

Invisible Banking: How Embedded Finance will Erase Traditional Banks

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Abstract:

Embedded finance refers to the seamless integration of financial services – payments, lending, insurance, and more – into the products and platforms of non-financial companies. In practice this means that consumers obtain financial services in the context of everyday activities (for example shopping, ride-sharing, or payroll) rather than by going to a bank or finance app. By “bringing banking to the customer” in context, embedded finance makes banking essentially invisible – the bank is just a back-end utility while the customer interacts with a retailer, platform or app. Indeed, as one expert notes, “the financial system of the future won’t be built in banks – it’ll be embedded in the apps, platforms and services people already use”. This paper examines the rise of embedded finance: defining the concept and its evolution, surveying key use cases (such as Amazon, Shopify, Uber, Apple Pay, and others), analyzing impacts on traditional banks and customer relationships, considering regulatory and security issues, describing technological enablers (APIs, Banking-as-a-Service, fintech partnerships), and exploring remaining challenges and future trends in financial intermediation. The overall thesis is that as embedded finance proliferates, banking will recede from view and traditional banks will increasingly serve as invisible infrastructure providers.

Definitions and Evolution of Embedded Finance

Embedded finance can be broadly defined as **financial services integrated into non-financial contexts**. For example, users today can obtain loans, open accounts, make payments or purchase insurance directly within an e-commerce site, ride-sharing app or enterprise software platform, without separately visiting a bank. In the words of Investopedia, embedded finance “takes banking and other financial services and puts them in nonfinancial apps and services”ⁱ. Similarly, a PwC analysis describes it as the “seamless integration of digital banking, lending, insurance and other financial products into nonfinancial companies’ platforms or applications,” enabling businesses to offer financial services to their customers without having to build the banking infrastructure themselves. In other words, the non-financial company “borrows” a bank’s regulatory license and technology through APIs, so that the customer gets a financial service (such as a loan or payment) from the familiar app interface, while the bank remains a hidden provider of the service.

Although embedded finance seems novel, its roots are decades old. Ever since the 1920s, companies have offered in-house financing (for example, car makers giving auto loans through captive finance companies) or credit (store-branded credit cards). Department stores and retailers famously issued charge accounts and cards in the mid-20th century, and telecom companies have long enabled customers to pay by monthly phone bills. What has changed in recent years is *how* ubiquitous and invisible these services

have become. Modern embedded finance is driven by smartphones, cloud platforms and powerful APIs, so that complex financial services can be activated on demand. As Investopedia notes, “because APIs and smartphones are ubiquitous, consumers can get their banking services wherever they are,” and companies can gain loyalty and revenue by making finance part of the core customer journey. The term “embedded finance” itself gained popularity in the late 2010s as fintech infrastructure matured: cloud platforms, open APIs and banking-as-a-service (BaaS) models enabled software companies to incorporate payments, lending and insurance into their offerings with little upfront investment. Unlike traditional fintech, which often provides banking services via standalone apps (e.g. challenger banks, mobile wallets) or open data (open banking), embedded finance makes the bank “invisible.” Customers don’t need to download a banking app or visit a branch – they simply see payment buttons, financing options, or digital wallets right in the context of shopping or doing business. For instance, at an e-commerce checkout a “Buy Now, Pay Later” (BNPL) option can pop up automatically, letting the customer finance the purchase without leaving the site. Or a gig worker might collect earnings instantly through the same ride-hailing app they work in, without logging into a separate bank account. In short, embedded finance brings financial services to the customer at the “right moment” and “invisible” manner, just when they need them.

In summary, embedded finance can be defined as **offering core banking, payment, lending or insurance services through non-banks via digital platforms**, relying on APIs and partnerships. It has evolved from early store finance into a fast-growing trend enabled by modern technology and consumer demand for seamless digital experiences.

Use Cases and Case Studies

A wide range of companies – from tech giants to retailers – are now offering embedded finance products. In effect, any platform that has a customer touchpoint can embed relevant financial services. Below are illustrative examples of embedded finance in action:

E-commerce and Retail (Amazon, Shopify, etc.): Amazon illustrates how a marketplace becomes a bank channel. It offers *Amazon Pay* (a digital wallet), *Amazon Cash* (paying cash into an Amazon balance at stores), and *Amazon Lending* (working capital loans to sellers). In 2020 Amazon launched *Amazon Pay Later* in India, giving shoppers instant zero-interest credit on purchases, with loans provided by fintech partners (Capital Float, IDFC First Bank). Similarly, Shopify has built an embedded finance ecosystem for merchants. Through *Shopify Capital*, the platform provides funding and loans to merchants directly from their admin dashboard; by 2024 Shopify Capital originated about \$3 billion in merchant funding (a 50% increase over 2023).

Notably, Shopify also earns a large share of revenue from embedded payments – indeed, a report notes that Shopify derives 59% of its revenue from embedded payment products. By integrating checkout, installments, invoicing and financing into its e-commerce tools, Shopify removes friction for merchants to access banking and credit without going to a bank.

Ride-Hailing and Gig Platforms (Uber, Lyft, etc.): Transportation apps are embedding pay and banking for drivers (and riders). Uber’s “Uber Money” division, for example, offers instant payments and a branded debit Mastercard to drivers, as well as driver insurance and rewards. Drivers can cash out earnings instantly into their debit card, or even take out 0% salary-advance loans within the app. Uber has also acquired fintech firms (like Vurb or even acquired a bank) to support these offerings. Similarly, Lyft and gig-worker apps are exploring on-demand pay and banking. These services let the platforms

pay out workers and manage expenses internally, rather than relying on external banks.

Payments and Wallets (Apple Pay, Google Pay, etc.): Companies like Apple and Google have embedded payments deeply into smartphones. Apple Pay and Google Pay integrate with retailers and transit systems so users can pay with one tap. Apple also launched the *Apple Card* (in partnership with Goldman Sachs) – a branded credit card integrated into the Wallet app – and offers BNPL (Apple Pay Later). These moves show how tech platforms themselves become front-ends for banking services. A user might never see their underlying bank; they just use Apple Wallet or Google Pay for transactions.

Fintech-Enabled Marketplaces (Airbnb, travel portals): Marketplaces in travel and lodging embed banking for both sides. For example, Airbnb enables hosts to receive payouts directly through the platform and offers co-branded credit (Airbnb's card with Chase). Travel booking sites now routinely suggest trip insurance at checkout, which customers can buy with one click (embedded insurance). Many airlines and hotels integrate BNPL (e.g. Uplift by certain airlines) so travelers can finance tickets on the airline's site without going to an external lender.

Financial Services for Small Businesses: Business-to-business platforms are also embedding finance. For instance, Shopify merchants (as above) can apply for loans or corporate cards from within the Shopify dashboard. Accounting and invoicing software (e.g. QuickBooks, Xero) are starting to embed payroll, card payments and lending. ERP systems and retailer point-of-sale (POS) systems similarly offer integrated financing or banking for their users. A manufacturing marketplace might offer supply-chain financing at the point of ordering parts, bundled as part of the procurement workflow.

Social and Messaging Apps (WeChat, WhatsApp): Outside the U.S., social apps famously embed finance. WeChat (in China) has its own wallet enabling users to make payments to merchants, transfer money to friends, and even access credit (WeBank) without leaving the app. WhatsApp is rolling out UPI payments in India, turning the messaging app into a financial platform. These are classic examples: for hundreds of millions of users, a ride, a purchase or even a cash transfer happens entirely through the “non-financial” app interface, with the financial services happening invisibly in the background.

Point-of-Sale and BNPL: Many e-commerce sites (and even physical stores) now trigger BNPL offers (by Klarna, Afterpay/Affirm, etc.) at checkout. When a shopper chooses to pay in installments, they never interact with a bank's app; they simply select the payment plan on the merchant's site and enter a quick form. Another example is the Starbucks app: over 30% of Starbucks US transactions occur through the Starbucks app, which integrates loyalty, payment and rewards in one place. Customers never see a bank name – they just swipe on their phone in a single-brand app.

These examples illustrate how embedded finance is reshaping user journeys: financial services are delivered at the point of need, without banking friction. Users see a single seamless experience (shopping on Amazon, or hiring a ride on Uber) and never realize a bank or insurer is doing the backend work. As one industry article puts it, these BigTech and platform companies are offering financial services “often in an invisible, seamless way” by using their consumer data and reach. In effect, financial products become contextual features of a broader service.

Figure: A consumer making a payment on a mobile device. Embedded finance makes such transactions seamless by integrating banking or payments into the shopping or service app itself (sources: Unsplash).

Impact on Traditional Banking Models and Customer Relationships

The rise of embedded finance has profound implications for traditional banks. By ceding the front-end customer interface to platforms and brands, banks risk losing visibility and control of the customer

relationship. In the embedded model, the customer may associate their financial services with the retailer or app they use, not with the underlying bank. As PwC observes, embedded finance “can seem like a threat to banks and their visibility with end-users, who may increasingly interact with the bank on another company’s platform”. If millions of consumers pay for purchases through Amazon or Lyft without touching a bank website or app, the emotional connection to the bank fades. This shift is sometimes called “invisible banking,” implying banks become hidden utilities rather than destination brands.

Banks also face strategic trade-offs. On one hand, partnering with platforms can dramatically expand a bank’s distribution. By offering their products through many apps, banks can reach new customers they could not acquire otherwise. Banks are thus drawn to embedded finance to “expand distribution across multiple channels,” opening up new segments. Some large banks have already partnered to serve big platforms (for example, JP Morgan Chase issuing Amazon-branded credit cards, or banks underwriting Uber’s debit cards). For smaller banks, embedded finance can act as a force multiplier: a local credit union can get access to national e-commerce volume by plugging into a fintech network or a white-label solution.

On the other hand, embedded finance threatens banks’ traditional margins and customer data. Banks are used to charging fees and earning interest spreads under their own brand; embedded finance often means sharing those returns with a platform partner or a BaaS provider. More critically, the bank risks being commoditized as a backend provider. McKinsey warns that banks participating in embedded finance could “relinquish some revenue and visibility of the customer relationship”. A report notes that the risk for banks “is losing control of the customer relationship and becoming more of a supplier of commoditized services,” even as it offers an opportunity to improve distribution. In essence, banks may find their customers now think of Amazon or Uber as their banker, not the underlying chartered bank providing the license.

Banks must therefore choose: either stay out of embedded finance and cede customers to non-bank “fintech-enabled marketplaces,” or join in and accept a new role. McKinsey points out that “incumbents must weigh the risk of opting out (ceding market share) versus participating (giving up some revenue to partners)”. Some banks have responded by launching their own BaaS divisions or fintech partnerships, trying to capture embedded flows. Others resist, focusing on niche banking services. The ones that fail to adapt risk irrelevance, since the fintech revolution is making banking infrastructure (and even fundamental services like payments) more of a utility.

Customers themselves are driving this change. Today’s consumers expect a “seamless, Netflix-like experience” everywhere – including finance. They demand personalization and speed, and they do not want to repeat information across multiple apps. Embedded finance meets these demands by leveraging the consumer data already collected by platforms. For example, an e-commerce app already knows what the customer is buying and can instantly offer a tailored loan or insurance quote. In contrast, in the old model a customer might have to visit a bank’s site, fill out a lengthy form and wait days for approval. The new paradigm brings the banking to the customer instead of vice versa. This shift enhances customer

experience and loyalty to the platform: users appreciate convenience and context, and may not even think about the underlying bank at all.

The effect on customer relationships can be summarized in a comparative way. In **traditional banking**, customers come to the bank (branch or app) for products; the bank owns the relationship, collects KYC

data directly, and markets its brand. In **embedded banking**, customers remain with their preferred platform (shopping site, social app, etc.), which introduces the financial product as one part of the experience. The bank behind it operates quietly in the background. The table below highlights key differences between these models:

Aspect	Traditional Banking	Embedded Finance
Customer interface	Bank branch/website/app (customer must visit)	Non-financial platform/app (banking is integrated)
Brand visibility	Bank's brand is front-and-center	Platform/retailer brand is seen; bank is invisible
Onboarding	Customer fills forms, visits KYC/AML processes	Onboarding piggybacks on platform's identity data
Product offering	Standardized banking products (accounts, loans, etc.)	Contextual or co-branded products triggered by user's activity
Data & Personalization	Bank collects data at transactions and account usage	Platform holds rich behavioral data; products are personalized by context
Distribution	Limited to bank's branch and digital network	Distributed through diverse platforms and apps
Acquisition cost	High marketing and branch costs	Lower, as platform's existing users are converted
Conversion rates	Typically low (customer dropout in processes)	High (customers convert at the point-of-need)
Customer loyalty factors	Relies on bank's service and loyalty programs	Driven by platform's convenience and ecosystem

Each of these factors tends to favor embedded finance. For instance, McKinsey notes that embedded finance can boost customer conversion rates dramatically (from ~15% up to 50% or more) because offers meet the customer at the right moment. Similarly, a PwC study found that many customers now view their retail platforms as their de facto finance partners, sometimes preferring those over traditional banks. In short, banks are losing the “prime real estate” of customer attention.

To remain relevant, banks have begun to change their strategies. As the World Economic Forum argues, traditional banks should not ignore embedded finance, but rather “partner with fintechs” and refocus on their strengths (capital, trust, regulatory expertise). By collaborating (or acquiring fintechs), banks can retain some influence and still benefit from the expanded market. However, the fact remains that the conventional model – banking in its own silo – is under threat: embedded finance is shifting the locus of financial services to context-rich environments, making banking “ambient” and often invisible.

Regulatory and Security Considerations

Embedding finance deeply into non-bank platforms raises important regulatory and security questions. By definition, embedded finance involves third parties (retailers, apps, or software firms) offering financial products under the bank's license. This creates complex compliance responsibilities. Technically, the underlying financial activities (taking deposits, lending, payments) must still occur

through licensed entities (banks or regulated fintechs). Many business models use a **sponsor bank** or licensed fintech in the background to hold deposits or issue loans.. These sponsors bear the primary legal liability: they must ensure that their partners (the platforms) follow KYC/AML rules, consumer protection laws, fair lending regulations, etc. As Alloy notes, sponsor banks “provide the licensing that makes embedded finance possible” and can dictate how risk and compliance are managed across partners. Thus, many embedded finance ventures are effectively “renting” bank capabilities through BaaS and must abide by the same regulatory framework a bank would.

From the customer’s viewpoint, these platforms may feel like any banking service, but legally the platform often must adhere to the bank’s regulatory program. For example, a retailer offering loans must still perform required credit checks and disclosures (often automated via the partner bank’s API). Data privacy regulations also loom large. Embedded finance typically involves sharing personal and financial data between the platform, fintech providers, and banks. In jurisdictions like the EU, GDPR governs how data is collected and used, and in the US California’s CCPA provides some consumer controls over data sale and sharing. Additionally, financial regulations such as the EU’s Payment Services Directive 2 (PSD2) impose requirements like strong customer authentication, even on third-party payment services. In practice, companies using embedded finance must navigate a patchwork of rules: banks might be licensed and regulated in one country, while the platform operates globally. Stripe notes that “embedded finance regulations are less standardised than open banking regulations; the rules depend on the specific service (e.g. lending or payments), and many companies partner with licensed institutions to ensure compliance”.

Security is another paramount concern. Embedded finance often leverages cloud-based infrastructure and mobile technology. Sensitive information (identity, financial data, card numbers) flows through many systems. Best practices therefore include advanced encryption, secure API design, and rigorous fraud monitoring. As one fintech consulting guide advises, companies must implement strong measures like end-to-end encryption (AES, TLS), tokenization of payment credentials, and multi-factor authentication to guard against breaches. Distributed services also mean new risks: a breach in the platform or API provider can expose many users across multiple services. Banks and platforms must also adhere to security standards (SOC2, PCI-DSS for payments) and regularly audit their vendors. In effect, embedded finance compounds the usual financial cybersecurity challenges by adding more interconnected elements. Many thought leaders emphasize that transparency and governance are critical. For example, SoftServe notes that embedded finance “requires robust data governance and transparency in monetization” – platforms must be clear how user data is used and shared. They must also maintain compliance with anti-money laundering (AML) laws, implementing solid KYC procedures even on non-bank front-ends.

Sponsor banks typically onboard the platform and monitor its transactions to meet these obligations, but the lines can blur in complex chains of partnerships. Regulators are increasingly aware of embedded finance too: some suggest that large platforms offering financial services should face heightened scrutiny, similar to banks, to protect consumers.

Another regulatory angle is anti-competition. As embedded finance grows, policymakers worry about big-tech platforms leveraging data and market power to dominate finance. The World Economic Forum and others have noted that cooperation (“coopetition”) between banks and fintechs will be key. But antitrust authorities may keep an eye on any one company that attempts to control too much of the financial plumbing (especially if user switching costs become too high).

In summary, embedded finance operates in a complex, partly uncharted regulatory landscape. It

demands strict adherence to financial regulations (banks' capital and compliance rules) and data privacy laws (GDPR/CCPA etc.), even as services appear on a screen that looks nothing like a bank. Security measures must be at least as robust as those in traditional finance. While embedded finance unlocks convenience, it also requires very careful risk management: sponsor banks and fintech enablers must ensure that platforms protect consumer rights, prevent fraud, and maintain financial stability. These challenges will be a central focus as the trend grows.

Technological Enablers: APIs, BaaS, and Fintech Partnerships

Embedded finance would not be possible without modern technology infrastructure. The key enablers are **APIs (Application Programming Interfaces)**, **cloud-based BaaS platforms**, and a broad ecosystem of fintech partners.

The API revolution is fundamental. APIs allow different software systems to communicate and exchange data in real time. With open, well-documented APIs, a bank can expose its services – account creation, payments, loans – to other applications. For example, Stripe and Plaid provide

APIs that let platforms verify bank accounts or process payments on behalf of their users. As Investopedia notes, embedded finance apps “incorporate banking, lending, and insurance through APIs linked to

financial partners,” so that any app can initiate a payment or loan request on the backend. In short, APIs turn banking functionality into plug-and-play modules. A retailer's website can call a bank's “initiate payment” API during checkout, effectively embedding a financial transaction without needing to build the banking logic internally.

A closely related concept is **Banking-as-a-Service (BaaS)**. BaaS providers are fintech companies that package core banking capabilities on the cloud. A fintech like Marqeta may offer card-issuing APIs, Sila might offer payment processing, and Galileo offers deposit account services. These BaaS providers have relationships with underlying sponsor banks, so they can issue cards or hold deposits under banking licenses. When a company wants to embed banking features, it can contract with a BaaS platform rather than building a custom solution. In practice, the embedded finance “stack” often includes one or more BaaS layers: the sponsor bank provides regulatory cover, the BaaS fintech handles the tech API, and the end-platform (the retailer or app) integrates the API into its customer interface. Alloy's analysis highlights these three roles – sponsor banks, BaaS providers, and end-brand programs – and how they work together to deliver embedded products.

Cloud computing and modular software architecture also empower embedded finance. Cloud platforms (AWS, Azure, etc.) allow these fintech and banking services to scale massively. Microservices and containerization (e.g. via Kubernetes) mean that new embedded features can be rolled out quickly. For example, a digital marketplace can integrate a BNPL service by simply adding a front-end and connecting to a cloud API; it does not need to deploy physical infrastructure. Cloud also facilitates compliance: banks and BaaS providers can host data in audited cloud environments and use shared compliance tools.

Partnerships and integrator platforms are equally important. Many large platforms do not build the finance tech themselves. For instance, Uber's driver debit card is actually powered by a partnership with companies like Branch or Evolve Bank and Mastercard, and Stripe often powers embedded payments for startups. API marketplaces (like Banking Circle or Treasury Prime) and off-the-shelf products (e.g. white-label mobile banking apps) make it easier for non-banks to launch financial services. Even big

banks are forming alliances: the McKinsey report describes toast + WebBank (lending), Uber + Evolve (debit

cards), airlines + Uplift (BNPL), etc. In each case, the non-bank company uses a fintech partner or bank partner to plug into the financial system.

Emerging technologies are further expanding the possibilities. **AI and data analytics** allow embedded services to be highly personalized. For example, gig-app platforms can use machine learning on user behavior data to offer instant micro-loans or earnings advances that fit a driver's routine. The WEF notes that AI is "ultra-charging embedded finance," enabling real-time underwriting and tailoring offers to consumer context. Similarly, the use of open data standards (like PSD2 in Europe) means that many more players can access banking information (with permission), accelerating innovation in embedded finance.

In summary, the technical backbone of embedded finance consists of cloud-based **APIs and BaaS platforms** that connect sponsor banks to any front-end. This flexible infrastructure is supported by a network of fintech providers (for payments, cards, KYC, identity, etc.) and by fast-evolving tech tools (AI, cloud, blockchain in some cases) to scale and secure the services. Because the architecture is largely modular, it is relatively easy for a retailer or platform to add a new financial widget (like a loan or wallet) by integrating a few APIs, thus embedding banking without building it.

Challenges and Limitations

Despite its promise, embedded finance faces several challenges and limitations. These must be acknowledged, as they may slow adoption or introduce new risks.

Regulatory and Legal Hurdles: As noted above, navigating financial regulations is complex. In some jurisdictions, the laws may not clearly address novel embedded models. Companies must ensure that all financial offerings have the proper licenses, disclosures and consumer protections in place. This can be cumbersome when platforms operate across borders or when regulators catch up. Compliance costs (AML systems, audits, legal staff) remain high. Some smaller platforms may find it difficult to meet these burdens without significant resources, limiting who can effectively deploy embedded finance.

Data Privacy and Trust: Embedded finance requires trust that the data and funds are handled securely. Consumers may be wary of sharing sensitive information through a non-bank interface unless they trust the brand. For instance, a user might hesitate to enter income data or authorize payments on a retailer's site if they fear scams or hidden terms. Ensuring transparency – for example by making clear that a transaction is powered by a bank or insured – is crucial. The complexity of partnerships can make it hard for users to know who is actually lending or holding their money. Any data breach on a platform could have wider implications, since the platform might hold payment credentials for many bank accounts at once.

Operational Complexity: For the companies implementing embedded finance, the technical integration and ongoing management are nontrivial. Although APIs simplify connectivity, platforms must still build user interfaces for financial products, monitor transactions for fraud, and reconcile payments behind the scenes. They also need to train customer-service staff to handle finance-related queries. These operational tasks can introduce errors and friction if not done carefully. Additionally, revenue-sharing arrangements with banks or BaaS providers need constant monitoring and adjustment. Smaller brands might struggle with these complexities or become overly reliant on a single fintech provider (creating vendor risk).

Market Fragmentation: There is not yet a single standard for embedded finance. Each partnership

might involve different APIs, platforms and banking partners. This fragmentation can confuse developers and

slow scalability. For example, a retailer may support one BNPL provider but not another, or have to integrate a new API for each financial service. Over time, the industry may consolidate around a few common platforms, but today the landscape is still disjoint.

Potential User Limitations: Not all users will readily adopt embedded finance. A recent report found only about 20% of U.S. mid-market firms preferred embedded financing over traditional loans. Some consumers may still want to maintain separate banking relationships or may distrust non-bank channels. There is also concern about oversharing: if embedded finance becomes ubiquitous, do users risk being targeted with too many financial offers? Platforms will need to balance convenience with choice overload.

Economic and Competitive Limits: If too many services become free or low-margin (as embedded finance often promises convenience over profit), banks may struggle to justify it. Credit products embedded into commerce might have to cut rates or fees to compete with the platform's incentives, squeezing bank profitability. There is also a competitive dynamic: if every platform offers similar credit products, differentiation may vanish and some players might exit. And finally, large banks that invest heavily in digital transformations might feel the sting if embedded models undercut their own app usage and branding.

These challenges mean that embedded finance is not a panacea. Careful design, strong partnerships, robust security, and clear regulatory frameworks are needed. Nonetheless, industry experts generally believe these limitations can be managed, and that the potential benefits (wider access to finance, customer retention, new revenue streams) outweigh the downsides. As the MobiFin blog points out, the shift to “invisible banking” is already well underway, and likely irreversible.

Future of Financial Intermediation

Looking ahead, embedded finance is likely to accelerate trends toward an “unbundled” and platform-centric financial system. In the future, we expect:

Financial services embedded everywhere. Virtually all digital platforms – social media, pps, marketplaces, and even physical devices (IoT, smart cars) – will carry basic financial capabilities. Users will take for granted that any transaction can have payment, lending or insurance embedded.

Banks as invisible utilities. Traditional banks may transition into something like utilities or utilities-with-APIs. Consumers might no longer visit bank branches or apps for routine tasks, but banks will still operate behind the scenes, providing liquidity, underwriting loans, and ensuring regulatory compliance. In effect, the “brand” of banking could shift from Chase or Citibank to Amazon or Google in many contexts, with banks relegated to back-end infrastructure.

Platform-driven innovation. BigTech and fintech platforms will continue innovating fast. We may see more novel embedded products: for example, “embedded wealth management” where investment advice is offered during spending decisions, or “contextual insurance” (e.g. dynamically priced coverage within the sale of a particular product). AI will enable hyper-personalization – microloans with instant offers, auto budgeting tools that trigger at expense events, etc. The MobiFin report envisions a future where banking is “ambient, integrated, and often unseen”.

Greater inclusivity – or new risks. On one hand, embedded finance could greatly expand financial inclusion: underserved customers (gig workers, micro-entrepreneurs, rural populations) may get instant

access to credit or banking embedded in the tools they already use. On the other hand, it introduces new risks (if not managed) – e.g. gig workers overextending via many embedded loan offers. The net social impact will depend on regulation and good design.

Regulatory evolution. Regulators will catch up. We may see new rules specifically for platform-finance partnerships, and perhaps licensing regimes for “embedded finance intermediaries.”

Already Europe’s Digital Finance Strategy and Digital Services Act are thinking along these lines. In the U.S., agencies are debating how to classify financial activities on non-banks.

Ultimately, rules will likely require high transparency (e.g. telling users which bank is behind an offer) and full consumer protection on embedded products.

Bank Fintech Partnerships: Many banks will likely follow the path of “coopetition” mentioned by the WEF. We foresee more joint ventures, investments and acquisitions: major retailers buying fintechs, tech giants buying banks, or banks acquiring BaaS firms. For example, Citi’s joint financing of Astra Tech’s fintech subsidiary (as reported in April 2025) signals this trend. Traditional financial institutions may find that the fastest way to “embed” is through building or buying their own platform capabilities, rather than purely letting others dominate.

Decentralized and Open Finance Links: There is also an interplay with other trends. Open banking APIs (like PSD2, open data initiatives) facilitate embedded finance by standardizing data flows. Meanwhile, innovations like blockchain or digital currencies could merge with embedded finance (for instance, smart contracts enabling automatic microinsurance upon an IoT sensor trigger). Central bank digital currencies (CBDCs) might get plugged into ecosystems as one form of embedded payments. The overall architecture of financial intermediation may become more distributed and software-driven.

In conclusion, embedded finance points toward a future where *financial intermediation is highly disaggregated and context-aware*. Banking activities will largely happen behind the scenes of diverse digital experiences. If a consumer needs a loan, insurance or payment right now, it will be delivered instantly within whatever app they are using, rather than through a separate banking interaction. This is not necessarily “the end of banks” – rather, it is the end of banks *as we know them*. Those that adapt (by integrating into ecosystems, or by embracing the role of infrastructural partner) may survive, while others could shrink or vanish.

Figure: Traditional banking versus embedded finance models. In traditional banking the bank (green) directly offers products to customers, whereas in embedded finance the non-bank platform or brand (blue) provides services to its users, partnering with banks via Banking-as-a-Service. (Adapted from industry sources.)

Overall, embedded finance is an accelerating force that makes banking more **invisible**. It shifts value and customer focus to the places people already spend time and money. Over the next decade, we are likely to see banking features permeate every digital experience – reducing the prominence of banks themselves and reshaping the very notion of financial intermediation.

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