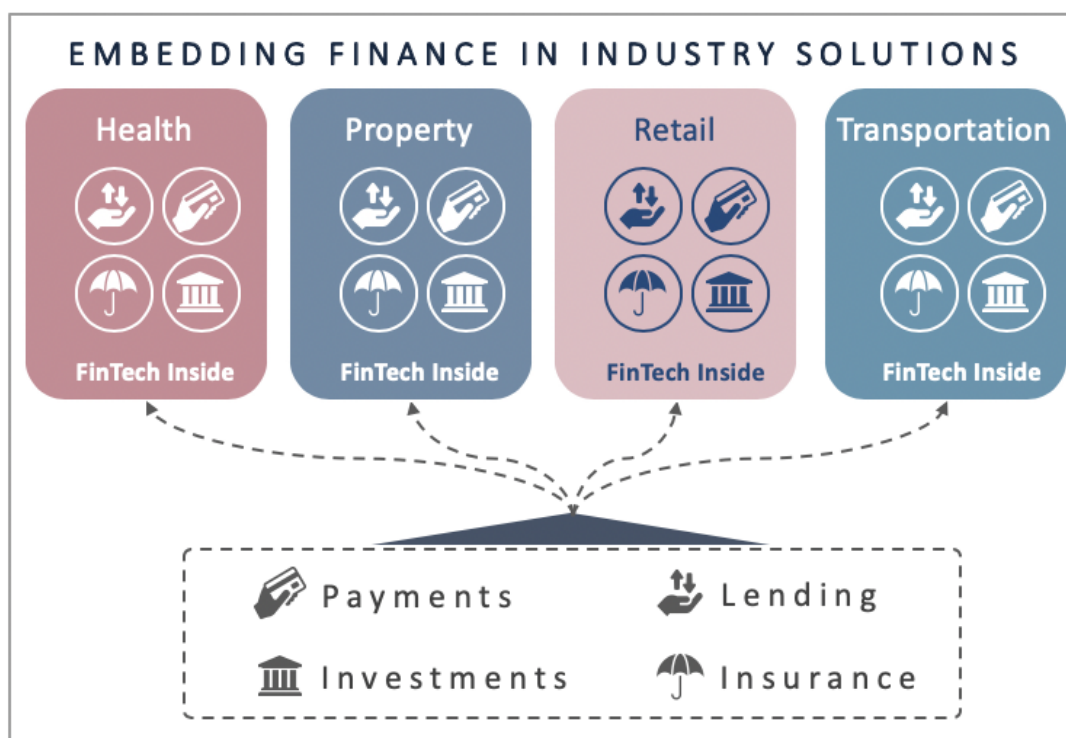


EMBEDDED FINANCE – PART 1

FAQs About The Hottest Trend in FinTech: Embedded Finance

Why Embedded Finance Will Define The Future Of FinTech



What is Embedded Finance?

Embedded Finance (EF) refers to the seamless integration and provision of financial services within the offering of any business service to customers, just like the ride-sharing companies Uber and Lyft have so successfully integrated payments. While EF may sound similar to older concepts like white labeling or accessing financial services via APIs, there are substantial differences that will become evident over time. EF will define the next phase of FinTech growth as services like payments, cash accounts, digital wallets, lending, and insurance are “natively” offered by non-financial-services firms in every industry, instead of the traditional model where financial services have been offered as a distinctly separate but bundled service, typically offered by a financial company.

Here are three distinguishing characteristics of EF:

- **It significantly improves customer experience:** On the UI front, EF delivers a more powerful user experience than the way financial services have been provided in the past. It is the next phase in the smart utilization of technology to deploy financial services, after the FinTech 1.0 revolution that began in 2010 with VC-funded FinTechs offering digital finance solutions. Paying for a taxi with cash or a credit card is no match to the customer experience you get with embedded payments in Uber/Lyft. Embedding services reduces friction, lowers cost, provides greater convenience and significantly enhances overall customer experience.
- **“Native” implementation means better integration:** At a technical level, the tech infrastructure enabling EF is substantially more advanced than what supported older financial API models that have existed for the last 8-10 years. Modern-day “embedded finance” is enabled by technology that was architecturally built for real-time, digital access from the ground up. It’s not an after-thought bolted on to the product and offered as a discretely separate function which resulted in a rigid, high cost, and time-consuming experience in the past.
- **Creates new revenue streams and shifts profit pools:** By substantially changing the way that financial services are delivered – seamlessly integrated into a product instead of being offered separately by a bank or insurer, EF will alter the economics of financial activities like payments and lending. Bringing services like Payments and cash accounts inhouse creates entirely new sources of revenue for non-financial companies, and enables new business models that were not possible earlier. It will shift profit pools along the financial value chain, changing the way services like payments are monetized, and weakening the competitive position of incumbent financial institutions and service providers.

How is EF related to concepts like BaaS, Verticalization of Finance, Open Banking, etc. ?

When an emerging trend or a technology is in its infancy, definitions are unclear, concepts are conflated, and there is a wide disparity in people’s interpretation of the same idea. EF is at such a stage right now. So we should expect confusion and a lack of clarity with the terms being used to describe this development. Here is clarification on the various terms and concepts that are often mentioned in the context of EF, and are somewhat related to it.

Banking as a Service refers to the enablement of traditional banking services (credit/debit cards, cash accounts, payment enablement) on behalf of another firm which either lacks in-house capability to offer a financial service or wants to save time/cost in offering such services. BaaS software vendors have existed for 5+ years, but more modern infrastructure providers like [Bankable](#) or [Finix Payments](#) are taking the BaaS concept to an entirely new level (lower cost, real time, flexible access), which has enabled the embedding of financial services.

EF is a broader concept that refers to the seamless integration of a financial service (payments, debit cards, lending, insurance, or investing) within a product or service provided by another firm (increasingly non-financial companies) in the course of its service delivery. The best illustration of this concept is still embedded payments within ride-sharing, though other use cases are rapidly emerging. Consider some of the more modern BaaS vendors as providing the tools or technology infrastructure that delivers or enables embedded finance.

Finance on Demand is a concept that refers to financial services becoming conveniently and cost-effectively available for businesses to “plug-in” to their service offering as and when required. (Again, prominent VCs like Bain Ventures and Andreessen Horowitz have espoused this concept). So Finance becomes a utility that is available on demand, just like AWS delivers computing on demand. This concept may take time to fully materialize, but it will be a very powerful enabler of embedded finance, allowing new business models to emerge.

Open Banking is an older term that emerged around 2012-2014 which describes easier, convenient and open access to the customer data held by traditional banks. Open Banking was pushed by regulators and banking consortiums but while a lot was expected, it has largely been unsuccessful in the US and Europe due to cultural constraints, lack of adequate incentives for traditional banks, and legacy technology. However, there have been some successes in countries like India and Singapore, whose governments have mandated banks to share customer data and created utilities to enable this.

Verticalization of Finance is another term often used by prominent investors (e.g., Bain Ventures, Canaan Ventures, Sequoia) that is a related concept. It refers to the customization of traditional financial activities (paying, borrowing, insuring, investing) to the particular needs of each industry vertical. Mobile enablement of parking payments and income sharing agreements for student loans are examples of the verticalization of finance (VoF). EF and VoF are closely related concepts.

Why are non-financial companies embedding Financial Services?

The motivation for non-financial companies to embed financial services is not to become banks or compete directly with financial institutions. It is driven by first principle design thinking, which means always focusing on what your customer’s needs are and then figuring out the set of services to offer the customer. Smart non-financial companies are not embedding cash accounts or offering payment services because they want to become financial entities, but because it assists their overall goal of impressing customers. Uber wanted to onboard drivers quickly and foster loyalty, so it created cash accounts for drivers that helped 1) onboard new drivers onto Uber quickly, and 2) allowed drivers to be paid more frequently, even several times a day. It was not because Uber wanted to become a financial company.

The primary motivation driving non-financial companies to embed financial services are:

- **To enhance loyalty, lower customer acquisition costs, and drive greater lifetime value.** EF delivers a substantially better customer experience by providing a frictionless, contextual financial experience aligned with a customer’s lifestyle. It delivers a financial service especially designed around a customer’s specific needs, versus the traditional banking model where banks provided generic services to customers based on their own goals and constraints, not those of the customer. Not anymore. As the technology to embed financial services is becoming available, firms in every industry from healthcare to transportation are offering customized financial services to meet their overall goals. Starbucks gives its 5.5 million app users the ability to store cash so they can pay instantly and conveniently. Behind the scenes, that helps Starbucks avoid interchange fees, drive loyalty, and generate crucial data about a customer’s preferences and lifestyle.

- **To develop entirely new revenue sources.** Embedding financial services allows a non-financial company like Shopify to participate in the financial value chain and earn a profit by enabling payment services. In the past, an online retailer would have paid an estimated 50-75 basis points in fees to an external financial institution or processing vendor to process the payment. Not anymore. By bringing payments (and other financial services) inhouse, EF creates an entirely new revenue source for firms like Shopify, which earned \$396 Million from payment facilitation in 2019, a solid 53% higher over 2018. Uber and Lyft don't disclose how much revenue they make from enabling payments and other financial services, but industry estimates range from \$40-50Mill, growing at 20% YoY.

Will only traditional Banking services and Payments get Embedded? What about Insurance and Investing?

Payments is emerging as the most popular use case for EF, being the most utilized function among the pillars of finance: Payments, Retail Banking, Lending, Investments, and Insurance. Payments is usually the first service to be embedded being less regulated than Lending, Insurance or Investments. Next comes consumer banking services (cash accounts, debit card, mobile wallets), followed by Lending. These are services that firms in every industry wants to embed first, driven by a desire to better serve customers, and to create a new source of revenue.

Embedding insurance and investments lag behind offering retail banking services and payments. Tech firms and other non-financial companies that are rapidly embedding payments/lending have less of a need to embed insurance and investing. Of course, there is the need for insurance to be provided seamlessly when you rent a Zipcar or to insure yourself against costly fees charged if you needed to cancel a travel itinerary. But these use cases are much less frequent than embedding payments. Beyond limited demand, embedding insurance and investing is tougher to do than payments, due to more complex integration, sophisticated compliance rules to get around, and the need for regulatory licenses. Having said that, firms like [Tesla](#) and [Quip](#) are beginning to embed on-demand or point-of-sale insurance, creating new sources of revenue and enabling new business models. The slowest service that will get embedded will be investing due to sophisticated product knowledge and compliance requirements.

What are the open questions regarding Embedded Finance?

Several open questions remain about the evolution of embedded finance and its implications. How will the role of incumbent financial institutions change as more firms outside our industry natively offer banking services? What impact will it have on profit pools, and how will the competitive structure of financial services change? Which industries will lead the charge, and where will new business models emerge? Payments and Lending are the first and most obvious financial services to be embedded, but which services will be next? To what extent will regulatory requirements be a constraint for non-financial firms to embed financial services? What are the prospects for embedding Insurance? Does Investments even stand a chance? What does this mean for job creation, and how does employment change in a world where non-financial businesses offer financial services? How must regulators respond to a world where non-financial companies are increasingly offering financial services? How does regulatory oversight, supervision and risk management need to change? What models will emerge across different regions to embed finance? Will the Chinese model of the

SuperApp come to Europe or the US? Or will the US continue having a bottom-up model of embedding financial services?



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