However, as I examined historical exits through recent tech waves and better understood the tech stacks of existing banks, I became more convinced that the largest exits in the AI wave will be companies building AI banks and banking applications. This is the model applied by companies such as Revolut, Nubank, Chime and SoFi in this last wave.

These companies present greater risk and require more capital to build, but have larger and more addressable TAM's than software companies. They will also be able to reduce cost to service dramatically by deploying agents in many roles previously occupied by people. The best companies in this category have the potential to exit in the \$5B to \$50B range.

Building an AI software company selling into existing banks is less capital-intensive and presents the opportunity to exit in the \$500m-\$5B range. This makes it important that we enter these companies at reasonable entry prices.

## Overview of the U.S. Banking Sector

Before going deep into banking software, it's important to understand the segmentation of U.S. banks to better understand the market opportunity. Here is how the U.S. banking sector breaks down:

**Community Banks:** The smallest banks are community banks, of which there were ~4,100 in the U.S. as of 2024. This figure is down from 7,600 back in 2003, reflecting the consolidation of this market over the past two decades.

Community banks generally have less than \$10B in assets. They comprise 90% of all U.S. banks, but only account for 15% of loans and 11% of total assets.<sup>1</sup>

Community banks operate in small geographic areas, primarily collect deposits from and loan to local residents and small businesses, and have generally been slow to adopt new software.

Community banks and credit unions have been fertile ground for the growth of certain banking software companies in past decades, such as Jack Henry, which was founded in 1976 and focuses on this segment.

This is not an easy market to penetrate, given its fragmentation. A new startup aiming to grow market share needs to figure out cost-effective distribution to reach this fragmented market. It also needs to provide a wedge product that shows immediate ROI and doesn't require immediate replacement of legacy core banking software. This is the approach that Glide is taking, focusing on account opening for community banks.

**Regional Banks:** Regional banks generally have assets between \$10 billion and \$100 billion, and operate within several counties or states. There are 134 regional banks in the U.S., and they manage 15% of total assets (over \$3 trillion in total).

These banks operate 100 branches on average. Consolidation pressures also have impacted this segment of the market.

These banks provide moderate Internet and mobile banking services. They are somewhat faster in adopting new tech in comparison to community banks, and have larger tech budgets.

**Large National Banks:** There are 33 large national banks, defined as entities with more than \$100 billion in assets. Combined, these 33 banks hold \$17.1 trillion in assets—representing approximately 71% of total U.S. banking industry assets (\$24.1 trillion).

These banks control the vast majority of U.S. banking assets, generally operate thousands of branches, and fall under the highest levels of regulatory scrutiny.

This group includes 8 Global Systemically Important Banks (G-SIBs), 4 state-member U.S. banks within those G-SIB systems, and 18 additional large U.S. institutions exceeding \$100 billion—all overseen by the Large and Foreign Banking Organization (LFBO) supervisory program

The top 4 largest banks - JPMC (\$3.5T), Bank of America (\$2.6T), Wells Fargo (\$1.7T), and Citibank - together control \$9.5 trillion of assets.

Needless to say, these banks have the highest budgets for software and the most extensive and complicated existing tech infrastructure.

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<sup>1</sup> "U.S. Community Banks: Holding up Well with Strong Asset Quality Despite CRE Exposures," at [https://dbrs.morningstar.com/research/440556?utm\\_source=chatgpt.com](https://dbrs.morningstar.com/research/440556?utm_source=chatgpt.com).

**Neobanks/Challenger Banks:** There are ~75 neobanks, also called challenger banks, operating in the U.S. As of 2024, about 40 million Americans had at least one neobank account.

It's difficult to say how much of the total \$25 trillion in U.S. assets are managed by neobanks, but it's safe to say that this figure is less than 1% of total assets.

For example, SoFi, the largest U.S. challenger bank, has \$36B of assets, or only .14% of total assets. Even if you include online banks like Ally and Synchrony, which are more diversified and not pure neobanks, total assets managed is only \$352 billion, or about 1.4% of total assets.

Neobanks are growing rapidly, however. Their user base grew at a CAGR of 55% between 2020 and 2024.

It is likely that they will capture much greater market share in the U.S. over the next decade, if they continue to innovate and broaden their product offerings. One international comparable is Nubank, which leapfrogged Latin American banks and now has over 100 million customers and over \$11.5 billion in revenues.

I view the neobanking market as similar to the e-commerce category in the 2010s to present. E-commerce is only ~16% of retail sales in the U.S., but it has yielded several very large companies, including Amazon. Similarly, I believe neobanking penetration will gradually increase each year, and will eventually yield several massive companies over the next decade.

Challenger banks often build their own tech infrastructure in-house, which provides them with a competitive advantage that will be described below.

Category	Asset size (\$)	Characteristics	Example institutions
Community	< \$10B	<ul style="list-style-type: none"> <li>Operate primarily in a small geographic area (local community)</li> <li>Collect deposits from and lend to local residents and small businesses</li> <li>Small branch footprint within the local geographic area with strong, highly personalized customer relationships</li> <li>Unlikely to offer high-quality internet or mobile banking services</li> </ul>	  
Regional	\$10B - \$100B	<ul style="list-style-type: none"> <li>Operate in a larger geographic area than Community banks, but do not operate on a national level</li> <li>Collect deposits from and lend to customers across a broader geographic region that can include several counties or states</li> <li>Offer more personal customer relationships than larger institutions</li> <li>Likely to offer moderate-quality internet and mobile banking services</li> </ul>	  
Large (National)	> \$100B	<ul style="list-style-type: none"> <li>Operate on a national scale with national-scale branch networks, deposit-taking/lending services and diversified financial services such as wealth management and insurance</li> <li>Less focused on developing strong personal relationships with individual customers; likely to offer high-touch services only to high net worth individuals</li> <li>Likely to offer high-quality internet and mobile banking services</li> </ul>	  

Figure 2: Classification of banks by asset size (<https://www.federalreserve.gov/>, <https://www.fdic.gov/>)

## Banking Software: Serviceable Addressable Market

The largest incumbents in banking software together generate **\$38B in total annual revenues**. This SAM comprises a wide range of software and services, including core banking software, payment processing, merchant acquiring software and services, loan software, account opening, fraud prevention, and online banking (see further below for a description of the tech stack). Revenue composition varies widely based on the individual company.

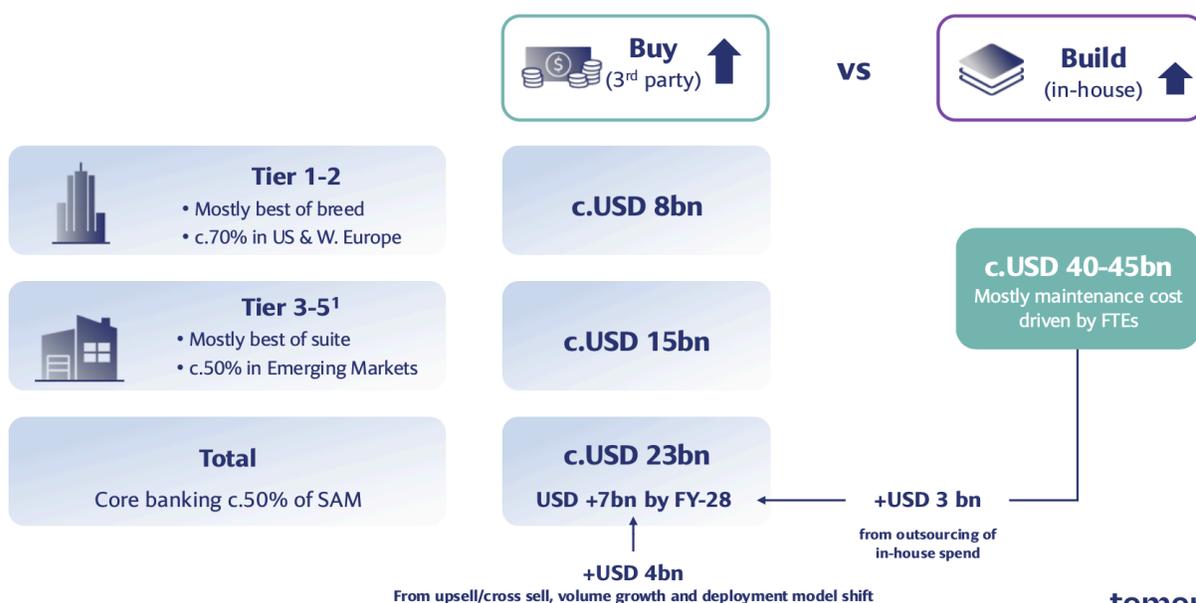
Below is a recent SAM sizing from Temenos, a major European banking software player. Temenos sizes the “buy” software market at \$23B in ‘24, growing to \$30B by ‘28. Temenos’ SAM excludes certain product lines that generate sizable revenue for its competitors, such as payment processing.

Temenos sizes the in-house “build” market at \$40-45B, composed primarily of maintenance costs of existing software. Banks typically have a hodgepodge of 3rd-party software, both mainframe and cloud, as well as software that they have built in-house.

One major factor in determining the TAM for AI banking software over the next decade is whether startups will be able to capture a meaningful percentage of the “build” market. It is almost nonsensical that banks continue to spend so much money maintaining software that is decades old, but they do.

This is a major area for new AI startups to attack, because they could enable banks to significantly reduce costs while improving their product offerings at the same time. To succeed, startups will have to fight against inertia and perceived risk of change.

### 7% CAGR in SAM FY-24 to FY-28 from USD 23bn to 30bn



Note: SAM: Serviceable Addressable Market relates to banking 3<sup>rd</sup>-party software spend addressable by Temenos products; Represents product revenue and includes spend on subscription, SaaS, term license and maintenance. 1) Includes Tier 3-5 & non-incumbents

## Incumbents, Upstarts and Exits

### Public Incumbents

Below is a summary of the largest public companies in the banking software category. As described above, the top 5 largest incumbents are 40+ year old companies with \$1B+ revenue bases, high profitability, and slow growth. These companies evolved in a different time, and largely compete today by defending their territory instead of innovating. Median revenue of these companies is \$1B and average revenue is \$4.2B.

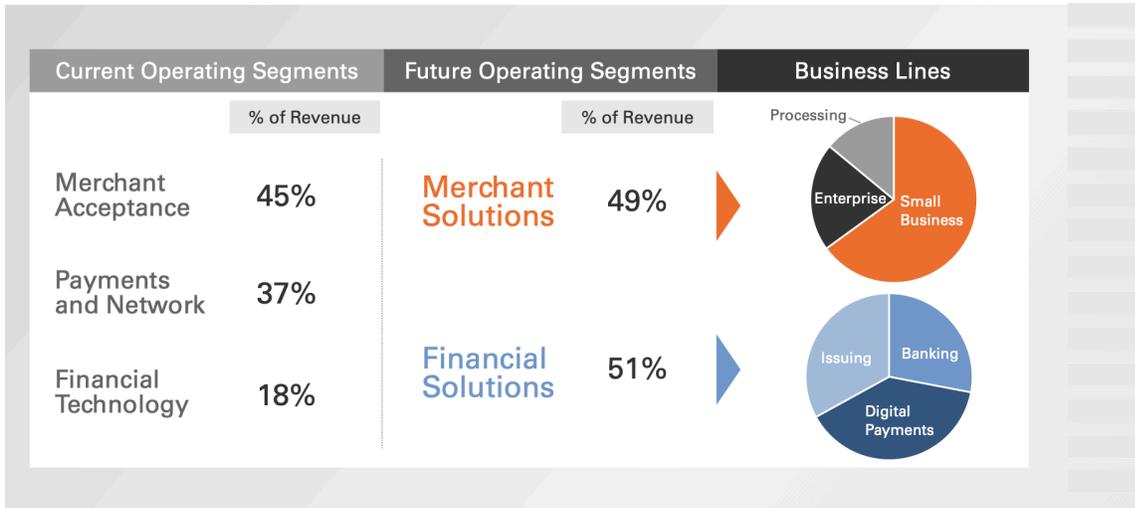
<b>Banking Software Incumbents</b>							
<b>Figures USD Millions unless otherwise noted</b>							
<b>Target or Public Co</b>	<b>Business Summary</b>	<b>Year Founded</b>	<b>Acquirer or IPO</b>	<b>EV</b>	<b>LTM Revenue</b>	<b>EV/Revenue</b>	
Jack Henry	Financial technology company that provides core processing systems, digital banking solutions, and payment processing services to community and regional financial institutions across the U.S.	1976	IPO	\$13,220	\$2,319	5.7x	
Fiserv	global provider of financial technology solutions that deliver payment processing, banking software, risk management, and data analytics services to banks, credit unions, and other financial institutions.	1984	IPO	\$118,260	\$20,747	5.7x	
FIS	global leader in financial services technology offering core banking, payments, asset management, risk and compliance, and outsourcing solutions for banks, merchants, and capital markets firms.	1968	IPO	\$52,980	\$10,188	5.2x	
Plaid	financial data connectivity platform that enables applications to securely access consumers' banking and financial information for use cases such as personal finance, lending, payments, and financial wellness.	2013	N/A	\$6,100	\$300	20.3x	
nCino	offers a cloud-based banking operating system built on Salesforce that streamlines loan origination, deposit account opening, and customer engagement for financial institutions.	2011	IPO	\$3,260	\$553	5.9x	
Q2	provides a digital banking platform that empowers banks and credit unions to deliver unified, secure, and personalized digital experiences to their retail and commercial customers.	2004	IPO	\$5,390	\$1,761	3.1x	
MeridianLink	provides cloud-based lending, account opening, and credit reporting solutions for banks, credit unions, and fintech companies, enabling automation and enhanced customer experience.	1998	IPO	\$1,560	\$321	4.9x	
Alkami	offers a cloud-based digital banking platform that enables financial institutions to deliver engaging user experiences across mobile, online, and voice channels with strong security and extensibility.	2009	IPO	\$3,070	\$356	8.6x	
Temenos	Swiss-based banking software provider that offers core banking systems, digital front-end platforms, and analytics tools used by traditional banks and challengers to accelerate digital transformation.	1993	IPO	\$5,960	\$1,050	5.7x	
<b>Median Average</b>				<b>\$5,960</b>	<b>\$1,050</b>	<b>5.7 x</b>	
				<b>\$23,311</b>	<b>\$4,177</b>	<b>7.2 x</b>	
<b>Total EV and Revenue</b>				\$209,800	\$37,596		
<b>Top 5 Public Cos EV and Revenue</b>				\$195,810	\$36,067		

**Fiserv** is the largest provider of banking software in the world. The company generates over \$20B of revenues and \$6.5 billion of operating cash flow. It has almost 30% operating margins. Its operating margin has actually increased over the past five years, reflecting a lack of competition in its major areas of revenue.

Below are images from Fiserv's most recent investor presentation showing where Fiserv generates its revenues, as well as the product segments where it was the market leader as of the end of '23.

At that time, Fiserv was #1 in processing payments for businesses, core banking software, online banking, Zelle money transfer, managing card issuances, mobile banking, bill payment, and internal money movement. 49% of its revenues came from merchant solutions such as payment processing, and 51% came from financial solutions such as core banking, digital payments, and credit/debit card services.

## Business Realigned With Client Demand and Growth Strategy



% of adjusted revenue is based on the first nine months of 2023.

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### The Case for Extending Our Lead

**Fiserv is a global technology leader enabling money movement for Financial Institutions, businesses and consumers**

**Business in more than 100 countries**  
Reaching nearly 100% of U.S. households

**#1**  
in Merchant Acquiring

**#1**  
in CORE Account Processing

**#1**  
in Online Banking

**#1**  
Zelle® Enabler

**#1**  
in Issuer Processing

**#1**  
in Mobile Banking

**#1**  
Bill Payment Provider

**#1**  
in Account-to-Account Transfers

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Fiserv's continued dominance in banking software is a reflection of the mission-critical nature of this software and banks' reluctance to rip it out for new providers. Many banks also prefer one provider which offers core and digital banking, debit/credit processing, and fraud/risk/compliance tools.

**Plaid** is an anomaly in this group of incumbents. It is the youngest company, the smallest in revenue, the only private company<sup>2</sup>, and it also occupies a very different position than the rest of the players.

Plaid is unique in that it is an API company that provides a mission critical service connecting financial institutions with application companies. The other incumbents are primarily software companies selling directly to banks, powering services that those banks provide to their end customers. Plaid is competing differently, addressing the emerging need for APIs that arose due to the growth of SaaS software and fintech applications.

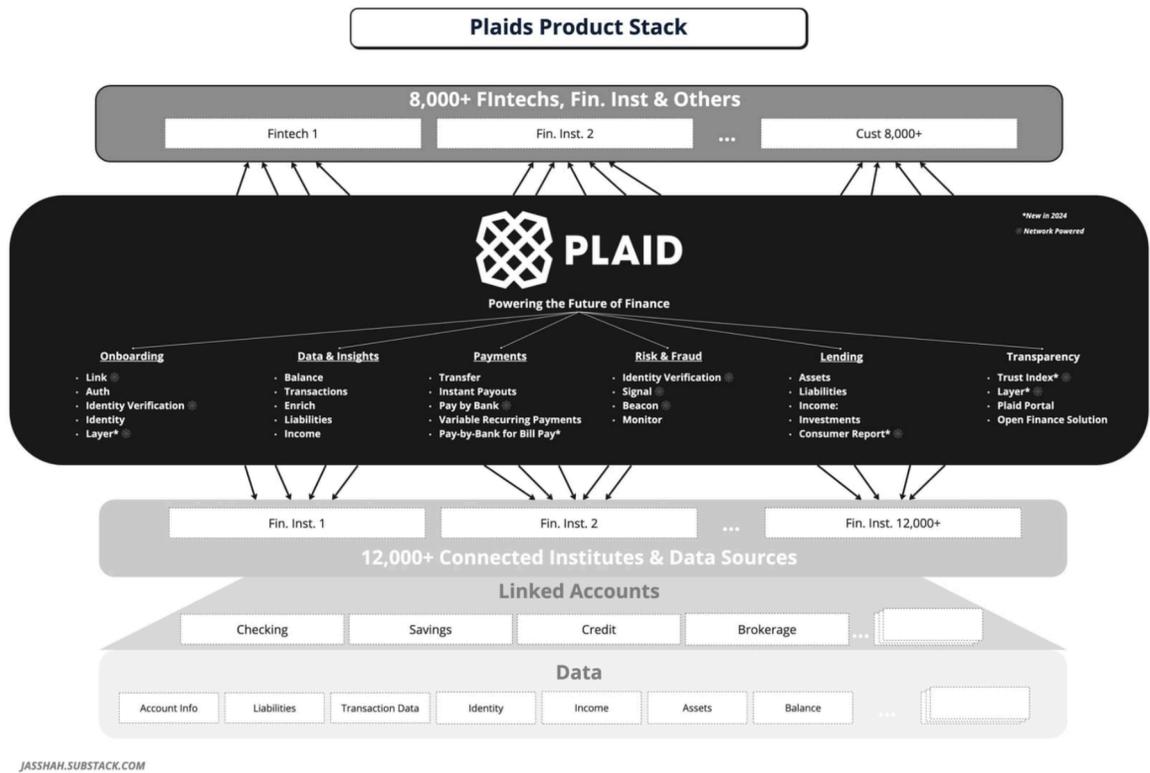
Plaid provides a comprehensive suite of financial APIs that enable companies to build secure, data-rich financial services. Plaid's products include:

- Plaid Link: A drop-in UI component for users to securely connect their financial accounts.
- Accounts and Authentication: Retrieves account numbers and fetches real-time account balances.
- Transactions and Financial Data: Enables access of up to 24 months of categorized transaction history.
- Identity & Fraud Prevention.
- Financial Snapshot & Verification: Validates user income, bank balances, net worth, liabilities.
- Payments & Transfers: Initiates end-to-end bank-to-bank transfers.
- Investments & Credit: Retrieves investments and credit data.

See below an overview of Plaid's product stack.

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<sup>2</sup>Plaid was acquired by Visa for \$5.3B in 2020, but the deal was blocked by the DOJ, on the grounds that Visa was a monopolist in online debit and that acquiring Plaid would eliminate a potential competitor in the online payments space.



Plaid powers connections to 12,000 financial institutions, integrates into 8,000+ fintech apps and services, and has 2,100+ customers. Plaid powers over 500 million account connections per day.<sup>3</sup>

Plaid’s customers span a broad range of industries, including lending, wealth management, payments/banking, personal finance, crypto, prop-tech, mortgages, iGaming, business/SMB financial services, and banks/credit unions. Major customers include Chime, Betterment, Flexport, Coinbase, Adyen, MoneyLion, Veridian Credit Union, Affirm, Varo Bank, H&R Block, among others.

Plaid is a great example of how a startup can innovate to fill a market void. One approach we should apply within AI for fintech is to think about major pain points that can be solved via an AI middleware or API layer. These could be processes that today are done manually, or that cannot be accomplished today through traditional processes, but where AI can enable a new process that can be done for the first time.

One area we are actively exploring is the **infrastructure layer that needs to be built to enable agentic commerce**. Specifically, the communication layer needed between financial services companies and online retailers and mobile commerce applications to facilitate transactions. One could envision a Plaid-like company for agentic commerce.

<sup>3</sup> “Fintech: Plaid’s Expansion beyond Data to Payments and Real-Time Underwriting,” <https://lex.substack.com/p/fintech-plaids-expansion-from-data>.

[Nekuda](#), which was created by a former executive at Solidus, a 645 portfolio company, is one company we are tracking in this category.

## Banking Software M&A Events

Below is a summary of some of the largest M&A events in banking software over the past ~15 years. Median exit size is \$1.7 billion, and companies were acquired for a median of 7.5x revenues. There was a flurry of activity in 2020 and 2021, with both strategics and PE firms acquiring banking software companies.

M&A Comparables							
Figures USD Millions unless otherwise noted							
Target or Public Co	Business Summary	Transaction Date	Acquirer	EV	LTM Revenue	EV/Revenue	
Mantl	MANTL is a financial technology firm offering unified account origination technology that empowers banks and credit unions to seamlessly open deposit accounts on any banking channel in	2/28/2025	Alkami	\$400	\$30	13.3x	
Galileo	Galileo provides API-based banking and payment processing infrastructure to fintech companies.	4/7/2020	SoFi	\$1,200	\$200	6.0x	
SimpleNexus	SimpleNexus offers a digital mortgage platform that streamlines the home loan process for borrowers and loan officers.	11/16/2021	nCino	\$1,200	\$42	28.6x	
Avaloq	Avaloq develops core banking and wealth management software primarily for private banks and wealth managers.	10/5/2020	NEC	\$2,200	\$663	3.3x	
Itiviti	Itiviti delivers capital markets trading technology and connectivity solutions for financial institutions.	3/1/2021	Broadridge	\$2,500	\$275	9.1x	
Bottomline Technologies	Bottomline Technologies offers payments, cash management, and fraud prevention software for banks and corporations.	12/17/2021	Thoma Bravo	\$2,600	\$494	5.3x	
Technisys	Technisys is a leading next-gen digital and core banking platform that redefines the customer experience.	3/3/2022	SoFi	\$1,100	\$70	15.7x	
First Data	First Data is a global payment processor offering merchant services and debit/credit transaction processing.	1/16/2019	Fiserv	\$22,000	\$8,600	2.6x	
<b>Median</b>				<b>\$1,700</b>	<b>\$238</b>	<b>7.5 x</b>	
<b>Average</b>				<b>\$4,150</b>	<b>\$1,297</b>	<b>10.5 x</b>	

The acquisitions of SimpleNexus by nCino and Technisys by SoFi are good examples of what attractive acquisitions that generate high multiples for venture investors look like in the banking software category. Here are profiles of these transactions, with key learnings that we can apply to investing in new banking software companies:

**nCino acquires SimpleNexus for \$1.2 Billion:** SimpleNexus was founded in 2011 by Matt Hansen and Dave Stevenson in Lehi, Utah. The business began as a mobile app for consumers to estimate mortgage payments. The founders realized that consumers wanted a better experience of interacting with mortgage lenders when getting a loan.

The business then evolved to providing a software suite to unite the people, systems and stages of the home buying process, enabling loan officers, borrowers, real estate and settlement agents to manage the mortgage process. The software increases mortgage lender profitability

by “automating loan processing and closing, delivering modern customer convenience, surfacing data insights, and simplifying incentive compensation management.”<sup>4</sup>

The company bootstrapped itself in its early years and turned down early acquisition offers. The business raised its \$20m Series A from Insight in June 2018, then raised a \$108m Series B in January 2021 from Insight and TCV. Roughly 10 months after the Series B, nCino acquired the business for \$1.2 billion.

At acquisition, the company had roughly \$41m of ARR. It had 300 independent mortgage banks, 80 banks and credit unions, and 41,000 loan originators as customers.

SimpleNexus is a good example of a business capitalizing on tech waves (the rise of mobile and cloud in the 2010s) and also selling at the right time (late 2021) where it captured a premium multiple (29x revenues).

We should be looking for AI startups that provide a similar value proposition in vertical markets, automating key aspects of the financial transaction while providing a much better experience for end consumers.

Home financing/re-financing is one vertical for us to look into. Other consumer areas might include car buying, student loan financing, vacation purchasing, or other major purchases.

**SoFi acquires Technisys for \$1.1 billion:** Technisys was founded in 1995 in Argentina by Miguel Santos along with partners Adrian Iglesias, Germán Pugliese Bassi, and Kevin Ball. The company was literally launched from a living room.

The founders were focused on providing digital banking solutions in the mid-1990’s, but the market wasn’t ready. In founder Miguel Santos’ words, *“We probably started the company ten years earlier than the actual market existed. We were first knocking doors in banks and people weren’t even using the internet, but slowly we realized how big the trend was going to be for the region.”*<sup>5</sup>

The company bootstrapped itself for 10 years, and in 2009 (14 years in) raised its first round of \$1 million. The business gradually found adoption of its Cyberbank platform. Cyberbank is a next-generation core banking system designed to adapt to modern customer behaviors. “Cyberbank offers financial institutions the agility to dynamically change end-to-end product definitions, allowing them to tailor services to individual customer needs.”<sup>6</sup>

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<sup>4</sup> nCino Mortgage Suite, at “<https://www.ncino.com/en-US/mortgage/us>”

<sup>5</sup> “A 20-Year Journey: An Interview with Technisys CEO Miguel Santos,” <https://www.lavca.org/feature/a-20-year-journey-an-interview-with-technisys-ceo-miguel-santos/>.

<sup>6</sup> “An expert delivering a fully integrated API-centric financial technology platform that reinvents how people connect with their money: Technisys,” [https://thesiliconreview.com/magazine/profile/fully-integrated-api-centric-financial-technology-technisys?utm\\_source=chatgpt.com](https://thesiliconreview.com/magazine/profile/fully-integrated-api-centric-financial-technology-technisys?utm_source=chatgpt.com) .

Cyberbank has two key components:

- Cyberbank Core: Enables institutions to “create and refine products and services dynamically, encompassing modern offerings such as deposits, loans, and payments.”
- Cyberbank Digital: “Allows for the creation of digital ecosystems, facilitating the development of exceptional, empathetic digital experiences for customers.”<sup>7</sup>

SoFi purchased Technisys with the aim of creating the “only end-to-end vertically integrated banking technology stack, from user interface development capabilities to a customizable multi-product banking core and ledger with fully integrated processing and card issuing available for SoFi products and Galileo/Technisys partners.”<sup>8</sup>

At acquisition, the company had 60 customers covering 89 million customer accounts across US, Mexico and Colombia. Its revenues was \$70 million

Importantly, the acquisitions of Technisys and Galileo enabled SoFi to move off third-party banking software. SoFi estimated that this would save them \$60-70 million per year.

Key learnings from this acquisition include the fact that it can take a long time for a company to reach product-market fit, and not to discard companies due to their age. Technisys was also founded in Argentina but served a global customer base; we should be open to non-U.S. software companies targeting large markets.

### **Neobank/Challenger Bank and Fintech Application Leaders**

Below is a summary of the largest exits in the neobank/challenger bank and banking application categories, as well as the largest companies that are still private. Median revenue for these companies is \$1.6 billion, and median valuation is \$10 billion. These companies consume large amounts of private capital, with median private funding of \$600 million.

These companies are not all banks. For example, companies like Chime and Wise provide services that a bank would typically provide, but they are not banks because they don't have banking licenses. Fintech banking companies typically partner with sponsor banks to avoid having to get licenses.

You can see that these exits are larger than the banking software exits, reflecting the fact that the TAM for a provider of banking services is generally a lot larger than that of a software provider selling into the banking software market.

Their growth is also not constrained by the slow tech adoption rates of incumbents. Instead, they can offer better products and services directly to end customers.

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<sup>7</sup> Ibid.

<sup>8</sup> “SoFi to Acquire Technisys,” at <https://coverager.com/sofi-to-acquire-technisys/>

**Wise** is a great example of this. Their founders had experienced the high fees associated with international money transfer, and wanted to provide a new service to solve this problem. Wise significantly reduced fees to transfer money across borders, creating a new, much more efficient model of correspondent banking. This model was enabled by several tech inflections, including:

- Rise of open banking and modular financial infrastructure.
- Widespread adoption of AWS and containerized microservices in fintech (mid-2010s).
- Advances in real-time data processing and machine learning.
- Rise of digital-first consumer experiences (mid-2010s).
- Rise of BaaS platforms and new fintech licensing models, enabling them to enter new markets without becoming a bank in each country.
- Adoption of national faster payment schemes (e.g., UPI in India, PIX in Brazil).
- Growth of RegTech tools and machine learning for identity verification.

Many of the companies are still private, and their valuations have not been tested by the scrutiny of the public markets.

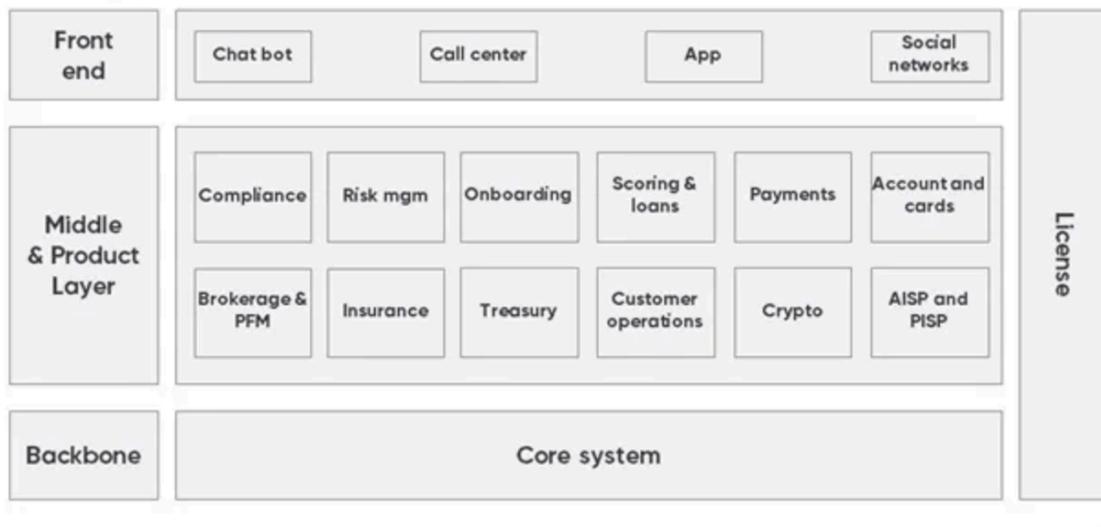
Largest Neobanks and Fintech Applications that Provide Banking Services									
Figures USD Millions unless otherwise noted									
Company	Description & Target Customers	Est. Annual Revenue	Private Funding Raised	Public or Private	Latest Valuation	Customer Base (millions)	Founded	Headquarters	
Nubank	Digital credit cards, checking, loans, and insurance for Latin Americans	\$8,000	\$2,000	Public	\$58,500	100.0	2013	São Paulo, Brazil	
Revolut	Multi-currency banking, trading, crypto for global digital consumers	\$4,000	\$1,700	Private	\$45,000	52.5	2015	London, UK	
Chime	Fee-free checking and savings for younger US consumers	\$1,700	\$2,300	Private	\$10,800	22.0	2012	San Francisco, USA	
SoFi	Lending, deposits, investing, insurance for US graduates and professionals	\$2,670	\$500	Public	\$16,700	11.0	2011	San Francisco, USA	
Monzo	Smartphone-based checking and budgeting tools for UK consumers	\$1,500	\$600	Private	\$5,000	9.3	2015	London, UK	
N26	Digital banking and multi-tiered accounts for European millennials	\$250	\$800	Private	\$3,000	7.0	2013	Berlin, Germany	
Starling Bank	Full-service checking and business accounts for UK customers	\$1,000	\$350	Private	\$2,500	4.0	2014	London, UK	
Varo Bank	FDIC-insured accounts targeting underbanked US consumers	\$200	\$600	Private	\$10,500	3.0	2015	San Francisco, USA	
Wise	Cross-border payments and multi-currency accounts for global users	\$1,300	\$400	Public	\$11,000	10.0	2011	London, UK	
Cash App	P2P payments, investing, and bitcoin tools for US consumers	\$16,000	N/A	Part of Block	N/A	57.0	2013	Oakland, USA	
Current	Fee-free checking with teen tools and early payroll access	\$250	\$220	Private	\$2,200	4.0	2015	New York, USA	
Klarna	BNPL and digital banking for global online shoppers	\$2,500	\$2,500	Private	\$15,000	93.0	2005	Stockholm, Sweden	
<b>Median</b>		<b>\$1,600</b>	<b>\$600</b>		<b>\$10,800</b>	<b>10.5</b>	<b>2013</b>		
<b>Average</b>		<b>\$3,281</b>	<b>\$1,088</b>		<b>\$16,382</b>	<b>31.1</b>	<b>2013</b>		

## Evolution of The Banking Software Stack

The legacy banking stack is characterized by a patchwork of older software that has been cobbled together. This typically includes a mix of mainframe software, some cloud software, middleware, and front-end applications. The majority of existing legacy software is on-premise vs. cloud, and written in older languages such as Cobol. Banks typically have a combination of software that was built in-house and third-party software.

Below are two diagrams of the legacy banking software stack. The stack is segmented into three layers: front-end, middle layer, and the core system. These layers do not communicate very well in the traditional banking tech stack.

### Banking tech stack



Banking tech stack



Figure 3. Retail banking legacy tech stack

A typical banking software stack for a retail or commercial bank includes the components below. I have prioritized the tech stack elements that are unique to banks. I have omitted the components of the stack that are similar to those of other verticals, such as CRM, identity and access management, back office systems (ERP, HRIS) and data/analytics software. I have also not focused on investment banks, which have additional software to manage specific aspects of their operations.

- 1) **Core banking system:** Core banking software is defined as back-end software that “processes daily banking transactions and posts updates to accounts and other financial records. Core banking systems typically include deposit, loan and credit processing capabilities, with interfaces to general ledger systems and reporting tools.”<sup>9</sup>

Core banking is the heart of a bank’s operations. Core banking basically enables a bank to accomplish its key functions, including recording transactions, maintaining the general ledger, calculating interest on loans, and managing withdrawals.

Community banks and credit unions tend to outsource core systems to external providers, while larger banks manage their own custom core.

Before core banking software arrived in the 1970’s and 1980’s, core banking was largely done on paper via manual processes.

A key shortcoming of legacy core banking systems is lack of integration between the back-end systems and the front-end consumer experience.

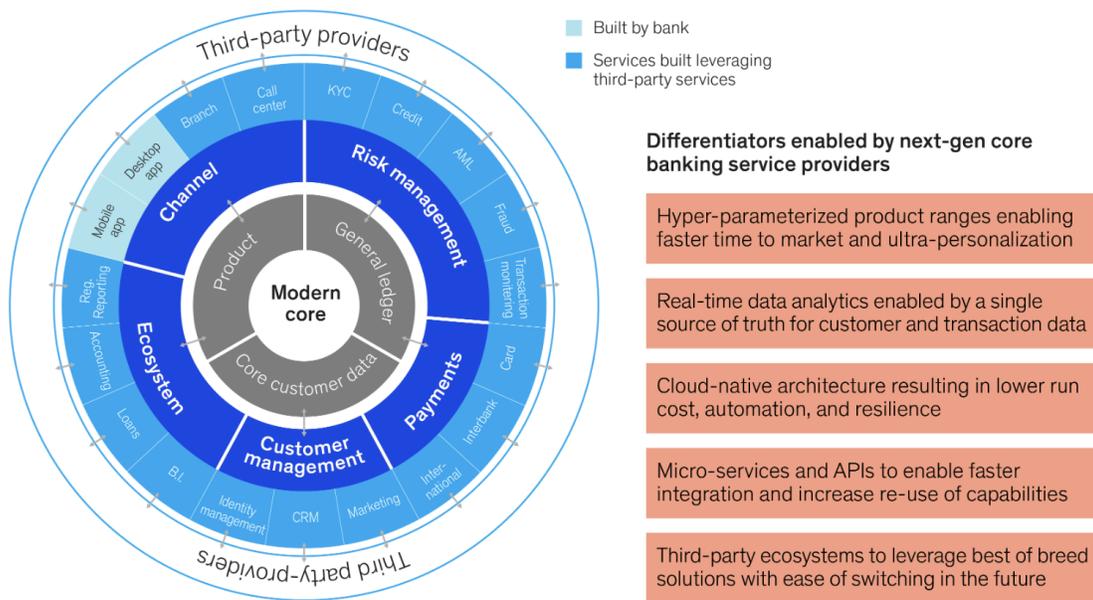
**Major players in core banking software are FIS, Finastra, Fiserv, Jack Henry and Temenos.**

<sup>9</sup> “Core Banking Systems Primer,” Fintech In Depth, at <https://medium.com/fintech-in-depth/core-banking-systems-primer-a2d26919f3eb>.

Core banking is one area of potential innovation by new AI players. If one were building a core banking software platform from scratch today, it would look very different from the core banking software systems that exist today. Building their own core banking systems is one reason why neobanks and banking fintech applications have been able to roll out new products and services much faster than traditional banks, as will be described in-depth below.

Below is an exhibit of what a next-generation core banking system looks like.

### Bank anatomy based on a next-generation core banking platform.



Source: McKinsey analysis

McKinsey & Company

- 2) **Payment Processing:** Payment processing is the sequence of actions that enables a customer's payment to be securely transferred to a merchant. It involves authorization, verification, and settlement of transactions through various electronic payment systems. This includes everything from credit and debit card transactions to digital wallets and mobile payments.

The payment processing layer handles payments via ACH, wires, checks and cards. This software comprises ACH processing, card processing, check imaging and remote deposit capture systems, real-time payment rails and FedNow integration. It also covers card issuing, dispute handling, interchange calculation, fraud monitoring and chargeback processing.

Payment processing is a large market in the U.S. and globally. Total U.S. payment volume across credit cards and via digital commerce in 2023 was \$7.6 trillion. Total net revenue to U.S. payment processors in 2023 was over \$16 billion.

**Major payment processors include FIS, Fiserv, First DAATA, and Marqeta.**

- 3) **Digital Banking (online and mobile):** Digital banking platforms provide features such as mobile apps and online portals; account opening software; bill pay; funds transfer; and budgeting tools.

These platforms integrate with core banking software via APIs, using middleware and data aggregators.

AI has the potential to transform digital banking, automating many manual steps and improving the end user experience. This is one of the areas that we have been prioritizing.

**Major players in digital banking include Q2, Alkami, NCR Digital and Apiture.**

- 4) **Middleware/Integration Software:** Middleware software connects core systems with financial applications. This is the “plumbing” of the banking tech stack - it performs data transformation, API orchestration, message queuing, and enables upgrades without changing core software.

Banks have been attempting to modularize the middleware later in order to make core systems more flexible.

**Major players in middleware include Mulesoft, IBM, and Oracle. Companies such as nCino and Mantl (Alkami) also play in this category.**

- 5) **Risk, Compliance and Fraud Detection:** This software covers anti-money laundering, Know Your Customer, fraud prevention and regulatory reporting. This is also a category where AI can play a major role in improving banking operations.

**Major players include NICE, Actimize, Alloy, FICO and ThreatMetrix.**

645’s portfolio company **Accend** plays in this category. Accend provides AI credit analysts for KYC as well as business underwriting.

- 6) **Loan Origination Systems (LOS):** LOS is a key component of the banking software tech stack. LOS handles front-end and workflow for initiating, underwriting and closing loans. This software is mission critical for a bank to grow and manage its loan portfolio, which is a major profit center of a typical bank.

**Key players in LOS include nCINO, Black Knight, MeridianLink, and Temenos.**

This is also a key area for AI innovation, which I will describe in more detail below. There are many manual steps in today's loan application and underwriting process, which can take months from start to finish for both consumers and businesses.

New companies playing in this category include **Fuse Finance and Cascading AI.**

- 7) **Treasury and Commercial Banking Tools:** This software covers cash management, used by enterprise clients to manage payments, wires, and balances. It also covers trade finance and treasury, which may be integrated or standalone.

**Major players in this category include Bottomline Technologies, Q2 Catalyst and Kyriba.**

## **Shift to Mobile and the Cloud: 2010s to Current**

The rise of mobile and SaaS enabled new players to carve out niches for themselves within the banking software stack. Incumbents moved relatively slowly to address these technology shifts, providing a window for new startups to grow before the incumbents woke up.

Certain of these newer companies were able to reach IPO (Q2, Ncino), while others reached moderate to large acquisitions. M&A's resulting from these tech waves included the acquisition of SimpleNexus by nCino for \$1.2B (described above), the acquisition of Itiviti by Broadridge for \$2.5B, and the acquisition of Finxact by Fiserv for \$650m.

One notable acquisition was that of **CloudLending** by Q2 for \$140m. CloudLending was co-founded by 645 founder Snehal Fulzele, who now runs **Uptiq**. We are betting Snehal will be able to capitalize on the AI wave to generate an even larger exit the second time around, perhaps on the scale of nCino.

**Q2** in particular was able to capitalize on the mobile wave. Q2 was founded in 2004 in Austin by Hank Seale III, a community banker and serial financial-tech entrepreneur.<sup>10</sup>

Seale and the Q2 team focused primarily on community banks. Witnessing how outdated and fragmented their technology was, Seale realized these institutions needed a modern, software-driven platform to compete with larger banks. Q2 had 3 primary aims:

- Empower community and regional banks by giving them robust digital capabilities.

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<sup>10</sup> "Our Story," [https://oc.q2.com/our-story?utm\\_source=chatgpt.com](https://oc.q2.com/our-story?utm_source=chatgpt.com).

- Build cloud-native, modular systems for online/mobile banking, bills, payments, lending, and more.
- Deliver enterprise-grade software tailored for the mid-market.

Q2's initial platform was designed to integrate with banks' existing core systems, delivering a unified, white-labeled digital banking experience for both consumers and small businesses.

Q2 went public in 2014 and its market cap has appreciated to \$5.5 billion.

**nCino** is a great example of a business that capitalized on the shift of core banking to the cloud, and is also one of the larger exits from this wave. nCino spun out of Live Oak Bank, an innovative bank specializing in SBA and USDA loans and offers business and personal deposit products on its branchless, digital platform.

Live Oak built software internally as its core banking system, then decided to spin this out in the form of an independent company. nCino was born in 2012. See timeline below for nCino's evolution over its first 10 years.



## nCino – Company's Journey from Inception to IPO



Source: Company Information

While nCino initially launched as a core banking system, it pivoted to providing specific cloud applications that provided immediate value to banking partners. Its first major product was a **loan origination system that was built on Salesforce**. Commercial loan origination was historically slow, manual, and spread across spreadsheets, emails, and legacy systems.

nCino's software helped salespeople originate loans, open accounts and manage customer portfolios. nCino then built additional modules such as business intelligence, enterprise content management, compliance, risk management, and AI/ML for automations and forecasting.<sup>11</sup>

Today, nCino provides a system of record for banks and credit unions, which it describes as a banking operating system. nCino manages all aspects of a customer's workflows such as onboarding new clients, making loans, opening accounts, and managing regulatory compliance.

Today, nCino is used by over 1,750 banks and financial institutions, including Wells Fargo, BNP Paribas, OakNorth Bank, and Santander. In 2022, it had 217 customers generating more than \$100k ARR, and 47 of them generating more than \$1m of ARR.

As described above, despite its success nCino is still *less than 3% of the revenues of Fiserv (\$550m revs vs. \$20B+ revs)*. This despite nCino being founded almost 15 years ago. This demonstrates how far newer entrants have to go before they put a real dent into the market share of incumbents, and how entrenched those players really are.

On the bright side, however, companies like nCino and Q2 have the potential for significant appreciation in the public markets over the next decade.

See below for diagrams of nCino's software.

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<sup>11</sup> "nCino - Cloud Banking Platform for Salespeople," at <https://alexandre.substack.com/p/ncino-cloud-banking-platform-for>.



## Extending the nCino Single Platform Vision



The Big Winners of the Cloud and Mobile Waves: Neobanks and Fintech Applications

Neobanks and fintech banking applications began to arrive about 15 years ago. Looking at the list of the largest neobanks (provided above), all of them were founded in the 2010s, with the exception of Klarna, which was founded in 2005. There was clearly a window where the market was for prime time, which yielded several massive outcomes. This is a learning we should apply as we evaluate new AI fintech applications.

The following factors drove the creation and scaling of neobanks and fintech banking applications:

**Rise of Mobile Penetration:** The rise of ubiquitous smartphones enabled consumers to bypass in-person banking and conduct a wide range of transactions via their mobile devices. Younger consumers expected digital experiences similar to that which they were experiencing via apps like Uber and AirBNB.

**Cost Structure Advantage:** No physical branches enabled much lower customer acquisition and servicing costs for challenger banks. Agile tech stacks and smaller teams allowed for rapid feature iteration and product launches. Nubank is an example of a neobank that capitalized on these advantages to leapfrog its competitors.

**Rise of Banking-as-a-Service (BAAS):** The rise of BAAS enabled neobanks to launch financial services without having a banking license. Providers such as Marqeta and Galileo stepped in to fill this void, providing the tech infrastructure to connect banks with fintechs. These players typically partner with existing sponsor banks in order to provide the underlying banking service, and then offer these services to the new players to white-label and provide to their end customers. This enabled fintechs to launch products faster with less capital required.

**Targeting Underserved Segments:** Neobanks and fintech apps have targeted demographics that were previously highly underserved by traditional institutions. Examples include Chime (fee-free checking + early wage access), Step (banking for teens), and Remitly (money transfer for immigrants).

**Regulatory Change:** Regulatory change had a major impact on the rise of neobanks and fintech applications. For example, the Durbin Amendment (2010) allowed neobanks under \$10B in assets to collect higher debit interchange fees (~1.5–2% vs. 0.05% for big banks), creating a strong unit economic advantage. This is one of the major drivers of Chime's growth. Regulatory sandboxes in jurisdictions like the UK, Singapore, and parts of the U.S. also encouraged experimentation.

**Access to Venture Capital:** From 2015–2021, VCs invested \$30B+ globally into neobanks, betting on customer acquisition and category disruption. Cheap capital allowed these companies to offer fee-free accounts, rewards, and generous marketing without short-term profit pressure.

**Rise of Embedded Finance:** Brands and platforms (e.g., Uber, Shopify) embedded banking features into their products. These partners either launched their own neobanks or partnered with existing ones, creating distribution.

It is likely that AI-driven startups will capitalize on similar factors to enable rapid growth and scaling.

## **How and Why Neobanks and Fintech Banking Applications Bypassed Incumbent Banking Software Providers**

Several neobanks innovated by bypassing existing banking software companies like Fiserv and FIS and building their own infrastructure from scratch (Nubank, Chime) or acquiring it (Sofi). This enabled them to leapfrog traditional banks in terms of the services they could provide.

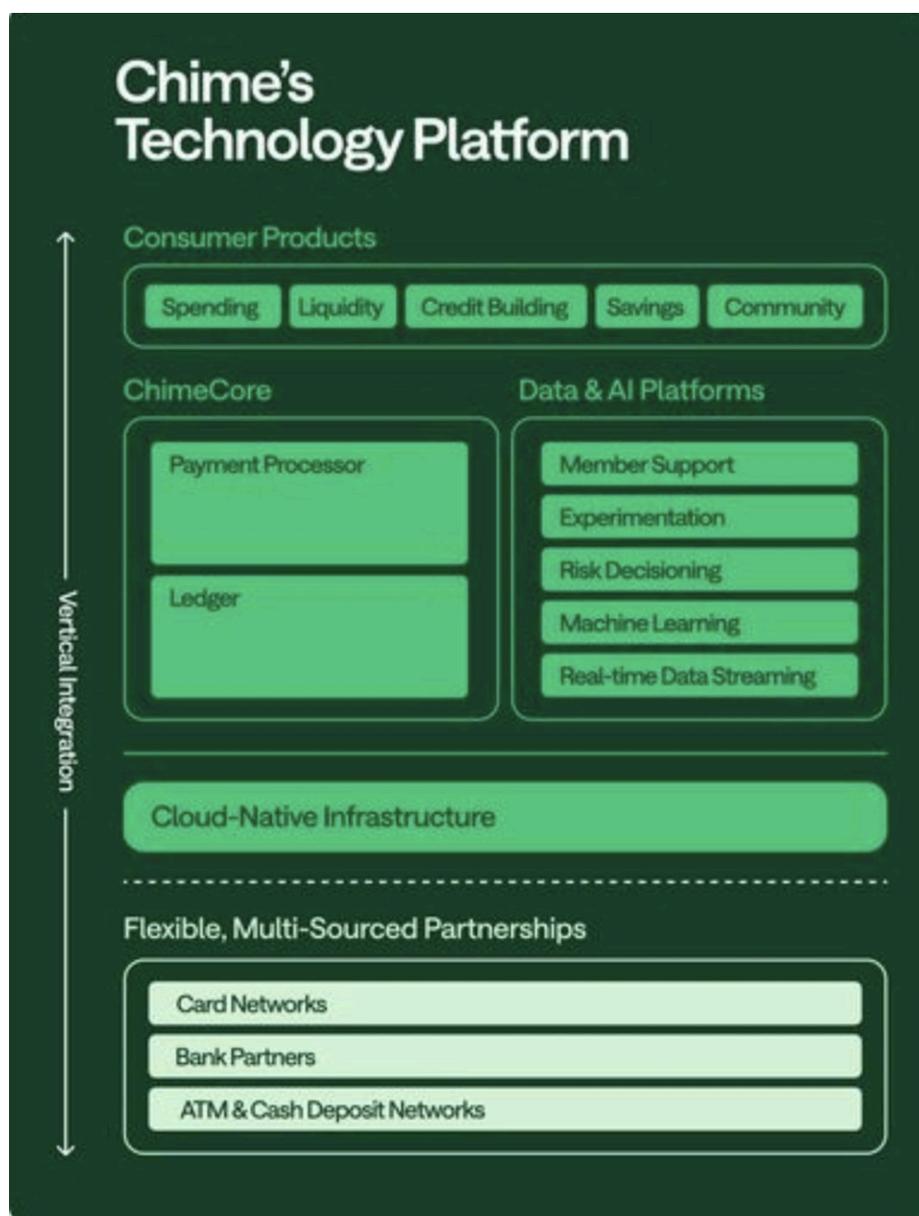
Chime built its own proprietary software in-house, ChimeCore. As described in Chime's S1 filing, "ChimeCore processes a portion of the payments, transfers, deposits, withdrawals, and other financial transactions that are conducted through [Chime's] platform. ChimeCore's role in transaction processing does not involve receiving or transmitting funds; rather, as transaction processor, ChimeCore's role is to facilitate the necessary messaging between parties involved in a transaction (e.g., members, bank partners, external banks involved in a transaction, and card networks) that allows for the processing of the applicable transaction. ChimeCore also serves as the system of record for a portion of member accounts, keeping track of transaction, balance, and other data."<sup>12</sup>

It's important to note that Chime is not a bank. It partners with two major sponsor banks, Bancorp and Stride Bank. So Chime needed software that could enable it to function as a transaction processor while also providing it with a system of record for its member accounts.

ChimeCore is a great example of a company bringing software in-house and building a tech stack that is customized to its own needs, without relying on 3rd-party core banking software. Chime has separated the customer relationship from the traditional banking core.

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<sup>12</sup> Chime Financial Inc., Form S-1, at <https://www.sec.gov/Archives/edgar/data/1795586/000162828025025059/chimefinancialinc-sx1wq1da.htm>.



Nubank adopted a similar approach as Chime. The company decided to build its [own tech stack](#) from the beginning, with the following rationale, in the words of its founders: “We believe we are in the early stages of technology, data, and customer-centric approaches revolutionizing all industries and all geographies globally. So, we made sure that Nu was a technology and data-driven business from day one. We made the unusual decision to build our own core banking platform and processor from the ground up, using a modern, cloud-based architecture and integrating data science and machine learning across key processes. We own and have built all of our key technology, so we are in control of our destiny.”<sup>13</sup>

<sup>13</sup> “The Spark Of Our Foundation: a letter from our founders,” at [https://building.nubank.com/founders-letter/?utm\\_source=chatgpt.com](https://building.nubank.com/founders-letter/?utm_source=chatgpt.com).

Nubank's building its own core banking system enabled it to launch unique features like customizable credit limits, automatic bill pay, or "buy now, pay later" financing. Nubank is also able to make updates multiple times per day, enabling rapid iteration and continuous product improvements.

## **The AI Wave: Implications for AI Software Companies and AI Fintech Banking Applications**

The AI wave has the potential to catalyze significant innovation within banking. Companies that we prioritize in AI for banking will ideally provide one or multiple of these value propositions:

- **Significantly enhance personalization of financial services offerings:** AI-driven banking experiences will have a much better understanding of the customer's financial profile and the products and services that fit the customer.

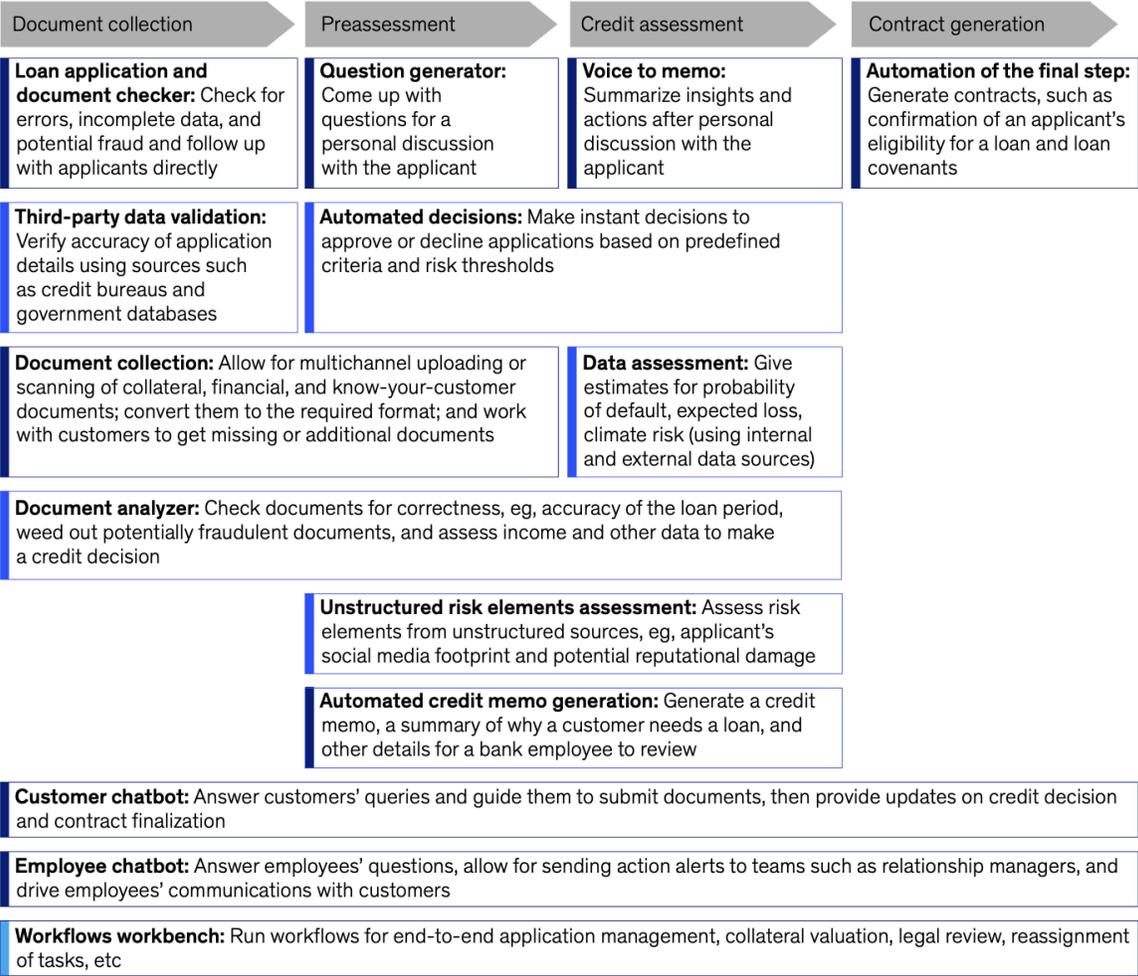
For example, your banking provider will not only make recommendations on how you can save money, but it will be able to act on your behalf to do that. Agents will proactively cancel subscriptions or switch providers once you approve their recommendations. Your banking agent(s) will understand your preferences and suggest products and services that are highly tailored for you, then purchase them. There will be less "one size fits all" banking services.

We are looking for agentic banking software companies that can enable these types of experiences.

- **Significantly reduce manual steps and processes in the process of applying for, being evaluated, and being approved for financial products and services.**
  - The loan origination, underwriting and approval process is a great example. The average process for receiving a mortgage in the U.S. is 30 to 45 days, and can be 60+ days if there are issues such as document delays and title problems. Manual steps in this process include application (1-2 days), processing (5-10 days), and underwriting (7-15 days). AI can reduce these steps from days to hours or even minutes, with much greater precision than humans. This will drive value for consumers as well as banks themselves, who will be able to reduce the number of people doing these manual tasks.
  - One could also envision a **standalone AI-driven loan provider** that utilizes agents to provide a much better loan experience than traditional banks.
  - Please refer to a diagram below which shows how AI may transform loan underwriting.

# Banks can rewire the customer underwriting subdomain by using a combination of gen AI, traditional analytics, and digital tools and platforms.

Elements and use cases in customer underwriting (illustrative) | Generative AI | Traditional analytics | Digital tools and platforms



- Provide compelling products for underserved customers:** This was one of the key reasons why neobanks and fintech applications were able to gain major adoption in the mobile and cloud waves. Companies like Chime and Remitly identified large customer populations that were underserved, and built products and services that served them much better.

It is likely that new players will also use this lever to gain rapid adoption in the AI wave. Large financial institutions are usually unwilling or unable to be first movers in providing products to address underserved customers.

Examples of this type of innovation driven by AI might include:

- **Access to credit:** Individual and business borrowers with thin credit files typically can't qualify for credit. This applies to gig workers, immigrants, and SMBs, among other groups. New AI-driven underwriting models that focus on cash flow, apply dynamic credit scoring, or automate loan decisions to reduce bias could address this pain point. Companies in this category include **Nova Credit and Fairplay**.
- **Access to wealth management and financial advice:** Financial advice and wealth management are still largely accessible by wealthy consumers. AI has the potential to provide a high-quality financial advisor to anyone. This goes multiple steps beyond what roboadvisors can provide today. We have been speaking with several players in this category.
- **Financial Planning and Cash Flow Management for SMBs:** Most SMBs can't afford to hire a VP Finance or CFO. Tools such as Quickbooks merely offer reporting and budgeting but are not a substitute for a financial professional that can enable them to make better financial decisions.

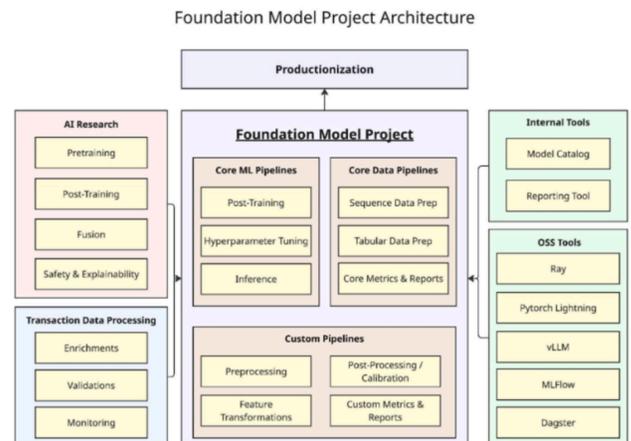
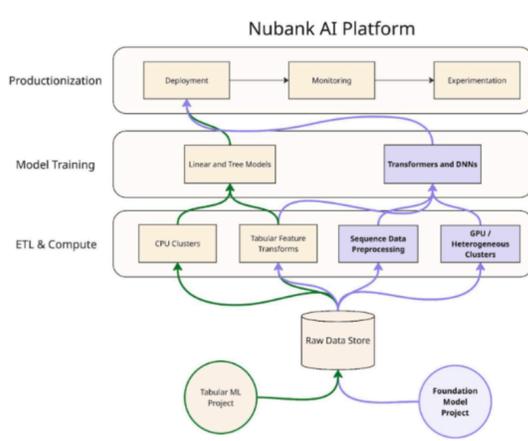
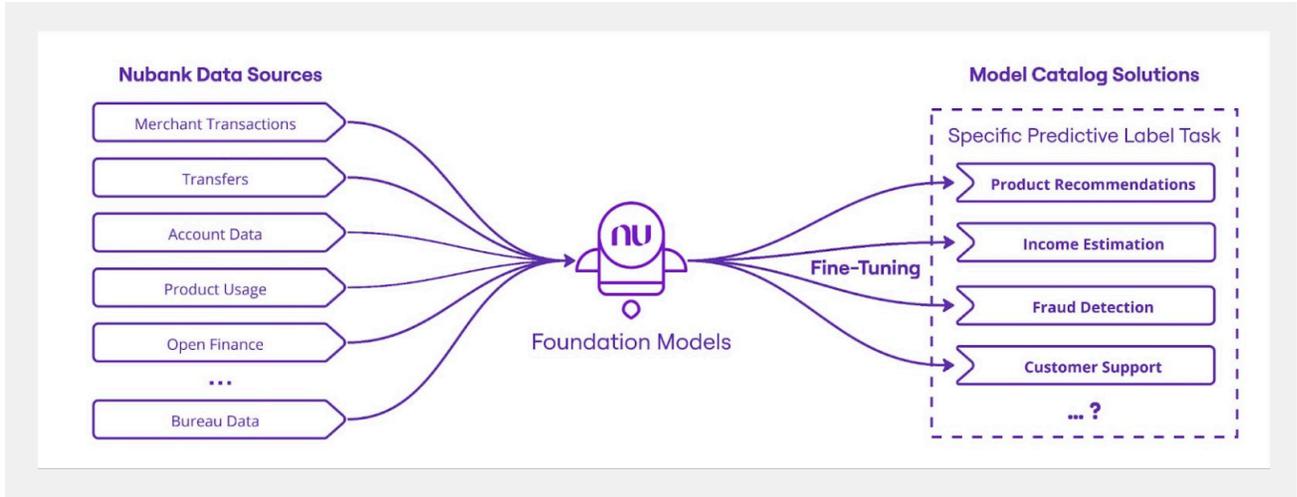
Agents have the potential to provide a true substitute for a VP of Finance or CFO for an SMB. Early-stage companies competing in this area include **Sapien, Hyberbots and Nume**.

- **Major improvements in customer service:** Banks are notorious for poor customer service. It's not rare for customers to wait on the phone for 60+ minutes to speak with a customer service rep who attempts in vain to solve a problem.

AI has the potential to provide immediate support that actually diagnoses and solves a customer's issue. Companies playing in this category include **Ada Support**. There will likely be new players getting started in this category.

**AI Case Study: Nubank** is a good example of a bank that has been ahead of the curve on rolling out AI features. As an example, [they acquired Hyperplane](#), an AI company providing foundation models for banks.

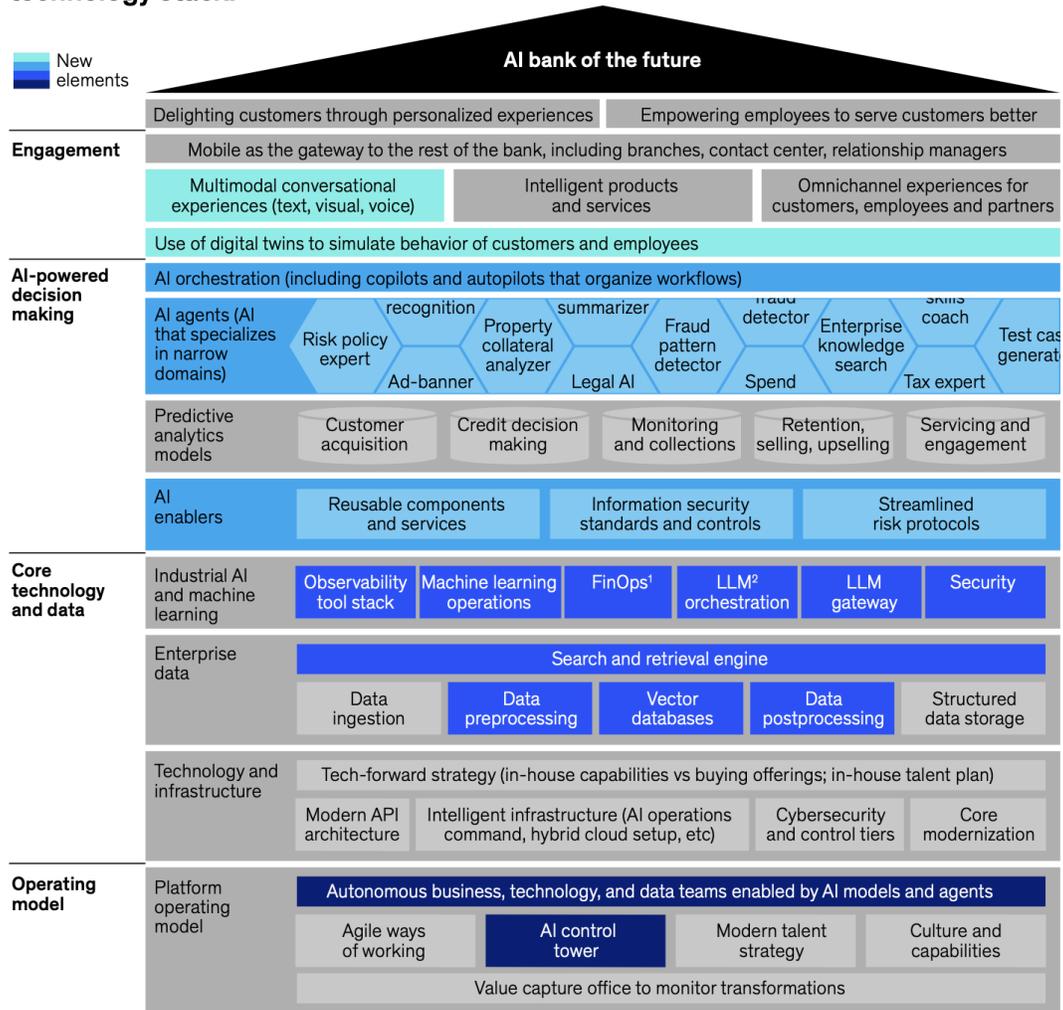
[This article](#) describes how Nubank has leveraged this acquisition to build foundation models to improve its operations, and specific metrics they are using to evaluate success. Below are diagrams on how they are applying AI in their operations, and how they have structured their tech stack.



**AI Bank of the Future:** As described above, I believe AI could enable banks of the future that reach large scale. One company aiming to do this is [Catena Labs](#). Catena was founded by [Sean Neville](#), who co-founded Circle, the stablecoin business that went public and is now valued at \$54B. Catena Labs is “building the first AI-native financial institution: a regulated entity designed from the ground up for AI agents and their human collaborators.” The company raised \$18m of capital from a16z and Breyer Capital coming out of stealth.

Below is an exhibit from McKinsey on what an AI-driven bank of the future might look like.

**To drive sustainable value, banks need to put AI first and revamp the entire technology stack.**



<sup>1</sup>Financial operations, a framework for managing the operational costs of cloud computing.

<sup>2</sup>Large language models.

McKinsey & Company

**Investment Banks:** While not the focus of this report, AI will also transform **investment banks**, which are notorious for their manual processes that require young professionals to work excessive hours. Much of the work done by investment banking professionals can be done better by AI if not today, certainly over the next few years.

[Rogo.ai](#) has grabbed an early lead in this category, raising significant capital and gaining adoption from banks such as Lazard, Moelis and Nomura. Rogo is an AI platform built for investment firms.

Another company playing in this area is [Offdeal](#), which aims to build an AI-native investment bank. Their CEO, Ori Eldarov, [wrote a long blog post](#) on why an AI-native bank could succeed.

## Select Prospects We Are Tracking

Below are examples of select companies within AI for banking that we have been tracking. This list is dynamic. This is a key priority area for the fintech team over the next several years.

Select Early-Stage AI Banking Startups									
Figures USD Millions unless otherwise noted									
Company	Description	Category	Website	HQ	Year Founded	Founders	Capital Raised	Major Investors	Why Compelling
Catena Labs	Building the first regulated 'AI-native' financial institution to serve the agent economy with autonomous treasury & payments APIs.	AI Bank	<a href="https://catenalabs.com/">https://catenalabs.com/</a>	Boston, USA	2025	Sean Neville; Dan Rice	\$18M seed	a16z Crypto, Breyer Capital, Coinbase Ventures	Aims to become the de-facto bank for AI agents—white-space few incumbents can address.
Glide	AI-powered embedded fintech platform enabling community banks & credit unions to offer <3-min digital account opening, unified loan origination & fraud-detection workflows.	AI Account Opening, Loan Origination System	<a href="https://withglide.com/">https://withglide.com/</a>	New York, NY, USA	2021	Gautam Ajarapu, Sameer Kapur, Vishnu Chakroborty	\$15m Series A	Acrew Capital, Pear VC, Pathlight	Turns legacy cores into modern digital experiences fast; white-label & no-code tooling lets small FIs compete with neobanks.
Fuse Finance	Low-code AI loan-origination system with LO/Underwriter/Verifier agents, 100+ integrations, Git-based versioning.	AI Loan Origination System	<a href="https://www.fusefinance.com/">https://www.fusefinance.com/</a>	New York, NY, USA	2020	Andres Klaric, Marc Escapa	~\$25m total	Primary VC, NextView, FJ Labs, Clocktower	Automates >90% of doc verification & fraud checks; lets business users tweak decision rules without code.
Casca (Cascading AI)	AI-native loan-origination system where an LLM agent ('Sarah') collects docs and prepares files for underwriters.	AI Loan Origination System	<a href="https://casca.ai">https://casca.ai</a>	San Francisco, USA	2023	Isaiah Williams; Kevin Lee	\$3.9M pre-seed	Peterson Ventures, YC, Clocktower VC	Targets SMB lending market by replacing legacy LOS with autonomous agents.
Contour	GenAI customer-support copilot trained on banking knowledge and compliance guardrails.	AI Customer Support	<a href="https://trycontour.com/">https://trycontour.com/</a>	San Francisco, USA	2023	Yuri Sato; Noah Walker	\$0.5M seed	Y Combinator, Amino Capital	Ultra-light deployment lets mid-size banks launch 24/7 compliant chat in <2 weeks.
Flagright	AI-native AML & risk platform with 'AI Forensics' agent that reduces false positives 93%.	AI fraud prevention	<a href="https://flagright.com">https://flagright.com</a>	Berlin, Germany	2021	Baran Ozkan; Shiran Emek	\$4.3M seed	Y Combinator, Greylock, Seedcamp	Purpose-built GenAI stack slashes manual alert review time for compliance teams.
Salient	AI-driven servicing OS for auto and consumer lenders; automates collections, due date changes, insurance updates, and more across voice, text, and email.	AI loan servicing	<a href="https://www.salient.ai/">https://www.salient.ai/</a>	San Francisco, CA, USA	2023	Josh Dunham, David Sanchez	\$3m seed	Y Combinator, Matrix Partners, General Catalyst	Automates 60% of tasks and cuts handle times by 70% while ensuring CFPB/FCRA/TCPA compliance out of the box.
Light Frame	Modern core banking and portfolio management platform for private banks and wealth managers; real-time, API-first, SaaS-based.	AI core banking software	<a href="https://www.lightframe.io/">https://www.lightframe.io/</a>	Lausanne, Switzerland / Providence, RI, USA	2024	Philippe Meyer, Samuel Sigrist	\$1.7m seed	ATX Venture Partners, New Stack Ventures	Provides a next-gen core platform purpose-built for private banking with up to 50% operational cost savings.

## Appendix

See below diagrams from a McKinsey report on some of the areas where AI could transform retail and commercial banking.

Examples of subdomains that AI could transform in retail banking<sup>1</sup>

Domains	Sales and marketing	Risk	Servicing and operations	Digital technology	Human resources	Other functions
Subdomains	Digital-led customer acquisition	Customer underwriting	Self-service via digital channels such as mobile banking	Developer productivity	Recruitment and staffing	Legal processes
	Frontline sales enablement	Risk-based pricing	Assisted service via contact center, branch, and digital	IT operations	Performance management, training, and skill development	Regulatory compliance and controls
	Relationship management and advisory	Transaction fraud prevention	Middle- and back-office operations	Technology modernization	Employee satisfaction and well-being	Business intelligence and analytics
	Partner collaboration for product and service sales	Portfolio optimization and monitoring	Complaints management	Product and service development and management	Employee development for key role fulfillment	
	Engagement, cross-selling, and customer retention	Collections				
Enterprise knowledge management						

## Examples of subdomains that AI could transform in corporate and commercial banking<sup>1</sup>

Domains	Sales and marketing	Risk	Servicing and operations	Digital technology	Human resources	Other functions
Subdomains	Digital-led customer acquisition	Customer underwriting	Self-service via digital channels such as mobile banking	Developer productivity	Recruitment and staffing	Legal processes
	Partner-led sales	Risk-based pricing	Relationship management and concierge services	IT operations	Performance management, training, and skill development	Regulatory compliance and controls
	Relationship management and advisory	Transaction fraud prevention	Middle- and back-office operations	Technology modernization	Employee satisfaction and well-being	Business intelligence and analytics
	<b>Frontline sales, generalist, and product led</b>	Portfolio optimization and monitoring	Complaints management	Product and service development and management	Employee development for key role fulfillment	
	Engagement, cross-selling, and customer retention	<b>Loan renewals management</b>	Assisted service via contact center, branch, and digital			
Enterprise knowledge management						

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