Sifted/Reports

Embedded finance

The new face of banking

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Embedded finance: the new face of banking is a Sifted Intelligence report, sponsored by OpenPayd. Embedded finance has further blurred the lines between the worlds of tech and finance by transforming how we buy goods and services, while allowing businesses of all sizes and industries to plug in payment and lending capabilities.

In this report, we take a deep-dive into the rise of embedded finance, analysing the areas of development so far. We'll also look at how startups are stealing the embedded finance opportunity from under the nose of banks, and detail the innovative offerings and fastest-growing market segments defining the next frontier of this up and coming trend. Finally, we'll collect thoughts from market influencers about where this sector is headed over the next decade.

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Contact Christopher Sisserian, head of Sifted Intelligence via chris@sifted.eu

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3 questions to Sophie Guibaud

Chief growth officer at OpenPayd

Why does embedded finance matter and who does it create value for?

The reality is that customers never want to think about finance. In an ideal world, people want their payments and loans to happen instantly, without any of the paperwork or hassle. That's why embedded finance matters: because it makes it possible to deliver finance where and when the customer needs it. It's the next phase of evolution in finance, after neobanks — getting a loan, making payments or opening an account comes to you as a consumer, when you need it, and without having to think about it.

The second point I want to highlight is that embedded finance is changing things for brands too. It's enabling brands who know their customers well, who have data points to build on, to provide financial services, potentially faster and cheaper. Shopify for instance is in a great position to provide credit to customers based on the data it has about their habits, or to provide loans to sellers to buy inventory with, based on what it knows about these brands and about the market.

> “I see embedded finance as a kind of iteration of Netflix: you consume it when you need it — convenience first.”

There are possibilities opening up for retailers, but more broadly for all ecommerce merchants, who sell to consumers or to businesses including SMEs. For the gig economy, embedded finance is enabling workers to increase sales and manage their budget differently.

Overall, businesses that are adopting embedded finance are typically obsessed with their customers and with improving user experience and customer retention. I see embedded finance as a kind of iteration of Netflix: you consume it when you need it — convenience first. It's the banking equivalent of the way customers consume music or film, and more in line with the kind of quality of experience we've all come to expect online and on our smartphones.

What proof points can you share that illustrate the momentum driving the embedded finance market right now?

I've been advocating in favor of embedded finance for 10 years, and I would say we're still in the super nascent stages of this market — a lot of the potential is ahead of us.

We are starting to really see some solid proof points though. In just a few years of deploying add-ons like payments, lending and bank accounts, Shopify and Grab generate nearly half their sales from financial services now. That's a testament to the massive potential of such offerings. Booking.com has also launched a lending unit recently. Meanwhile Amazon launched a partnership with Affirm to allow clients to pay in installments for the first time.

Also, VCs are so bullish about this space. It's a huge market, and the potential for brands to leverage embedded finance solutions to increase revenue is something VCs including Andreessen Horowitz and Bain Capital have been very vocal about.

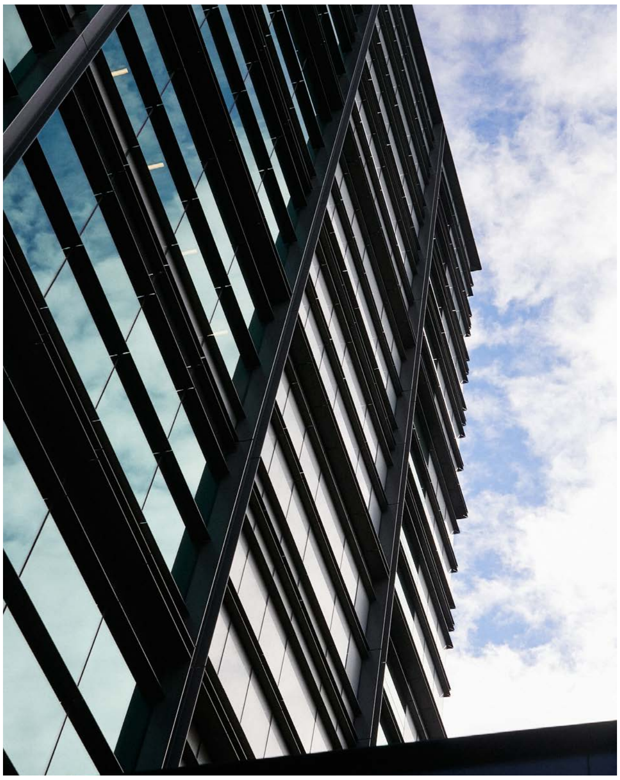
Looking forward, what's your main prediction about the future of embedded finance for 2021 and beyond?

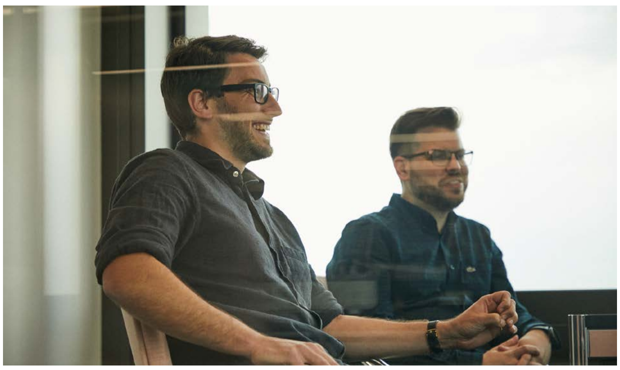
My main prediction is that most brands will offer financial services in the coming years, and customers won't need to go to their banks anymore if they don't want to. Services like payments without any required action are definitely going to become the norm. I also think these services are going to become cheaper because there's going to be more competition around price, driven by the fact that brands have access to more customer data and can use it to bring costs and prices down.

The other trend we'll see is embedded finance helping to expand financial inclusion, as brands help customers get around the constraints of traditional banking. Basic financial inclusion is enabled by the fact that brands know their customers, including those who don't have bank accounts, and can offer them the financial services they need.

"Most brands will offer financial services in the coming years, and customers won't need to go to their banks anymore if they don't want to."

Finally, I think we'll see more consolidation. We're seeing the beginning of this in the market, between fintech players and payment players for instance. There will be more of that, reflecting the potential of embedded finance as use cases grow.





\Embedded finance

Introduction

The rise of embedded finance

Your next loan may not be from a bank

It's very likely that you'll get your next loan from a company other than your bank. In fact, consumers are increasingly making all sorts of decisions about money and executing on them without the help of their financial services provider.

The trend highlights the rise of what's often referred to as 'embedded finance', or 'contextual banking'. It points to the integration of financial services — the kinds people usually go to their bank for — into the products and services of 'non-banks', paving the way for a broadening array of bundles and hybrid approaches, and expanding the boundaries of finance and fintech innovation.

For consumers, the most notable development so far has been the integration of new payment options into online shopping, making purchases simpler and improving fluidity. But the expansion of embedded finance is leading to bigger, deeper transformations.

In the near future, it's likely to become standard for customers who are buying a fridge online to be offered a loan to cover the cost, insurance for the product, and maybe even some form of blockchain integration to secure the entire process.

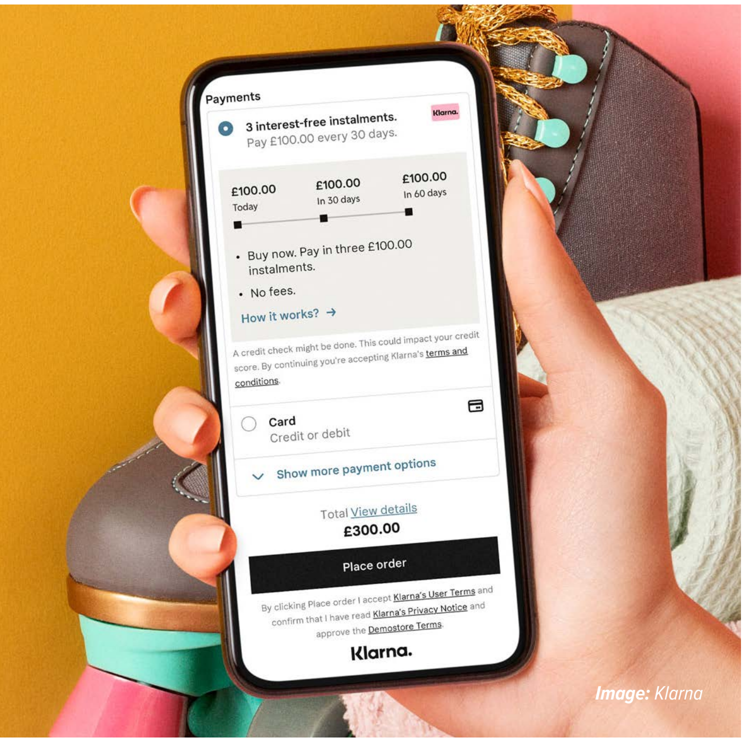


Image: Klarna

"Payments aside, there's still a boundary today between what you do on your banking app and the rest of your online presence, but that's going to change drastically over the next few years," says Alan Vaksman, managing partner and cofounder of venture capital fund Digital Horizon. "The focus on client experience means companies are increasingly delivering services to customers when and where they want them. In that context, there's no sense in logging on to a separate bank app to get your financial services," he says. "Embedded is the way to go."

"More and more 'non banks' are warming up to the idea of proposing a wide array of financial services integrated right into their usual products."

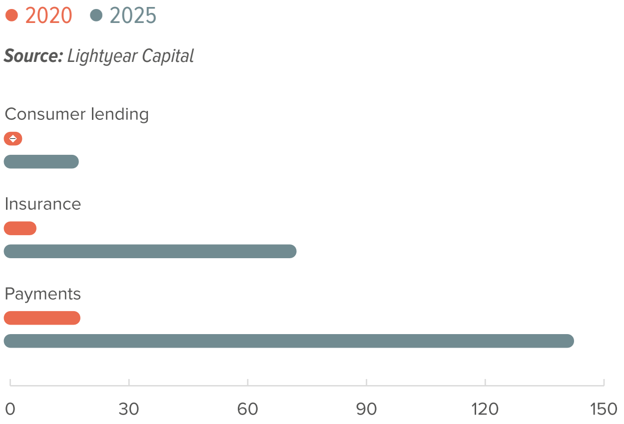
In recent years, lines have already become blurred between the worlds of tech-focused businesses and finance. Global tech giants, from Apple to Amazon and Uber, have converted millions of their existing clients to their wallets and payment apps. Fintechs including Europe's Klarna are becoming household names with embedded finance features like 'buy now pay later' that sit on top of practically any ecommerce website and shake up the way loans are traditionally awarded.

How consumers open a checking account or apply for a credit card, whether physical or virtual, are up next. And embedded finance is increasingly extending to insurance and financial investment offerings too.

More and more 'non banks' are warming up to the idea of proposing a wide array of financial services integrated right into their usual products, lured by the promise that this will translate into more satisfied — and faithful — existing customers who'll end up buying more, as well as help attract new shoppers with the promise of a better, more integrated experience. Companies that are addressing corporate customers are also starting to tap this trend, as banking features get folded back into business processes including procurement and revenue-based financing.

Embedded finance will grow to a €230bn opportunity by 2025

Embedded finance market size by segment (€bn)



The result is an embedded finance market that is estimated to be worth $43bn globally in 2021, according to data by research company Juniper Research. It's forecast to reach approximately $230bn globally by 2025, an average annual growth of almost 60%, fueled by new use cases in embedded payments, lending, investments, insurance and banking, according to US private equity company Lightyear Capital. The sector could reach $3.6tn by 2030, according to analysis from Bain Capital Ventures.

And while embedded finance is most visible still in the offerings of international marketplaces like Amazon, or the development of Uber Money (Uber's dedicated financial services division) and more recently Booking.com's fintech unit, it's actually fueling opportunities for hundreds of startups and innovative companies. They're emerging to supply technology bricks and plug-and-play solutions for merchants and businesses of all sorts, helping them overcome regulatory, technical development and cost hurdles.

"We're not yet at the top of the hype cycle for this market, we're only about 40% of the way and there will be a lot at play in the next two to three years," says Digital Horizon's Vaksman. "By nature, banks are not very client-centric. They're bogged down by regulation, risk and procedural requirements. Client experience just isn't their expertise, and that's leaving room for other players to come in and grab this market opportunity."

EUROPE'S EMBEDDED FINANCE FLAG BEARERS

Embedded finance companies like Afterpay and Klarna have attracted whopping valuations in the double-digit billions, on both sides of the Atlantic. In the US, Plaid, a tech platform that enables apps to connect with users' bank accounts, got snatched up by Visa last year for $5.3bn. In the UK, fintech-as-a-service startup Rapyd, which offers financial service bricks to integrate into third parties' websites, raised a $300m mega-round in January on a $8.75bn valuation. And there are dozens more examples.

In Europe alone, startups including Toq.io and FintechOS in the UK, Banxware and Afilio in Germany, and Younited Credit in France are emerging as the next wave of embedded finance champions. All have closed fundraisings in recent months, by investors including Goldman Sachs, Commerzbank, the World Bank, and some of Europe's leading venture capital firms.

COMING UP

In this report, we'll take a deep-dive into the rise of embedded finance, analysing the areas of development so far. We'll also look at how startups are stealing the embedded finance opportunity from under the nose of traditional banks, and detail the innovative offerings and fastest-growing market segments defining the next frontier of this up and coming trend.

In doing so, we'll dissect the drivers behind some of the mammoth valuations that have emerged in embedded finance: from Square's offering of $29bn in shares for Australia-based Afterpay to Europe's Klarna becoming the world's second-most valuable fintech in June 2021 by fetching a valuation of $45.6bn after its latest round. These deals and others reflect the value creation potential for businesses that lie within embedded finance, and the possibilities for emerging players to grab chunks of market share from banks and even well-established neobanks.

Finally, we'll map out the startups to watch in this space, zooming in on the European entrepreneurs and innovators worth knowing, and collect thoughts from market influencers about the embedded finance market, ending with their predictions for the future.

Embedded finance

Chapter I

A growing opportunity

So what's so innovative about embedded finance today?
In a few words: it's about the shift to online

Embedded finance is attracting attention from investors today and has been ramping up in recent years as a trend to watch. But the concept isn't exactly new.

For several decades now, department stores have offered services that rely on the same principle as the most sophisticated up and coming embedded finance offerings of today. Consumers can, for instance, walk into Marks & Spencer and use a store-labeled credit card to pay for their food, perhaps in exchange for fidelity points or rewards. The service is decades old in the retail industry and widespread across a variety of brands, which are motivated by the idea that clients will buy a greater number of products and come back more often if things run extra smoothly at the cash register.

The same thinking has gone behind auto giant Volkswagen and other carmakers running their own banks for several decades. These industrial champions have brought finance knowhow in-house and built entire business units dedicated to offering customers financial services like leasing on new car purchases. Volkswagen Financial Services, for one, has been around for 70 years, and has its roots in promoting sales of the original Beetle and Volkswagen bus in post-war Germany. For more than half a century, carmakers have turned to offering financial products as a way to facilitate customer purchases, sell more vehicles, and promote client fidelity.

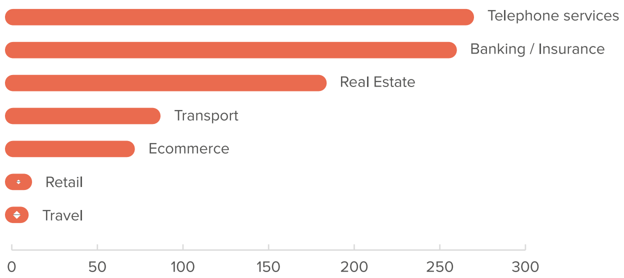
The very idea that we may not necessarily need banks to offer financial services has been the subject of discussions and debates since the early 1990s, and there is not a fintech conference since that has passed without citing Microsoft's billionaire founder Bill Gates, who in 1994 made a premonitory statement about how "Banking is necessary, banks are not".

Image: M&S Bank

By converting existing customers, non-finance companies face far lower acquisition cost than banks

Average customer acquisiton costs per industry (€)

Source: *Proof Technologies*



So what's so innovative about embedded finance today? In a few words: it's about the shift to online.

"The more commerce goes online, on all levels, the more embedded finance will grow and gain importance," says Enrique Martinez-Hausmann, who specialises in fintech investments at venture capital fund Speedinvest. "It's a massive and growing market."

> **"The more commerce goes online, on all levels, the more embedded finance will grow and gain importance."**
>
> ***Enrique Martinez-Hausmann****, associate, Speedinvest*

Retail ecommerce sales alone are expected to total $4.9tn worldwide in 2021, according to research by eMarketer. After growing more than 16% last year, they're expected to increase another 14% this year.

BEYOND FINTECH

With the transition to digital and online, the array of financial services that's being built straight into non-bank offerings is widening, and the kinds of businesses that are integrating these services are becoming more varied too. It's not only department stores and carmakers anymore: ecommerce players and online marketplaces have started developing their financial offerings, and so have gig economy platforms and even some software as a service (or 'SaaS') providers.

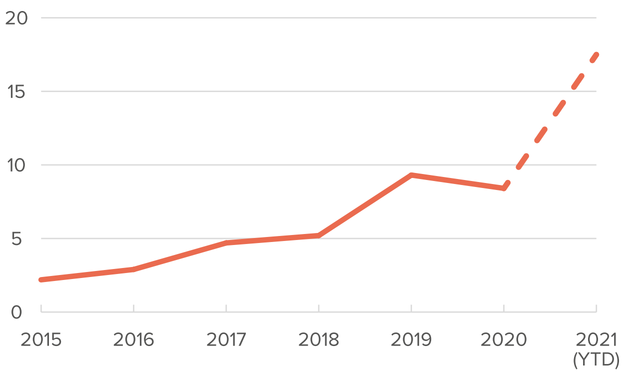
The trend is one that investors including Bain Capital Ventures have been predicting for a couple of years, and that's starting to deliver proof points now. "The role that fintech will play in our world moving forward is going to be even bigger and vastly more pervasive, to the point that we won't even use the word fintech anymore. While there won't be 'fintech' companies as such, over time many or even most technology companies will need to incorporate embedded financial services in order to win in their segments," Bain Capital Ventures partner Matt Harris wrote in 2019, encouraging all startup founders to embed financial services into their businesses.

Part of what's driving adoption today is that embedding finance into third-party applications is becoming cheaper and faster. Startups and companies that specialise in ready-to-use finance bricks are enabling non-banks to deploy these new services quickly and without having to invest to develop everything themselves — or figure out the hassles of ultra strict banking regulation.

2021 has already seen double the amount of funding as 2020

VC funding into European fintech (€bn), 2015-2021

Source: *Dealroom*



At its core though, the motivation for change is primarily fueled by strong demand from consumers for a better, smoother online experience, across the board. Clients who over the years have grown accustomed to downloading music off of iTunes without inputting their credit card information each time, and have switched from passive television watching to Netflix's buffet of anything you want, anytime you want it in just a click, are becoming increasingly demanding in all their online experiences.

> **"Embedding finance into third-party applications is becoming cheaper and faster."**

Payments processing has often been the place to start for brands that are making the move to embed financial solutions into their existing offerings. The idea is that users' experience of making purchases online can be improved significantly by integrating payments processing and having it take place in the background, in a quasi-invisible way. But the cultural shift over the past decade has meant that behaviors like one-click purchases, or even fully seamless payments that require no action at all, are slowly but surely becoming the norm, and clients are starting to show an appetite for more.

BNPL EXPLODES

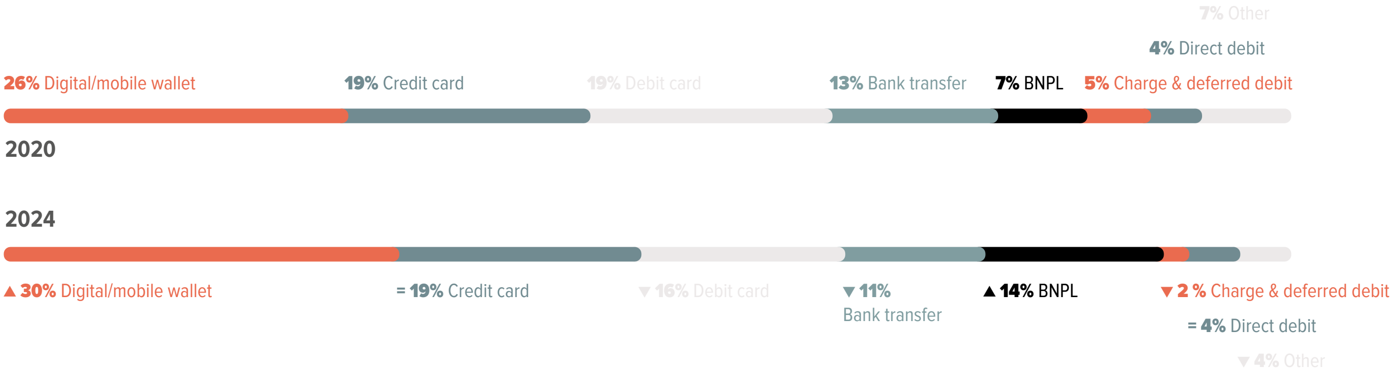
'Buy now, pay later' is one example. The feature, called 'BNPL' for short, offers an alternative to traditional lending by letting users buy goods online and receive their purchase immediately while paying in several, often interest-free, installments. The whole process is simplified down to a couple of clicks, and happens at the time that is perceived as the most opportune for consumers: when they're ready to pay, and taking their digital shopping cart over the finish line.

BNPL is one of the easiest financial features to embed, and by integrating seamlessly into brands' existing commercial websites it has rapidly become a standard of online shopping. In turn, the feature's widespread adoption has translated into a surge in investor interest.

BNPL usage is set to double from its 2020 levels by 2024

Ecommerce payment methods in Europe, 2020 and 2024

Source: *Worldpay*



Twitter cofounder Jack Dorsey's Square snapped up Australia-based Afterpay, one of the global leaders in this segment, for $29bn in August, in one testimony to the hype around BNPL. Founded six years ago, Afterpay now serves some 16m customers and 100k merchants. In Europe, Klarna — a rival of Afterpay — became the world's second most valuable fintech in June by fetching a valuation of $45.6bn in its latest funding round, which amounted to about $639m. Klarna, which was created in Stockholm in 2005, boasts 90m active consumers across more than 250k merchants in 17 countries.

Along with payments and credit cards, BNPL has been one of the biggest drivers of the growth of embedded finance. Analyst house Juniper Research estimates the option will make up more than half of the embedded finance market by 2026, which amounts to about $69bn. A report by payments company Worldpay forecast deferred payment services will account for 4.2% of all ecommerce transactions around the world by 2024 and see usage double from its 2020 level. BNPL services will make up as much as 13.6% of online transactions in Europe within the same timeframe, from 7.4% last year, Worldpay estimated.

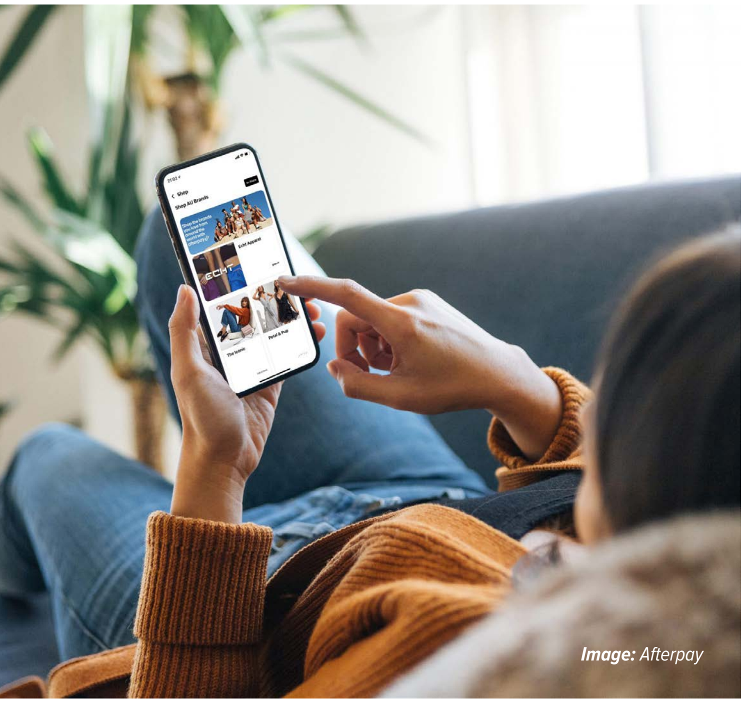


Image: *Afterpay*

“Along with payments and credit cards, BNPL has been one of the biggest drivers of the growth of embedded finance.”

Investors are now trying to spot the embedded finance features that will become the next standard and drive market growth. Loans, checking accounts and insurance products are already gaining popularity with consumers. In the future, features like cryptocurrencies or peer-to-peer transfers could also develop, albeit at a later stage.

“Consumers are used to a tailored, smooth experience, and embedded finance is bringing that type of experience to paying for something online or getting a loan," says Speedinvest's Martinez-Hausmann. "The end-customer wants it because it makes their experience easy and smooth, and businesses are implementing it because they see potential to get value out of it."

BEATING BANKS AT THEIR OWN GAME

For brands, there are several reasons why it can make sense to add financial services to existing offerings.

The most basic argument is that integrating services like payments and loans makes for a smoother, more enjoyable experience for customers, and happy customers tend to spend more and become more faithful. It's the same thinking that, over the years, led department stores to hand out branded credit cards and rewards plans: first, if you give consumers access to more money, it's likely they'll spend it; second, it's cheaper to keep an existing client than to go out and try to attract a new one.

"By using the heaps of data they have access to about millions of customers around the world, brands think they are best-placed to predict what financial products clients will need and when."

To go a step further down the same line, packaging a financial product with a non-financial one — say car insurance with a rental for instance — can also be a way for brands to boost profitability margins and get more out of the same consumer push.

More and more though, businesses are looking to embedded finance because they think they can beat banks at their own game. In fact, many companies are venturing into embedded finance not just to facilitate the course of their usual business, but instead as a full-blown expansion into new revenue streams. The bet is that data will give these businesses a competitive advantage.

By using the heaps of data they have access to about millions of customers around the world, brands think they are best-placed to predict what financial products clients will need and when. Companies also expect that by anticipating demands and leveraging volume effects they can bring costs down and offer customers better deals.

FINANCE 2.0

As one example, Booking.com this summer announced it was setting up its own fintech division with the dual purpose of boosting bookings on the platform, including by allowing travelers to pay in their preferred currencies at more attractive foreign exchange rates, as well as create new revenue streams for the company. It unveiled plans to grow the unit to more than 400 employees by the end of 2021.

"Giving a credit card to your store customer is basic, but using data to go further is the next generation," says Speedinvest's Martinez-Hausmann. The VC investor refers to the up-and-coming trend as "fintech 2.0": the next generation of financial innovation. "Fintech 1.0 happened when whatever was offline went online. User experience became more beautiful and easier, and

Image: *Booking.com offices*

banks went online and we got neobanks. But the bigger innovation happens after that, beyond just the shift to online," he says. "It's what I call fintech 2.0. It's about using technology that did not exist before to unlock more value."

As competition intensifies and the number of players trying to grab a share of the financial services market increases, the focus on data and how well companies know their customers, especially through online interactions, is set to grow further.

"Customers are looking for quality of experience, that's what matters to them," says investor Digital Horizon's Alan Vaksman. "The battle isn't going to be won with pretty bank cards and fancy apps."

B2B: A POTENTIALLY BIGGER MARKET

That's true not only for businesses that cater to individuals, but also for companies that sell to corporate clients and small and medium enterprises.

> **"B2B markets potentially represent the bigger opportunity down the line."**

Shopify is one example. The ecommerce platform has added a full line of services for its merchants over the years, including payments (direct and in installments) bank accounts, credit cards and rewards — all built on the premise that Shopify can tailor to its merchants better than banks could. Now, the company is going a step further and announced over the summer that it would make its one-click checkout service Shop Pay available to any US merchant that sells on Google or Facebook — not just Shopify merchants.

Hefty valuations

Square paid $29bn for global BNPL player Afterpay in August, while Klarna's valuation hit $45.6bn in June.

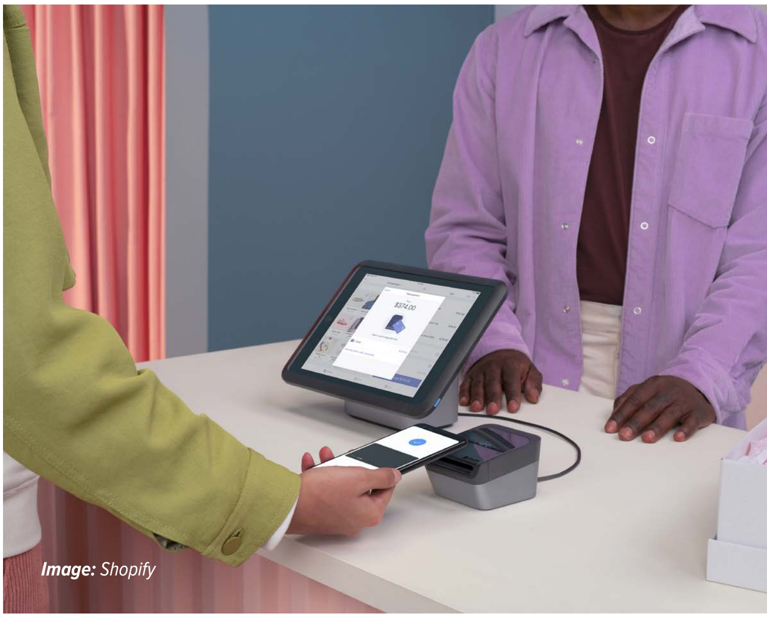


Image: *Shopify*

Looking forward, VCs including Digital Horizon and Speedinvest, as well as Andreessen Horowitz, are betting that finance offerings that are part of consumer experiences online, from ecommerce to gaming, are only the tip of the iceberg, while so-called "business to business", or B2B, markets potentially represent the bigger opportunity down the line.

"Targeting microbusinesses is very similar to serving individual customers, so those will be the first to go embedded, with offerings like corporate credit cards or a credit line," says Vaksman. "The focus for SMEs will be much more on working capital and revenue, with services around receivables, revenue advances, invoice factoring, or marketing cost financing," he says. "We think for SMEs it's still early days — we're investing there because we see potential."

Some startups are making a similar assessment and choosing to specialise in embedded finance for the B2B space. Ireland-based Wayflyer for instance offers revenue-based financing to ecommerce brands, crunching all sorts of data to estimate how marketing spend is likely to translate into revenues and derive a risk assessment out of that. Agro.Club, a US startup that raised $5m in July, is tailored specifically to the agricultural sector, providing farmers and their suppliers and customers with factoring, invoice financing, and credit services.

Embedded finance

Chapter II

How startups stole the embedded finance opportunity

Historically, banks were the main intermediary between corporations and the financial world. That is all breaking up now

When French peer-to-peer money transfer app Lydia launched its credit arm, the initial response from users was somewhat muted. "We were refreshing the page every second," Lydia cofounder Cyril Chiche says. "Then at around 11pm, we saw a request for €487, which seemed like a strange amount to ask for. Forty minutes later, we saw a card transaction to a locksmith. Someone had locked themselves out and didn't have a way to pay for a guy to come and fix it."

Straightforward to use, quick to access, and available in the moment that it's needed — that's the impetus behind embedded finance. For Lydia, the much-loved app's expansion into financial services has been gradual for its 4m users. After launching in 2013, it added more features, such as a debit card, account aggregation and savings accounts. In 2022, there are plans for investment and trading options.

All of this, Chiche says, has been built on embedded third-party partnerships with fintechs, such as Younited Credit, Cashbee and Treezor. That collaboration has enabled Lydia to grow faster and more widely than the cofounders would have ever imagined. "Not only quicker but also safer," he adds. "Because you're talking with partners that have all their focus on these particular topics. They're experts, they have experience, they have the regulatory framework. It makes things a lot easier."

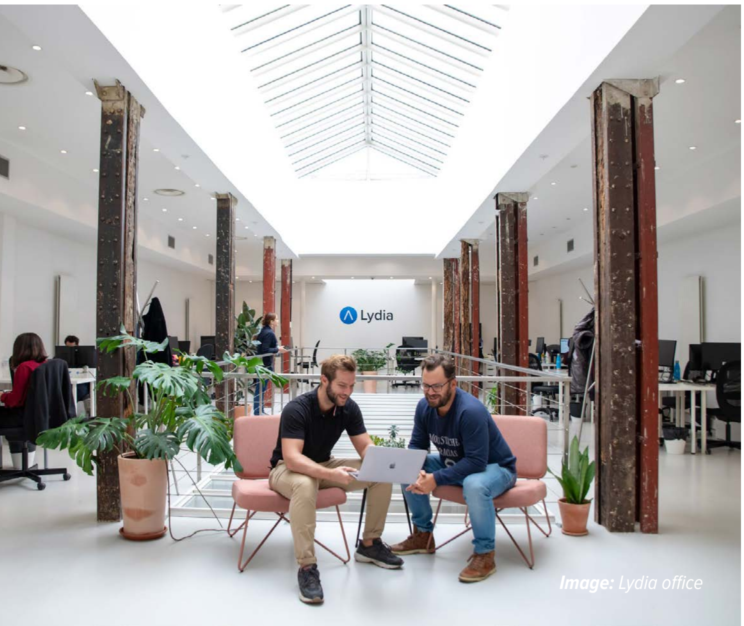


Image: *Lydia office*

TECH STARTUPS CATCH BANKS ON THE HOP

As embedded finance has grown to be a global $43bn industry, it's the fintechs and tech startups more broadly, not the banks, that have led the charge. Fuelled by cloud technology, these startups are providing turn-key technology across buy now, pay later (BNPL), banking as a service (BaaS) and embedded insurance and wealth management services so that organisations from every sector can expand what they offer to their customers.

> **"Banks have a culture that is focused on risk. [Startups] can just attack any kind of revenue stream and go for broke."**
>
> ***Niklas Kammer**, equity analyst, Morningstar*

But why has it been the tech startups and not the banks that have made the most of this opportunity? After all, they have the regulatory framework and expertise too. Experts such as Morningstar's equity analyst Niklas Kammer, believe a lot of it is down to culture. "Historically, it's true banks were the main intermediary between corporations and the financial world. That is all breaking up now," Kammer says.

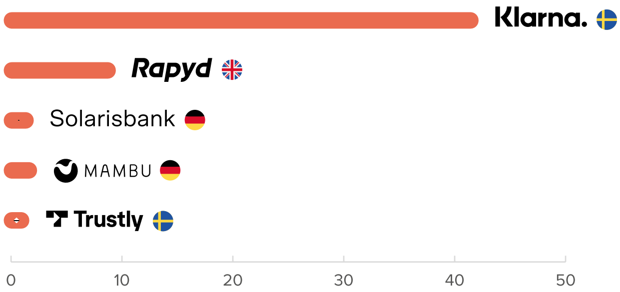
"Traditional banks have a culture that is focused on risk. They're highly regulated and have low margins with a big balance sheet and that's how they drive their profitability. It's very difficult for them to lower their cost base and become more agile as an organisation. Then you have smaller players coming in, that can hire the talent, and don't have to show profitability in the first 10 years. They can just attack any kind of revenue stream and go for broke."

Grappling with a legacy technology stack is, of course, another issue. According to IBM, 92 of the world's top 100 banks, 10 top insurers and two thirds of the top 25 retailers, still use mainframes. They're known for their reliability, security and relentless processing power — the IBM z15 mainframe, for example, can process 220k encrypted transactions per second (19bn per day).

Europe's success stories include Klarna, the world's second most valuable fintech

Europe's top embedded finance startups by valuation (€bn)

Source: *Dealroom*



A MULTI-BILLION EURO OPPORTUNITY

On the other hand, mainframe technology cannot be updated quickly. Changes to architecture, processes or applications take a long time and come with the risk of complications. In comparison, organisations built on cloud technology are more agile. Innovation is second nature and they're free to pivot to new services and products according to the gaps in the market. "A lot of the traditional financial infrastructure relies on decades-old technology," Pitchbook emerging technology analyst Rober Le, says. "Open banking has been a big eye opener for them to realise they need to be cloud native but they need to be API native as well. And they have been investing in that. But I think fintechs just do it better. It's much easier for them."

That potential for innovation has been exciting investors across the entire value chain. In 2021 alone, Swedish BNPL giant Klarna raised $639m; BaaS provider Solarisbank raised €190m; London-based FintechOS closed a $60m Series B round; and the German insurtech Afilio secured $13m in Series A funding.

Filip Dames, cofounder of Cherry Ventures, which participated in Afilio's round, says the competitive advantage of these startups lies in their ability to respond to customer insights. "Technology and data have enabled fintechs and insurtechs to offer much more personalised, more relevant products. Embedded solutions can offer these products right when and where they are needed. That's a great strategy when competing against the big marketing budgets of incumbent players. It's about generating fast feedback loops and making changes when things do not work."

Of course banks have held that data for decades, embedded finance expert Simon Torrance says. "That asset was trapped within the banks and the credit card companies and they didn't even bother to do anything with it."

OPEN BANKING MOMENTUM

European open banking regulation, known as PSD2, forced banks to give regulated entities access to their customer data via APIs, providing the customer authorised it to happen. Fintechs can then use that transaction data to provide budgeting advice, loan approval and other services. It essentially enables the startups to offer almost every product that had been the sole domain of banks. Although PSD2 has existed since early 2016, it's only been enforced since 2019 and experts say we're just scratching the surface of open banking's potential.

"For customers, what open banking does is make your bank account something useful," Keith Grose, head of UK at the open banking platform Plaid, says. "You can share your financial data, you can share your financial health … you basically turn a bank account into a service that can be used for onboarding, lending, budgeting, payments, ecommerce, you name it."

In Germany, Banxware has made use of that technology to launch its lending as a service offering, and bridge the gap many SMEs face when it comes to securing funding. The tool includes anti-money laundering (AML) and know your customer (KYC) compliance, and a scoring engine that analyses account

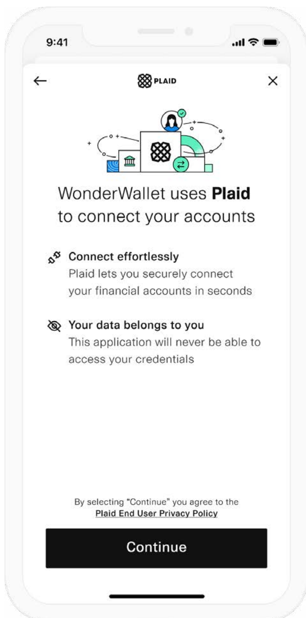


Image: Plaid

data to provide an instant loan decision and payout in as little as 15 minutes. “Smaller merchants have real difficulty managing their liquidity and getting access to fast money,” co-founder Miriam Wohlfarth, says. “In Germany, you can’t get a bank loan if your business is under two years old.” The startup raised €4m in seed money to launch in December 2020 and has already processed €10m in loans via its partnerships with delivery giant Takeaway.com, ecommerce marketplace company The Platform Group, and German neobank Penta. It will raise a Series A round in 2022.

Wohlfarth, who cofounded RatePay with an early BNPL concept in Germany 12 years ago, says the market has moved on considerably. “No one wanted it,” she says of the fundraising experience back then. But there are still challenges in scaling the revenue-based finance solution. “A lot of our potential customers have difficulties in giving us access to the data. It’s not that they don’t want to but their technology is not that great. The integration can take a long time, or we have to find workarounds.”

> **“The sluggishness of traditional banks’ ability to evolve has made consumers open to new brands”**

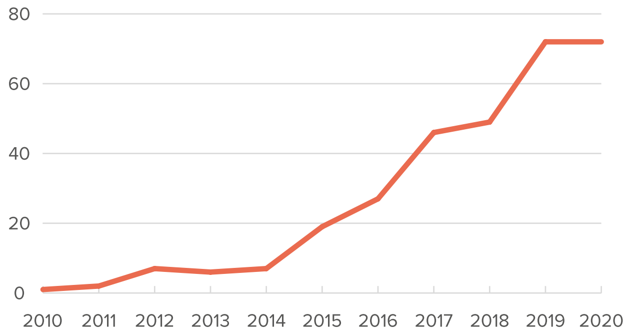
APPETITE FOR DISRUPTORS

The sluggishness of traditional banks’ ability to evolve has also made consumers open to new brands operating in this space, Alex Marsh, head of UK for Klarna, says. One in five UK customers already use a challenger bank, and it’s estimated the number of neobank accounts will surpass 145m in Europe and North America alone by 2024. That openness is also true for the popularity of embedded services within non-financial brands, he adds: “The growth of these embedded products really is a function of the fact that consumers in the UK have received pretty poor service from the incumbent banks, for many many years.” That’s made them more open to accessing financial products elsewhere and in new ways.

Over the last three years, a neobank launched every five days somewhere in the world

Global annual neobank launches, 2010-2020

Source: *Exton Consulting*



Founded in Sweden in 2005, Klarna is now the largest private fintech in Europe. Its BNPL service is used by 90m users in 17 countries, who make 2m purchases a day, across 250k retailer websites. After a recent funding round, it’s now thought to be worth more than $45bn, almost twice as much as Deutsche Bank, and is expected to IPO in the next couple of years. The startup makes money primarily as a payment processor, Torrance says, competing with PayPal and Stripe, rather than as a lender. Merchants pay a fee for Klarna’s service because it acts as a marketing tool, attracting more customers, and reduces cart abandonments at the checkout.

Image: *Klarna office*


Image: Satispay

Marsh says the embedded nature of the product has also helped accelerate Klarna's rapid growth. "The fact that we partner with [known] retailers drives the awareness among consumers. Often the scale part can be the challenge actually. Incumbent banks do have a really strong grip in terms of retail banking, particularly in the UK. Fintechs need a genuine point of disruption but they also need to reach critical scale in terms of awareness and adoption."

That's one competitive advantage incumbent financial institutions can take benefit from, Le says. "A lot of credit card companies are coming out with their own BNPL services. And because they already have relationships with all the merchants, their distribution is a lot easier than Klarna, for instance. They just have to build the product." Visa has recently rolled out APIs so its clients can develop their own BNPL installment payment programmes, alongside other digital solutions.

Italian smart mobile payment app, Satispay, also expects to expand into BNPL in the future, Alberto Dalmasso, founder and chief executive, says. "More and more we see the willingness of the population to leave the banks to jump onto tech companies' services," he adds. "It's a matter of service — banking is a service, finance is a service. And the level of service you have with a tech company — consumer oriented, product first — is something that's never been achieved by a bank. What people are looking for are super apps that can make your life simpler. Once you're loved by your customer base, you can leverage that to add in services."

BANKS FIGHT BACK

Banks are also starting to make moves to compete with, acquire, or partner with the fintechs that are disrupting this sector. "They're starting to wake up a bit because the danger is they get relegated to a commodity position and they won't have the customer relationship anymore," Torrance says. "The forward thinking ones have created their own separate tech ventures. They have access to lots of customers, access to banking services, brand trusts and brand recognition, and are selling into the digital companies or the brands who want to have embedded finance to support their propositions."

> **"Banks are also starting to make moves to compete with, acquire, or partner with the fintechs that are disrupting this sector"**

London-based fintech 10x Future Technologies recently raised $187m to expand its offering, helping established banks build next-generation services and tools to help legacy systems work more efficiently. Its founder Antony Jenkins is the ex-chief executive of Barclays, and 10x is reportedly currently building services for Westpac and Nationwide. Other notable BaaS players include Railsbank, which closed a $70m in July and announced a partnership with Plaid; and Rapyd, which is now worth an estimated $2.5bn and working with around 5k businesses.

In Spain, BBVA is one bank embracing the potential embedded finance offers. It has developed its own BaaS offering, and announced in 2020 that it's collaborating with Google Pay in the US to offer digital bank accounts to interested customers. In Europe, it's one of the main investors behind BaaS provider Solarisbank and has participated in four funding rounds so far. Carmela Gómez, head of open banking at BBVA says such partnerships are becoming more common for banks. "I think every big bank now has such a partner. We're learning a lot, we're exploring what this means in terms of security, in terms of due diligence, and in terms of providing services to a platform that is not yours so you cannot control the customer experience completely.

"The trend is unavoidable," she adds. "All the digital behaviour from the customer, all the technology enablers, all the regulatory pressures, is forcing us to move towards open banking. But beyond that, I think the main drive is client behaviour. The need for financial services will never go away, in fact we need banking more than ever before. And the only way that banks can service financial services everywhere is by adopting an API-first mindset."

"All the digital behaviour from the customer, all the technology enablers, all the regulatory pressures, is forcing us to move towards open banking."

***Roland Folz**, chief executive, Solarisbank*

BUILDING ECOSYSTEMS

Solarisbank, which provides a range of financial services via an estimated 180 APIs, recently raised €190m in a Series D round and announced the acquisition of one of its competitors Contis. That takes the company's value to €1.4bn and will enable the Berlin startup to expand beyond Europe, into the UK and Asia. Solarisbank counts American Express, BP, and Samsung among its customers and is currently active in Germany, France, Italy and Spain, although it can cover the whole European Economic Area with passporting.

"The momentum on the client side is really strong," Solarisbank's chief executive Roland Folz says about the interest from potential partners. "In general banks are the product providers and for the longest time ever, they only focused on their own products. You have a huge camp of traditional banks that have a lagging value proposition. They don't know how to differentiate. But they realise there's a world out there from a customer perspective and they cannot just focus on their own products anymore".

"You have a huge camp of traditional banks that have a lagging value proposition."

***Roland Folz**, chief executive, Solarisbank*

"BBVA is one example of a modern bank but there are others that understand building a successful ecosystem may not be possible on their existing platforms because of its limitations," he adds. "The time to market to add that additional product with Solaris, for example, is of course much faster than deciding to go for a credit license, and then build a tech stack, and then do the processes and integrate the offering."

***Image:** Solarisbank office*

Embedded finance

Chapter III

The next frontier

Post-Covid, will embedded finance change customer behaviour for good?

The embedded finance trend has been gathering momentum for some time but experts believe Covid-19 has changed the trajectory of this opportunity, and accelerated adoption among non-financial brands. Ecommerce in Western Europe grew by 26.3%, according to research company eMarketer, with 96% of consumers shopping online (up from 60% the year before). Three quarters of European consumers predict they'll stick to their pandemic online shopping levels in the long term.

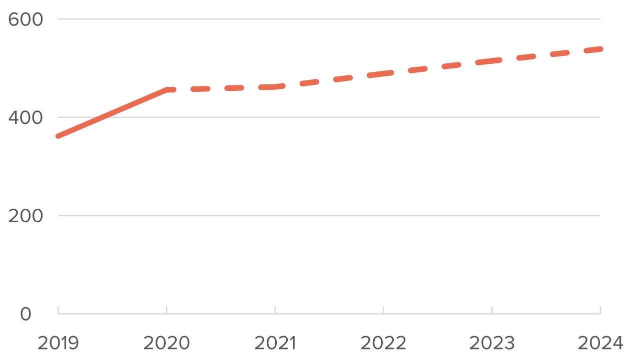
That's created opportunities for brands, not only in terms of new business model opportunities — in the UK alone, 85k businesses launched online stores or joined online marketplaces for the first time — but also the sheer volume of customer data and insights that's now available. Economic uncertainty during and post lockdown has left many leaders looking to explore new revenue streams and products or services. "Most business models of traditional sectors are under significant pressure if they don't rejuvenate," embedded finance expert Simon Torrance says.

"Brands are looking to add more functionality and value to their customers, and financial services are a very attractive part of that. It's a way for all kinds of companies in all kinds of sectors to hook into people's everyday activities, create new relationships with their customers, and help businesses think differently about their space in the world."

After a 26% jump in 2020, growth in ecommerce sales is set to stabilise

Projected retail ecommerce sales in Western Europe (€bn), 2019-2024

Source: *eMarketer*

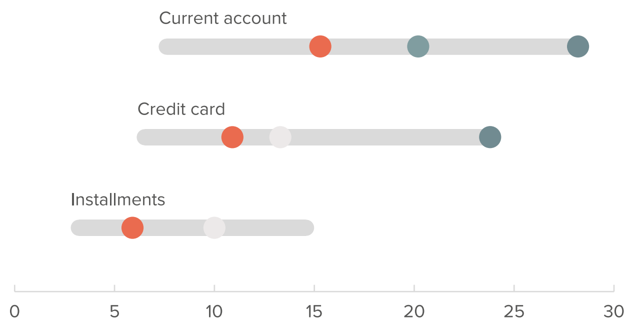


Case study Germany: 61% of survey respondents can imagine using an embedded finance offering

Survey on willingness to use embedded finance products from notable ecommerce companies

● Median value ● Amazon ● Lidl ● Ikea

Source: *Solarisbank, Handelsblatt*



IT'S ABOUT 'FINANCIAL INCLUSIVITY'

Recent research by management consultancy Accenture, in partnership with open banking platform Plaid, found 87.5% of the non-financial companies that have begun to offer financial solutions had increased engagement levels and 85% said they'd attracted new customers. More than two thirds (70%) are using partners, buying or licensing technology as part of their embedded finance strategy. Another study by Solarisbank and the Handelsblatt Research Institute found 61% of German online shoppers could imagine purchasing financial services from an ecommerce provider.

In the future, banking will be something that customers 'do' with their favourite brands, incorporated into the products and services that they already use. The potential of that is huge, Louisa Murray, chief operating officer at Railsbank, says. "I don't think we've even seen the tip of the iceberg. This will absolutely move wider than just fintechs and startups, to sports clubs and big brands that have never even thought of this stuff. They've got good engagement with their fans, they can widen that even further. It's about financial inclusivity."

One potential stumbling block to the rollout of these services, many of which are powered by open banking, is awareness of the benefits. According to a survey by the Federation of Small Businesses in the UK, the majority of business owners are wary about sharing banking data electronically. Only 15% currently do so (largely to update accountancy software), and two thirds say they would not consider sharing their banking data with other financial services providers electronically. Four in 10 (43%) believe it's unsafe, and 37% are unsure of the benefits.

"Financial technology is enabling this explosion of new innovation," Torrance says. "For digital natives like Uber, Airbnb, Revolut, this is meat and veg for them. But for the rest of the world – Tesco, Vodafone, Asda, for example – this is completely new. A big challenge is education in terms of how valuable this is to improve the core business model of the embedder companies. They just don't know what's possible – this wasn't feasible a few years ago. The second challenge is getting the consent of the user [for the open banking API], and you have to create an incentive or motivation for them to do that."

Image: Uncapped founders

> **"For digital natives like Uber, Airbnb, Revolut, this is meat and veg for them. But for the rest of the world – Tesco, Vodafone, Asda, for example – this is completely new."**

***Simon Torrance**, embedded finance expert, Embedded Finance & Super App Strategies*

REVOLUTIONISING B2B

One startup driving the momentum in B2B embedded services is Uncapped. The London-headquartered, Warsaw-based fintech recently raised $80m in debt and equity funding to expand its revenue-based lending platform. Entrepreneurs can access working capital between £10k and £5m for a flat fee, and receive a decision on a loan application within 24 hours, thanks to open banking technology. "Our vision has been about democratising access to capital," cofounder Asher Ismail says. "You couldn't have built a company like us five years ago because there wasn't a consistent enough dataset. Now we can build a cash flow and return revenue history for these companies in real time."

The result is a more personalised service that's more tailored to an entrepreneur's current needs, rather than the archaic credit score system that traditional banks use. "If you took the credit score of almost all the customers on Uncapped, you would say they're completely uncreditworthy because they're investing every pound they have back into growth. A business like that is just not going to have a great credit score. That's just a really antiquated system that was designed for a different generation of companies." In the future, Ismail expects tools like Uncapped to become embedded in B2B purchase flows, so that entrepreneurs can use it in real time to make purchases, "and then get on with growing their businesses".

That's exactly what Banxware is building in partnership with Lieferando, the largest food delivery platform in Germany. Lieferando partner restaurants now have access to instant cash advances, based on their recent

Image: Banxware team

revenue. “It’s a paperless, completely automated liquidity solution,” Miriam Wohlfarth, cofounder of Banxware, says. “We saw huge disruption in ecommerce in the last 15 years but that did not happen in B2B. This is now going to happen. People have gotten used to everything being easy in other areas of their lives. They want great usability for their businesses too.

“There are lots of possibilities. It’s changing so much,” she adds. “The horizon we have for planning is the next three to six months. The most important thing now is to really listen to the customers, understand them and then go and change things.”

KEEPING AHEAD

Embedded finance as a sector is moving so fast, it’s not surprising Banxware is only planning a few months ahead at a time. Manuel Silva Martinez, general partner at Mouro Capital, which took part in Uncapped’s recent funding round, says one of the challenges for these fintechs is keeping up with evolving customer needs. “Two things are crucial in this space,” he adds. “Access to funding (and understanding how it can be optimised with growth and maturity), and teams that have a world-class product vision. They keep on innovating and evolving their offering by reacting to customers’ feedback.

“Building these kinds of solutions takes time, especially if a regulated element comes into play, so it’s crucial they’re future proof and push the boundaries of embedded finance. Otherwise there is a risk that by the time the new product hits the market, the market has moved past that need,” he says.

Of course, rather than just responding to feedback, embedded finance solutions also have the potential to change customer behaviour for the better. Upside Saving is an intelligent cashback API and app, powered by open banking, that has raised $2m in pre-seed funding so far. Andries Smit, founder and chief executive, saw real potential in creating a savings product that would work alongside people’s established spending habits. “One of the frustrations I always had is, when you're talking about saving and investing personal finances, you always only resonate with a certain segment of the population – the people who’ve got more money than they spend, and therefore it's coincidental that they then become savers. Rather than saying to people ‘you should save’, we wanted to find them new money by plugging into the spending habits that already exist.”

“Rather than just responding to feedback, embedded finance solutions also have the potential to change customer behaviour for the better”

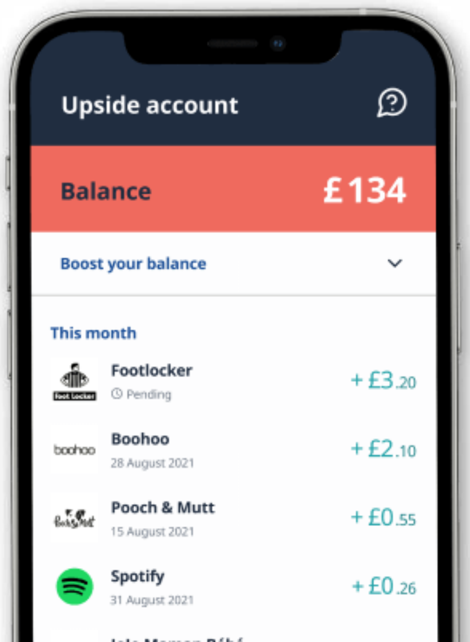


Image: Upside Saving

The platform has already attracted nearly 10k users since launching in beta in 2020, and has a pipeline of 60 organisations interested in embedding Upside into their websites. "We've been pleasantly surprised about the organic demand," Smit says. "We are simply where people are in their everyday apps – that could be banking, fintech, insurance, shopping, charities, football clubs apps. Businesses are realising customers want frictionless rewards, and they want to use that to create sticky engagement with their users."

He also believes the pandemic has bolstered interest in savings products. Data shows the EU household saving rate has climbed 6.6 percentage points higher than it was a year ago, largely because of a decrease in household expenditure. "Lockdown skewed open banking implementations very much to a savings proposition," Smit adds.

HELPING PEOPLE ACHIEVE 'FINANCIAL WELLNESS'

Financial wellbeing is something Zurich-headquartered additiv is also trying to address with its embedded wealth and banking-as-a-service platform. The company has around 450 APIs that allow clients such as asset managers, independent financial advisors, insurers and neobanks to build a wealth management portal in as little as three to six months. "A large number of people globally need help to understand where they spend and how they spend, and need assistance with basic financial planning and investing," Christine Schmid, additiv's head of strategy, says. Recent research by

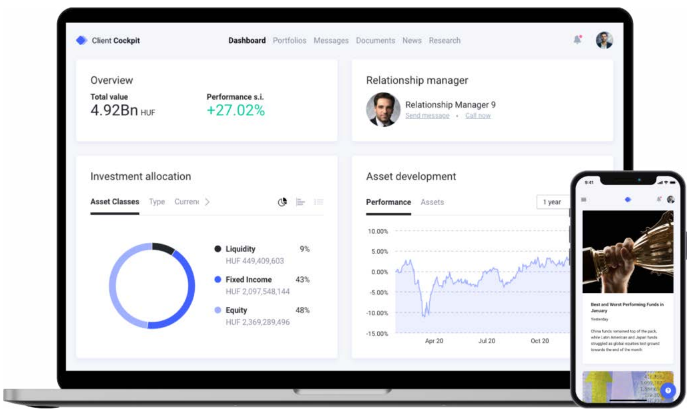


Image: additiv

additiv estimates embedded wealth management could increase the size of the worldwide market by up to $33tn in assets in the long term.

"Savings don't help you to gain investment returns of a diversified portfolio, it's just a way to store money. It's transactional," she says, adding that an embedded proposition is perfect for wealth management because it exists within the context of a user's life. "Wealth, health or home insurance, life insurance, wealth planning, financial wellbeing or even cashback ecosystems — these are context relevant journeys. They don't need to be at an interaction with a bank."

> **"If you're poor, you get terrible, expensive financial services. You pay way more than rich people do."**
>
> ***Simon Torrance**, embedded finance expert, Embedded Finance & Super App Strategies*

Torrance agrees. He sees great potential for embedded wealth management tools like those developed by additiv to tackle issues such as the global pension deficit. In Europe, for example, 43% of people are not saving into a supplementary pension. According to additiv, in the 20 largest OECD countries, there is more than a $78tn deficit in pension assets. "We as a society can't afford to retire," Torrance says. "We're going to live to be 100 years old. The state can't afford to keep us going that long and we aren't saving enough. The protection gap is in the trillions.

"Embedded finance is a very powerful way of trying to address financial wellness for all, not just a few. The danger if we don't do that, is you start to get huge inequalities and unrest. If you're poor, you get terrible, expensive financial services. You pay way more than rich people do. Therefore you have enormous proportions of the population that are underbanked, underinsured, under protected and are not saving enough. Embedders can create unique solutions for their customers, which has societal and commercial benefits. You can get exactly what you need in a way that suits you."

But there has been criticism that BNPL services like Klarna are saddling younger customers with debt they can't afford. Research has found UK consumers now owe an average of £244.37 per person to BNPL services, and 45% of young people admit to missing at least one payment. Millennials and Gen Z have been found to spend 44% and 72% more (respectively) on orders if BNPL is available. There are also reports of young Brits being refused mortgages because they've used BNPL, even if they've never missed a payment. Because some BNPL products don't charge interest, they fall outside of the UK's Financial Conduct Authority's remit, although that could change. The rules are expected to be tightened after the government promised to take "swift action" in February. In the meantime, Klarna launched KlarnaSense, a resource tool to encourage consumers to take a moment to ask themselves: 'Do I love it? Will I use it? And is it worth it?' before making a purchase.

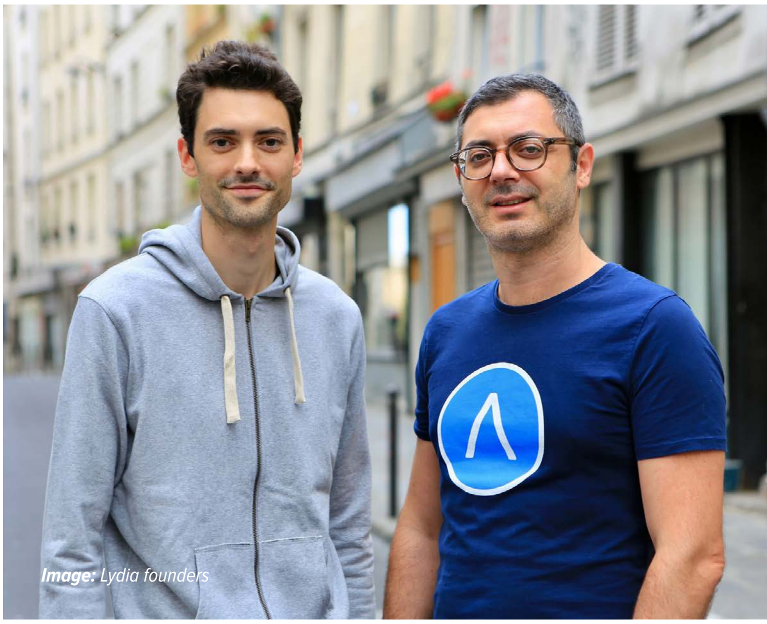


***Image:** Lydia founders*

> **"Most people think the digitisation and evolution of these sectors will create a solution that is colder and less human."**

***Cyril Chiche**, co-founder, Lydia*

BRINGING THE UNBANKED INTO THE FOLD

Financial inclusion is one of the key facilitators in the UN's 2030 Sustainable Development Goals (SDGs). It features in eight of the seventeen SDGs, including eradicating poverty, ending hunger, achieving gender equality, and promoting economic growth and jobs. According to the World Bank Group, there are an estimated 1.7bn unbanked people worldwide.

In Mexico, BBVA is partnering with Zolvers, an employment marketplace for domestic workers, to connect 25k of its users with banking services for the first time. "It's been very difficult for banks to bank some people," Carmela Gómez, global head of open banking at BBVA, says. "But it's not that difficult for a platform that is already providing different kinds of services to those unbanked people, and is already a source of trust for them. Perhaps they're not familiar with what banking means, but they're very familiar with these platforms that they use every day."

Gómez believes in the future, open banking will evolve towards open finance. "The use of data will probably need to be addressed in an open finance, and not only an open banking way. That means we'll share data around other areas — not strictly banking — that will provide a much better understanding of who the customer is and what they're looking for in their lives."

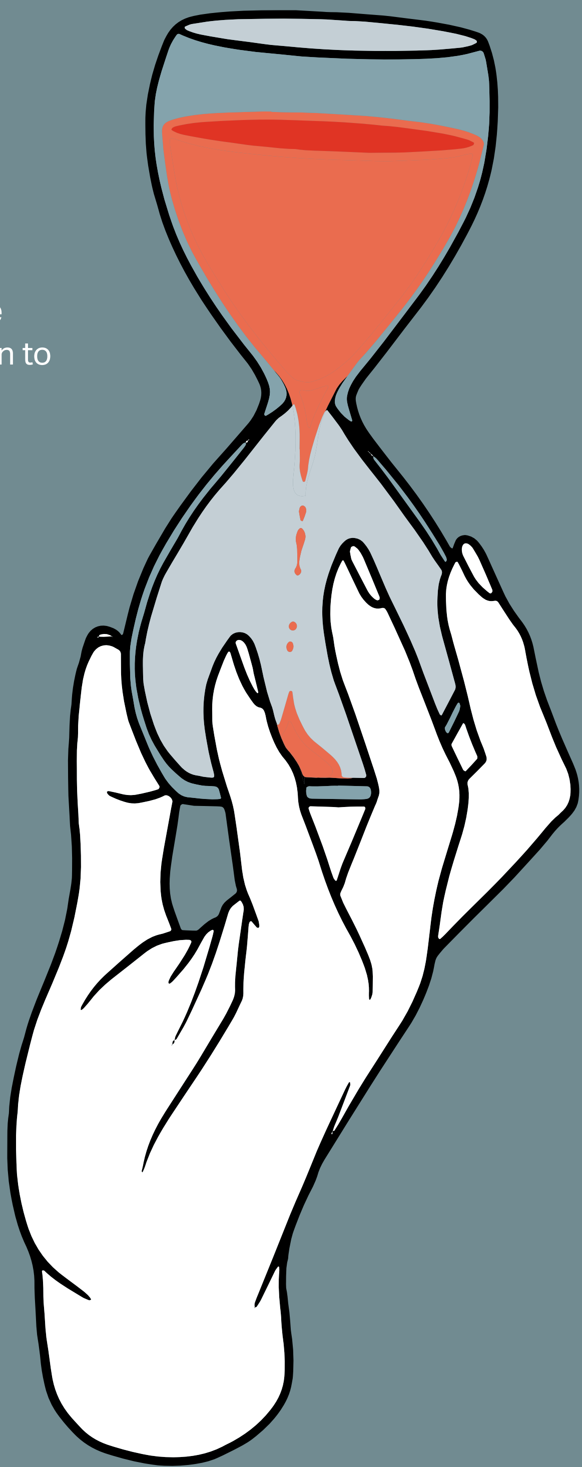
That personalisation of services will only be a good thing, Cyril Chiche, cofounder of Lydia, the French peer-to-peer money transfer-turned-super-app, says. "The biggest impact [of embedded finance] is not really about who will be the dominant players of tomorrow. The biggest impact will be for consumers. Most people think the digitisation and evolution of these sectors will create a solution that is colder and less human. But we believe the exact opposite, that you have to bring the human back to the centre."

"This business is really all about trust. The more you interact with customers, the more you can show that you bring them solutions and help them have a simpler financial life, the more that trust grows."

Embedded finance

The future

Experts reveal the trends we should all be paying attention to



Europe is next

"Some geographies including Europe are underdeveloped and will follow the same market trend of embedding financial services that we've seen elsewhere. That's why we're investing based on geography, and we're also investing where we think embedded will expand to new types of customers, like SMEs, who will also want to get their finance where they're buying something else."

***Alan Vaksman**, managing partner and cofounder, Digital Horizon*

Huge disruption for B2B

"Embedded finance is one of the biggest new developments, which really disrupts the financial industry. Open banking was also a big disruptor but it took a long time until something really happened. That's now become the rails for these new services, to provide the data and infrastructure to make this possible. We now expect huge disruption in B2B, like we've seen in ecommerce."

***Miriam Wohlfarth**, cofounder, Banxware*

Not a winner takes all market

"I don't think there will be only one winner in any of the subspaces of embedded finance — it's just not a winner takes all market, because it's massive, but also because Asia, the US and Europe are very different markets. There's a cultural aspect to how people buy things. I think there's room for two or three winners in each geography and per subsegment."

***Enrique Martinez-Hausmann**, associate, Speedinvest*

Mega-company shopping sprees are likely

"The entire ecosystem will continue to grow over the next year. Traditional value chains within finance and insurance will be unbundled and innovative technology companies will continue to capture significant market share. We will continue to see consolidation through M&A like in the case of Visa and Tink. Publicly listed finance and insurance incumbents with their current market capitalisations are in a strong position to acquire technology companies and internalise specific know-how as well as access to new customer segments."

***Filip Dames**, cofounder, Cherry Ventures*

Downward pressure on prices

"We'll see more flexible, relevant and affordable services, which will reduce the gap between what people need and what they're offered today."

***Simon Torrance**, embedded finance expert, Embedded Finance & Super App Strategies*

Checkout.com will enter the space

"BNPL will evolve. I think some of the bigger merchants will start developing their own solutions, because it's expensive for them to use. I expect Checkout.com for example to get into this space with its own BNPL, BaaS, and insurance services."

***Robert Le**, emerging technology analyst, Pitchbook*

Will take 'much longer than people think'

"I think embedded finance is going to be like cloud computing. It's going to be absolute. But it's going to take much longer than people think."

***Andries Smit**, founder and chief executive, Upside*

Sports clubs will be big embedded finance players

"I don't think we've even seen the tip of the iceberg. This will absolutely move wider than just fintechs and startups, to sports clubs and big brands that have never even thought of this stuff. They've got good engagement with their fans, they can widen that even further."

***Louisa Murray**, COO, Railsbank*

Embedded finance inevitable for all big brands

"Embedded finance is going to become the norm. Any application where there's already a big user base is going to start to add in financial services as an offering. With these tools and open APIs available, it's easier than ever before to build financial services into an application if you already have brand equity with consumers."

***Keith Grose**, head of UK, Plaid*

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ROBERT LE, emerging technology analyst, Pitchbook

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LOUISA MURRAY, chief operating officer, Railsbank

CHRISTINE SCHMID, head of strategy, additiv

ANDRIES SMIT, founder and chief executive, Upside

SIMON TORRANCE, embedded finance expert, Embedded Finance & Super App Strategies

ALAN VAKSMAN, managing partner and cofounder, Digital Horizon

MIRIAM WOHLFARTH, cofounder, Banxware

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OpenPayd is the leading global payments and banking-as-a-service platform for the digital economy. OpenPayd's clients are delivering seamless user experiences and building a new generation of digital products, all through embedded financial services.

OpenPayd's platform unlocks an ecosystem of financial services, delivering accounts, FX, international and domestic payments, acquiring and Open Banking services globally via a single API integration. With a growing network of licenses across the UK, Europe and North America, OpenPayd is providing the banking and payment solutions digital businesses need to thrive.

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