

FINTECH DISRUPTORS 2019

REMOVING ROADBLOCKS THE NEW ROAD OF FINTECH



METHODOLOGY

Fintech Disruptors Report EMEA 2018, in its fourth year, is a temperature check on the status of digital financial services and the role of traditional financial institutions and fintechs in providing consumers with secure, easily accessible and value-formoney services and products. The report, carried out by MagnaCarta includes the results of a survey of 5,000 professionals within banking, financial services and fintech across Europe, the Middle East and Africa. In addition, interviews have been conducted with 24 experts across the region.

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Head of the FOUNDeRY, Rand Merchant Bank

SPONSOR INTRODUCTION

BET ON FUTURE BEHAVIOURS OVER PRODUCTS

In 2018 the term 'Fintech' finally entered the dictionary. The term is part of our everyday industry speak but it is now in the wider lexicon. The definition is: "products and companies that employ newly developed digital and online technologies in the banking and financial services industries" whichof course is factually correct. However, in my opinion, it is lacking a key dimension, what does Fintech actually solve? What does it contribute to society? Why does it actually matter to consumers? Technology is a tool but not an end in itself. That is why at Klarna, we do not start with technology, but first focus on the question "what are we solving?" It is on this point where we at Klarna believe the real journey has only just begun.

Never before have people had this much technology at their fingertips. Despite access to faster internet, better devices and smarter services, people actually have increasing complexity in their lives and find it harder to solve their daily time equation. This is especially true when it comes to handling money and managing purchases. People now spend more and more time worrying and administering their finances and less time doing what they love. We therefore



"THOSE WHO HAVE THE COURAGE TO ACT AND CHANGE THINGS BASED ON CUSTOMER NEEDS ARE GOING TO BE THE ONES THAT ARE SUCCESSFUL."

Sebastian Siemiatkowski CEO, Klarna

need to eliminate this unnecessary friction and complexity in an increasingly bureaucratic, slow and impersonal world. That means offering services that help people seamlessly pay, finance, manage and keep track of their purchases. It is my belief that we as an industry will have failed in many ways if we cannot have a meaningful impact in empowering consumers to manage their daily financial life.

In the context of this report, the four elements of 'relevance', 'openness', 'automation' and 'data' identified as critical to the future development of fintech are also fundamental to building consumer orientated solutions. This is not coincidental. The consumer will simply no longer be forgiving when their bank or service provider does not leverage the insights available to make their engagement personalised, intelligent and simple. This is not about betting on future products but rather future behaviours.

There is also a clear maturation of views on openness and the historical lines between competitors, partners and customers are blurring. The overall strength of the ecosystem and partnerships will continue to be of utmost importance, not least as the value in specialism becomes increasingly clear. Such is the breadth and complexity of technology as well as market and consumer demands across sectors. It is obvious, no one entity can adequately fulfill all needs to everyone at the level required. We will all need each other.

Ultimately, we at Klarna believe that those who have the courage to act and change things based on customer needs are going to be the ones that are successful.

I hope you will enjoy this year's report and gain some new and valuable insights into how the market will evolve in the coming year.

Happy reading, Sebastian Siemiatkowski

EXECUTIVE SUMMARY

FAIR GAME OR FAIR PLAY?

IN THE DECADE AHEAD THE SUCCESS OF FINTECHS AND BANKS WILL DEPEND ON THEIR ABILITY TO PROVIDE ANSWERS TO QUESTIONS POSED BY FOUR FOUNDATIONAL BUILDING BLOCKS.

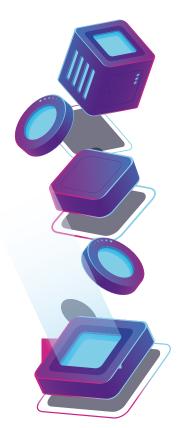
A decade after the Great Recession a lot has changed in financial services. But much has also stayed the same. Not including regulator-enforced bank rescues, league tables of the largest financial services organisations in Europe, and across the Middle East and Africa, are much the same as before the crash.

Despite a dent to revenues, and share prices between 2008 and 2010, global bank market capitalisation has grown nearly 50% in the years since¹. Trust in banking has also bounced back – UK consumers' trust in banks is at the same level as high street retailers². At a time when the number of bank branches in Europe has declined by a fifth, and the number of banks by nearly a quarter³, since 2008.

But all is not quite as it seems. As banks have declined, numbers of new entrant fintechs have swelled – estimated to be anywhere between 5,000 and 12,000 depending on your definition. Including several thousand across Europe, the Middle East and Africa⁴.

Up the scale

Plenty have gone on to become scale players. From mobile money



"IN THE NEXT DECADE RELENTLESS FOCUS ON SMOOTH CUSTOMER EXPERIENCES WILL TRIUMPH OVER TRADITIONAL CHANNEL OR DISTRIBUTION METRICS AS A DETERMINANT OF SUCCESS."

Fintech Disruptors 2019

providers in Africa – a global pioneer – to advanced payments services and challenger banks in Europe, fintech as a sector and a mindset has proved it's here to stay. It's also proved its customer-centred, data-rich operational model is more relevant than banks' in a digital age.

It's a model where relentless focus on smooth customer experiences triumphs over traditional industry channel or distribution metrics. And where the best prospects of success are in enabling commerce in its broadest sense over the selling of margin-first products.

Fintech's 'no legacy' advantage is no longer a given. Progress will be determined by an ability to respond to new technologies and emerging regulations and to scale the organisation accordingly.

Whether the question is where to draw the line between data use and abuse, or how to scale an organisation for inevitable change, fintechs will struggle as much as banks to provide the answers. A failure to do so could quickly turn the building blocks of the new road into potentially fatal roadblocks.



CHART 2

BUILDING BLOCKS OF THE NEW ROAD

Top opportunities for banks and fintechs

Open APIs	Data analytics	Automation/ digitisation	Al	mobile
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4 building blocks

In a break with tradition, this year's research abandons a now arbitrary conflict between fintech innovators and incumbent banks. Four years into the fintech journey, the distinction between them is no longer so helpful, particularly as larger technology firms trying to drive their own re-positioning efforts are also calling themselves fintechs.

Mainly though it's because rapid advances in technology like artificial intelligence, and new regulations on data and data-sharing, are opening a new chapter – for regulators as much as for innovators and traditional institutions. It's a chapter defined by the questions it poses - and to which no side has the answers.

As the report explains, all sides will have to work together to come up with them. When it comes to data in particular, confronting opposing perspectives – of its value, of how to use it and who should own it – could grow the market for financial services at the same time as it improves customer safety.

This report identifies four building blocks of a new fintech road. Although not individually new, a combination of economic and regulatory pressures, and accelerating technological change, will sharpen the attention of providers of all sizes on them in the decade ahead. They are defined as follows:

- 1 Banks in the changing world of financial intermediation, McKinsey & Company, November 2018
- 2 Trust in banks highest since 2012, Accenture, May 2018 www.accenture.com/gb-en/company-news-release-trust-bankscustomer-risk
- 3 European Banking Federation data 2017, September 2018 www.ebf.eu/regulation-supervision/banking-in-europe-ebf-publishes-2017-facts-figures/
- 4 Fintech by the numbers, Deloitte Center for Financial Services, September 2017

BUILDING BLOCKS OF THE NEW ROAD

RELEVANCE

Understanding their purpose. And how to deploy technology to define, and re-define, it.

IMPACT

Customers & distribution

KEY ATTRIBUTES Convenience | Responsiveness

O P E N N E S S

To partnership. Of culture. And a firm grasp of the new dynamics of competition.

IMPACT Strategy & Culture

KEY ATTRIBUTES

Collaborative | Open mindset

A U T O M A T I O N

How, when, and (when not) to automate processes.

IMPACT Service & systems

KEY ATTRIBUTES Agility | Flexibility

DATA

It's use. And it's value – as a profit pool or a source of purpose?

IMPACT Manufacturing & modelling

KEY ATTRIBUTES

Sensitivity | Security





» To stay relevant financial services companies need to align culture with delivery and technology.
» Fintechs and banks moving at two speeds. Often simultaneously within the same organisation.
» A 'no legacy dividend' for fintechs is coming to an end.

BANKS HAVE RESTORED THEIR BALANCE SHEETS AND RE-GAINED THEIR CONFIDENCE – AND THE TRUST OF CUSTOMERS – BUT THEIR SEARCH FOR RELEVANCE IN THE ERA OF DIGITAL FINANCIAL INTERMEDIATION HAS ONLY JUST STARTED.

2018 was a turning point for the financial services industry. And not only because it marks a decade since the Global Financial Crisis brought advanced world economies to a standstill.

Having re-built their balance sheets and restored the confidence of investors – global banking industry market capitalisation has grown nearly 50% since 2010¹ – banks have also fared well, surprisingly so, against a barrage of new competitors from every corner of financial services.

In the UK alone there have been applications for new banking licences from 37 retail "challenger" banks since the Prudential Regulatory Authority was established in 2013 to increase competition in UK retail banking².

Despite their recovery, industry revenue growth is slow – averaging 2 % for the last five years according to McKinsey Panorama, a banking database, well below pre-crash at a discount to peers in other industries going through their own digital disruption – from healthcare to energy, consumer goods companies and telcos. What's driving low investor

averages of 5 to 6%. Bank valuations are also trading

confidence is more than just a period of unexciting results. In the decade since the crash, and despite weak growth, particularly across Europe, new entrant fintechs have proved that they're here to stay.

They've also proved they have the edge over banks in understanding what it takes to stay relevant in the age of digital-first finance. "Consumers today expect relevant, convenient and simple experiences - it's where these experiences come from that has changed dramatically. By 2020 Generation Z will be the biggest market segment to expect digital only services and are unlikely to ever step foot in a bank branch," says Mitesh Soni, director of innovation and Fintech at Finastra.



"A KEY FOCUS FOR US NOW IS ON FURTHER BUILDING OUR CAPABILITY TO EXPERIMENT AND LEARN FASTER MEANING WE CAN RUN A GREATER NUMBER OF SMALLER BETS, DISCOUNT CONCEPTS THAT DON'T WORK QUICKLY, AND FLOW SUPPORT TO VALUE."

> Stephen Dury Santander

The legacy of no legacy

As the inter-generational wealth shift gets going, opinions on the new ingredients for success are converging. As such this year's survey shows a market moving at twin speeds:

- » Speed 1: Consolidating the gains and lessons from the first wave of fintech – characterised broadly as deepening digitisation, extending partnerships and deploying agile techniques at scale to improve time to market and respond to new patterns of demand.
- » Speed 2: Understanding the implications and potential of a new breed of advanced technology, especially artificial intelligence, and right-sizing organisational infrastructures – both human and technological – to be ready for a next, inevitable wave of change.

With Brexit around the corner, the concept of a "two speed Europe" is not new. What's different is that both speeds are as applicable to incumbent banks as they are to fintech innovators. Sometimes running simultaneously within different parts of the same organisation. The "no legacy" dividend of most fintechs is already coming to an end.

You complete me

The business models of traditional banks and non-traditional fintechs are also aligning. Anders La Cour, chief executive officer at Banking Circle, "at the moment we talk about two groups – banks and fintechs but within ten years they will look quite similar – servicing clients with tailored solutions."

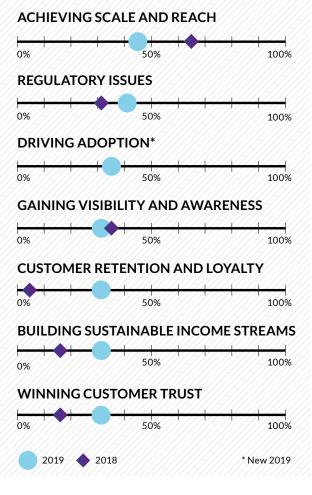
While that plays out in the years ahead, the old fault-lines of the bank-fintech axis remain.

FROM MUST-HAVE TO HYGIENE FACTOR

1 in 5 view mobile as an opportunity

CHART 3

BIGGEST CHALLENGES FOR FINTECHS



Where fintechs score highly in digital relevance, they continue to struggle in achieving scale, driving adoption and building strong enough, trusted reputations to displace existing banking relationships in meaningful numbers. If anything it seems to be getting harder for them this year.

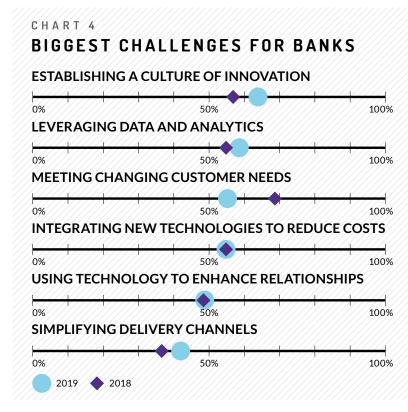
Banks on the other hand, despite coming to terms with the impact of fintech on their own businesses, are still grappling with last mile digitisation to help them unlock the potential to build efficient, more agile, responsive organisations. In the survey this year, one in five banks view new revenue models as a primary opportunity, compared with one in ten fintechs, an increase of 50% over 2018. And the perceived direct threat of fintechs on banking revenues is as serious as ever (chart 5). Now more than ever, bank and fintech need one another.

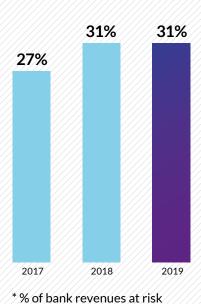
Just good hygiene

The survey also points to the emerging hygiene factors of the new banking - core components, but not determinants, of digital success. Mobile solutions and data and analytics, once lord and master of most in-bank transformation strategies, while essential, are only as valuable as the culture that deploys them.

Mobile dropped to fourth place among banks and

CHART 5





STILL THREATENING

from fintech competition over next 5 years

fintechs this year as a primary opportunity (down from first or second in the previous two cycles of this survey, tied with data and analytics among fintechs). In contrast, fintechs continue to lead over the region's banks that are still trying to work out where data fits in their business. More than double the proportion of banks versus fintechs picked data as a key opportunity for 2019.

Channelling infrastructure

Staying relevant in the new world of banking is not confined to delivery channels. Data is also a key enabler for the continual process of renewal pioneered by digital giants like Amazon and Google that's essential for digital disintermediation. To determine what the customer wants, and when she wants it.

Sometimes with dramatic results: "Fintech is helping to solve the problem of an ageing customer base in the life insurance market. The technology that we use has

opened up this sector to a millennial audience - over 70% of the policies we've sold are to consumers under the age of 40. That's the direct inverse of the wider life insurance category, where the vast majority of policies are sold to people aged 50 and older," says Andre Fredericks, chief information officer at South Africa-based IndieFin.

Over the next five years, applying analytics to respond to what the data is telling you will become essential to escape the commoditisation trap of next generation financial services. A challenge that will become more acute as automation of everyday payments

QUESTIONS DOWN THE ROAD

- » How do organisations stay relevant without the right data and analytics?
- » How do you right-size organisational infrastructure for inevitable change?
- » How should organisations respond to reduced ability to predict the future?

and processes becomes commonplace, and the physical moment of payment starts to disappear.

"Some products and services are becoming commodities and the complexities are invisible to the customer – the way funds move from A to B for example happen in the background – we just expect them to work. Sensors and the internet of things are already doing transactions

> on our behalf and these will become more commonplace. In future a lot of innovations will come from adjacencies," says Mr Soni.

> Without the right infrastructure, paired with the right culture, it will be impossible to know what the right adjacent opportunities are. And irrelevance will be a thumb swipe away.

2 Interview with Clair Mills, head of change and data management, Bank of England, Central Banking, November 2018 https:// www.centralbanking.com/awards/3858681/ interview-clair-mills-on-the-meaning-of-fintech



"BIG BANK ECONOMIES OF SCALE HAVE CONVERTED TO THE COST OF COMPLEXITY"

Martijn Hohmann Five Degrees

¹ Banks in the changing world of financial intermediation, McKinsey & Company, November 2018

REVOLUT: RE-THINKING DELIVERY

Launched in 2015, Revolut was conceived to make it easier for travellers to buy, exchange and spend foreign currency abroad through an app-enabled prepaid Mastercard and Visa.

The company has since evolved to become the world's second largest "challenger" bank after Brazil's Nubank – with a growing range of services including insurance, cryptocurrency sales and credit card lending.

Approach and mindset

» To enable a world of money without borders

Attributes

- » Solution-centred Created to solve a specific problem – the high costs of transaction and foreign exchange fees for international travel – and to make it easier to buy and spend foreign currency.
- » Scaled for scale Customers can trade, hold, spend and transfer 150 currencies, including 5 cryptocurrencies. Company adds and improves services as the number of customers grows and can adapt to changing customer demands rapidly.
- » Independent-minded Avoids copycat models instead launching and trialling products which might even seem archaic such as the launch of a Metal card in 2018.
- » A physical-digital experience Blends digital app functionality with physical card – from loading funds to making transfers, spending, and managing spend.

Next challenges

- » Keeping up with customer service demand as the number of customers has grown.
- » Understanding how to use AI to differentiate products to customers and enable growth.
- » Enabling deeper personalisation through advanced technology to enable customers to create and curate the services and products they need – no matter how individual.

Results

» Company is now the second largest digital challenger bank globally after Brazil's Nubank and adding over 8,000 new customers a day¹.

1 Fintech Q3 2018 Briefing, CB Insights 2018



Nikolay Storonsky is Founder & CEO of Revolut





PROGRESS ALONG THE NEW ROAD

» A customer-first approach is key to overcoming the complexity of the new road.
» The model of competition is changing – an open mindset is becoming essential for success.
» Fintechs and banks are trying to define the new rules of an open ecosystem.

THE QUESTION OF 'OPEN VERSUS CLOSED' COMPETITION IS AT THE HEART OF THE DIGITAL CHALLENGE. TO SURVIVE, TOMORROW'S 'DIGITAL DISINTERMEDIATORS' NEED TO BE READY TO BUILD AND TAKE PART IN THE ECOSYSTEM THEY WANT TO PLAY IN.

Twentieth century financial services ran on a linear principle of competition of "them" versus "us". Regulators, vendors, and competitors kept businesses keen and made them buy new equipment when the market got tougher (them), versus (us) – a bank or insurance

company that was pretty much guaranteed an easy ride providing they kept pace with the market.

The digital age has changed the old rules. Sometimes to such a degree that the lines between competitors, partners and customers have blurred as to become almost invisible.

Is Uber a transportation company, a payment provider or an employment agency? The answer will determine how the business is regulated (and taxed). So how should you answer, knowing that how you answer today might change when the competitive tide turns?

The impact of open banking and PSD2 regulation across Europe, and their gradual adoption in other regions, will only accelerate the disorienting feeling for many banks, and a fair proportion of fintechs as it takes effect in coming years.

Zero knowledge-proof

As a market driver, openness is not confined to compli-



"AS A BANK YOU HAVE PHYSICAL AND DIGITAL CHANNELS— APIS ALLOW YOU TO EXTEND DISTRIBUTION BEYOND THAT. WE'RE THINKING ABOUT HOW WE BUILD API-ENABLED PRODUCTS AND SERVICES THAT CAN EXTEND OUR REACH"

> Alex Park Metro Bank

ance with the principles of new regulation. No matter how new rules are adopted, applied or interpreted, successful digital disintermediators need an open mindset. This means accepting their place in an inter-connected ecosystem where success is achieved by identifying win-win (them *and* us) scenarios. And that they can no longer predict the future with the same degree of certainty.

Although this might come easier to fintechs that start out with very different organisational cultures, than to banks, it's not just about the "no legacy" luxury of innovators. It's also about unrelenting commitment – to the spirit of the new rules and to work with partners to smooth out

CHARTG

HOW FINTECHS CAN HELP BANKS MEET THEIR GOALS

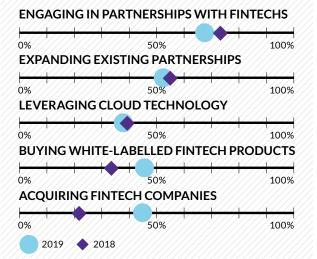
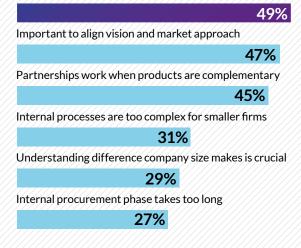


CHART 7

BANK EXPERIENCE OF PARTNERING

Important to invest time to decide who to partner with



existing processes. Even in unrelated areas.

"[In payments] there's a number of touchpoints that cut across the merchant and consumer vertical. We come at this from a user perspective - what's the consumer problem you're solving and then we have to make changes," says Michael Rouse, chief commercial officer at Klarna in Sweden.

After all, when the novelty of getting a shiny new bank account by mobile has passed how do you incentivise the customer to ditch her primary bank account for yours in sufficient numbers? According to this year's survey, it's getting harder as competition heats up.

Some banks across the region find it easier than others. Dutch lender ING's success with ING Direct in the nineties and the early years of the dotcom era prepared the bank for the challenges of digital by showing staff that the old certainties of banking were in the past. "One principle is fail fast – if an idea doesn't work, we're willing to let it go," says Karien van Gennip, chief executive of ING in France.

A sentiment echoed by another division of the bank, "When it comes to technology and products, we have to accept that we can never be 100 % sure of what's coming and we need to have a culture in place that supports that view of the world in a customer centric manner to keep validation ongoing," says Mariana Gomez de la Villa, ING's program director for distributed ledger technology.

No fintech is an island

Solutions to the challenge will be built together. Often directly with customers, "it's also about picking your customers. You have to make careful choices," says Mr Rouse, "ask yourself 'who do I want to work with that also wants to solve the same specific problems?'"

The compatibility of the challenges faced by banks

and fintechs clear the way for greater openness to partnership and collaboration.

In principle, both sides seem to have got the message – banks and fintechs want to pair up. In the survey, partnering or extending existing partnerships are the main goals of banks' intentions

QUESTIONS DOWN THE ROAD

- » Fintechs and banks need to ask themselves -Who are we? Who do I want to work with?
- » What is the best partnership model to deepen digitisation and drive customer adoption?
- » What is the role of regulators in setting digital standards and enabling innovative businesses?

This works in closed loop environments too. While not a regulator, Transport for London's introduction of contactless payments in the UK (quite literally) opened the barriers to adoption that had dogged the technology for nearly a decade since it was first announced³.

with fintechs, now three years in a row.

In practice it's not so easy. Banks are struggling with the different values and cultures of many fail-fast fintech organisations¹, and fintechs are frustrated at the slow processes and obscure procurement protocols involved in working with most banks.

Within their own institutions, bankers are getting frustrated at the pace of change too. Acquiring fintech companies and buying white labelled products and services have jumped to third and fourth place among banking respondents – to jumpstart digital transformation or perhaps avoid the headache of absorbing opposing cultures (see chart 6).

My friend the regulator

Openness is also about accepting that an ecosystem world means regulators are as much allies as assassins. Making sure everyone plays by the same rules or standards is in everybody's interest. And creates larger markets for everyone to play in.

Despite the pain of implementation, Europe's new rules on data protection² may have been the saviour of digital business by giving consumers the confidence, and protection, to continue transacting online.

As next wave technology pushes the boundaries in the decade ahead, an open approach to regulation - where providers and rule makers work together to strengthen the financial supply chain will be essential to drive adoption, and build the foundations for robust, innovative businesses.

"Who should lead conversations with the regulators? It should be more of a collegiate discussion. You can't have conversations about regulation in isolation. The market is moving too fast; regulators cannot be expected to be equipped for the task ahead without new types of skills and comprehensive consultation." explains Martin McCann, chief executive at Trade Ledger.

Thinking in circles

In some areas this is already happening, "It's important to have the right regulation in place. There's been tremendous progress, but things still need to happen. For example, we need a clear taxonomy for crypto assets – what do we class as a security or a commodity? There's still a lot of education needed," explains Marieke Flament, chief marketing officer at crypto payment and investment platform Circle.

Government and regulators are getting better at

CHART 8

PSD2 - WHICH ACTIVITIES ARE IN DEVELOPMENT?

CHART 9

... AND WHAT ARE THE BIGGEST OPPORTUNITIES?

Multi-account management 45% Account aggregation 40% Identification and authorisation services 35% Product cross-selling 25% Peer to peer payments 24% Account to account payments 22% working with the industry to build an ecosystem that affords protection without preventing innovation, "The speed at which things are changing has caused governments to start asking questions about certain products and services. And where such regulatory uncertainty exists, it makes investors hesitant and hinders innovation," explains Teana Baker-Taylor, advisory council member at Global Digital Finance, a cryptocurrency trade association.

With rules on open banking and PSD2 still fresh, the open mindset is only just beginning to gain currency. No pun intended. A little over half of banks and fintechs have a defined strategy for their business in the wake of PSD2. Nearly one in five appear to have no specific plan in place at all.

Slow adoption of the new rules of the open ecosystem applies to regulators themselves as much as financial service providers. Despite a global trend toward protectionism and trade barriers, in the digital realm regulations are only effective if coordinated – across markets, industries or regions. As automation and IoT technologies advance in the years to come, harmonisation will become more important.

"AWS [Amazon Web Services] or Azure are prohibited in France for use in banking – but the banks that are using them there, such as N26 or Revolut, can't be stopped. It's a matter of time before all these barriers are broken," says Five Degree's Mr Hohmann. Linear competition has come full circle.

¹ www.computerweekly.com/blog/Fintech-makes-the-world-go-around/ Fidor-Bank-to-separate-from-BCPE-after-short-marriage

² General Data Protection Regulation, May 2018, ec.europa.eu/ commission/priorities/justice-and-fundamental-rights/dataprotection/2018-reform-eu-data-protection-rules_en

³ The contactless revolution ten years on, Visa, September 2017 https:// www.visaeurope.com/newsroom/news/the-contactless-revolutionten-years-on

METRO BANK: DIGITAL DRIFT

UK-based Metro Bank was the first new high street bank to be launched in over 100 years and paved the way for a new line of "challenger" banks who have brought competition into retail and business banking with over 1.5 million UK customer accounts. While launched on traditional retail banking lines with a small number of branches, it sees much opportunity in building its digital offering, and is keen to capitalise on open banking and their API developer portal that launched in June 2018.

Mindset

» View open banking as an opportunity that aligns with the bank's incep-tion as a new bank created to challenge the existing marketplace.

Implementation

- » Partnered with Apigee (part of Google) in 2017 to build the API portal, sandbox and registration process.
- » Explored internal opportunities to drive efficiencies – including working with the bank's partners to overhaul existing processes
- » Sought insight from FinTechs on the bank's open banking layer and the different areas of financial services that it might be applied to
- » Roadmap in place to deliver PSD2 requirements (e.g. SCA) throughout 2019.

Results

- » Within three days of the launch of the API portal in June 2018, five developers signed up.
- » At time of publication, the bank reports that a number of third party developers have signed up on their developer portal from a cross section of the financial services industry.

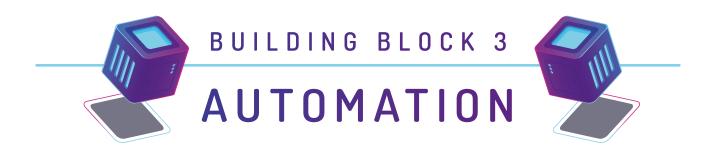
Next challenges

- » Finding ways to create value in new and innovative ways by extending the scope and reach of our APIs. For example, enabling integrations with other areas of financial services such as insurance and pensions.
- » Staying up to date with development of open banking standards to be ready to take advantage of emerging opportunities.
- » Right-sizing bank infrastructure, including streamlining internal processes, to enable bespoke integrations for in-demand services as the market matures.



Alex Park is Director of Digital, Metro Bank





PROGRESS ALONG THE NEW ROAD

» Al jumps to top of investment league table in 2019.
» Fintechs struggling to keep up with pace of technological change as much as banks.
» Technology investment is wasted without the infrastructure to support it.

FINANCIAL SERVICES PROVIDERS OF ALL SIZES ARE FOCUSING ATTENTION ON THE POTENTIAL OF AI AND ADVANCED TECHNOLOGY TO AUTOMATE THEIR BUSINESSES. EXTRACTING VALUE FROM THEM IN THE DECADE AHEAD WILL DEPEND ON MORE THAN ADOPTION.

A circular financial services ecosystem requires the right culture. It also needs the right tools. Coupled with the technical architecture that can adapt as processing power grows and patterns of demand change.

But with reduced ability to predict the future with any degree of certainty – how can providers zero-knowledge proof their business for a world where today's opportunities can quickly become tomorrow's obstacles?

"There's a risk that someone can offer consumers a service they've never had before that could replace you almost overnight. Your offering will seem archaic, and you simply can't plan ahead for that" says Mr Fredericks at IndieFin.

Sprinting backwards

In the survey half the top six predicted investment areas for



"AS BUSINESS CONTINUES TO GLOBALISE, THE DEMANDS ON SME AND GROWTH BUSINESSES FROM A REGULATORY PERSPECTIVE WILL BE ENORMOUS.

> Rob Israch Tipalti

2019 haven't featured meaningfully in previous editions. And until very recently any talk of AI was kept to science fiction thrillers.

Rapid technological change is not exclusive to financial services. All industries are now at its mercy to some degree. The specific problem – for fintechs as much as banks – is that backbone services like finance now cross paths with other industries in increasingly sophisticated ways. To the point that providers are becoming invisible¹.

While greater automation might be smoother for the customer, it's making financial services like payments become their own hygiene factors – absorbed into the bloodstream of the businesses they're serving and no longer important as customer-facing brands. "If payments do become - as is likely - more automated and more integrated into an overall shopping experience or service, the challenge for brands will be how do you become the default option for your consumers? If it's either automated or just invisible, then the consumer is less likely to make an active decision to use one particular brand 'in their wallet' over another," says Jeremy Nicholds, chief executive of JudoPay.

It raises challenging new questions for the future. What use will providers serve apart from providing the backbone for transactions? And how do you right-size your infrastructure so you're not washed away when the next technological wave hits?

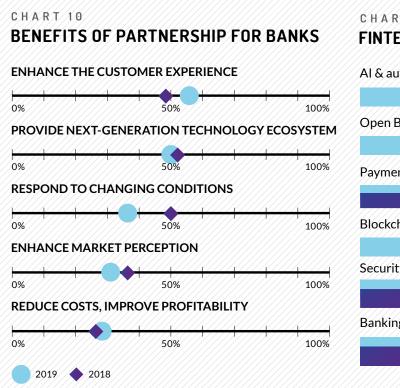
Views of technology among fintechs and banks – its potential, its benefits and the doors it can open have

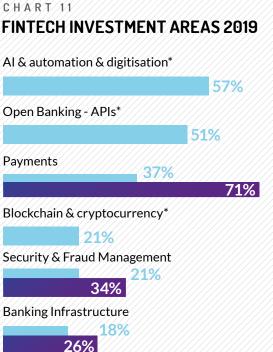
matured over the three editions of this survey. So have views of the link between innovation and technology.

The focus now is fixed firmly on the perspective of the customer (and increasingly on the customer's customer). "Technology is not a means in itself – it's how is this helping customers and improving the overall offering?" says Mr Rouse at Klarna.

Placing their bets

Incumbents have also come to understand that buying the latest kit can't deliver a digital dividend if the commitment to drive new processes into everyday operations across the enterprise is not there.





* New 2019

CHART 12 GOING DOWN:

INTEREST IN BLOCKCHAIN DECLINES

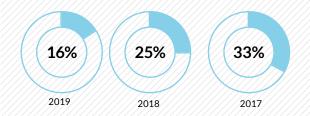
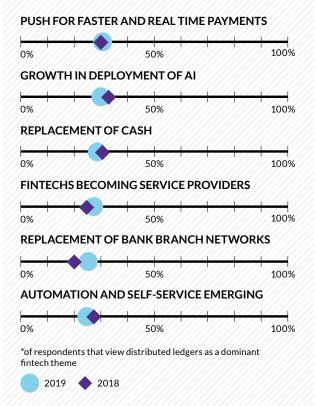


CHART 13

DOMINANT FINTECH THEMES IN NEXT 5 YEARS



It's no longer a case of too little technology but of too much. To the point that bankers are blinded by the range of options and unsure where, or on what, to place their bets. Three years ago, one third of respondents said blockchain and ledger technology would be a dominant theme for the industry in future, double the number that now think so (see chart 12).

"We've adapted how we look at opportunities," explains Stephen Dury, director of new business models at Santander UK, "Three years ago our model focussed on how you could learn and prove concepts based on the biggest problems our customers and business faced. This approach generated a great deal of learnings that we are using to evolve our approach. A key focus for us now is on further building our capability to experiment and learn faster meaning we can run a greater number of smaller bets, discount concepts that don't work quickly, and flow support to value."

Auto-mate?

Development and adoption of artificial intelligence and process automation by financial services organisations is still at an early stage. And it's not yet clear how much consumers want their banking to be fully automatic.

Automation has as much potential to cause

QUESTIONS DOWN THE ROAD

- **»** When is automation a value creator? And when is it a value destroyer?
- » How do providers avoid irrelevance in an age of invisible transactions?
- » When is enough technology 'too much'?

customer headaches as to relieve them. If your fridge automatically re-orders last month's birthday cake who's fault is it? And do you have the time or will power to talk to the supermarket chatbot to return it to get a refund?

As awareness of the value of data, and scrutiny over how it's traded and stored, grows the industry will have to work hard with regulators, for the best chance of their bets paying out.

"I do wonder whether AI isn't becoming too intrusive. There's growing evidence that people are getting turned off by on-line "smart" advertising for financial products based on search behaviour," says Ms Baker-Taylor at Global Digital Finance.

Banking used to be about relationships. And if the internet's long tail makes it possible to serve the smallest niche – how can providers re-invent the relationship for a

digital age, and where do institutions or innovators draw the line between real and robot?

Automation and AI are already driving forces across financial services. This will continue in the decade ahead. The subject came up, unscripted, in every interview for this report and appears once again at the top of the list in the survey. "I truly believe that 2019 will be the year we'll see real applications of machine learning. The development in this space is incredibly rapid," says PayU's Matthias Setzer.



"IT'S IMPORTANT TO EMPHASISE THAT AI HELPS US TO ADD VALUE AS OPERATORS BY POINTING THINGS OUT THAT WE MIGHT NOT HAVE NOTICED. IT'S NOT A SUBSTITUTE FOR HUMAN ENGAGEMENT.

> Amir Nooriala Oak North

Starting, or stumbling, block?

To stay competitive, banks need to identify and unlock the efficiencies it promises.

"For one client we applied AI and machine learning to automatically code, process, and approve their invoicing processes. We achieved 88% automation of processes and a 25% reduction in the time taken to close the books," says Rob Israch, chief marketing officer at payment provider Tipalti.

As the rules to how, when and where to apply AI are worked out, banks everywhere are asking themselves how they should make use of it, "We have to get our heads around the concept of trust in a digital relationship, and determine which interaction still has to be human-tohuman, and which can comfortably turn into a trusted 'human being-todigital being' interaction. What does an intellectual digital conversation look like?", says Liesl Bebb-McKay,

head of The FOUNDeRY, the digital acceleration unit at Rand Merchant Bank in South Africa.

Despite a 'no legacy' head-start, fintechs may yet need to get better at understanding the point at which enough technology becomes too much. Legacy or not, automation is a building block that can quickly become a roadblock.

1 Installments firm Affirm rebrands, Payments Source, November 2018 https://www.paymentssource.com/articles/paypal-co-foundersinstallments-firm-affirm-rebrands-gets-into-travel

SANTANDER UK: DEEPENING DIGITISATION

The UK subsidiary of Spain's largest bank is involved in a proof of concept pilot to explore the role that automation and digital technology can play in making regulatory compliance easier for financial services providers. The pilot based on distributed ledger technology, is a partnership with UK regulators and five other UK banks.

Objective

» Explore how automation can link regulation, compliance procedures, and bank policies and standards with the bank's applications and databases to open the possibility of an automated regulatory environment.

Strategy

- » Bank innovation targeted at providing deliverable innovation that improves the customer experience.
- » Acceptance that doing new things at scale Is not only related to what can be achieved technically.
- » Adapted strategy of how the organisation looks at opportunities – from learning and proof of concept three years ago to look at the biggest problem areas and identifying the most creative solutions today.
- » Engaging with partners including fintechs in core business areas to deliver innovation and create new products.
- » Deepening understanding of how to improve internal efficiencies more quickly and at scale by working with a combination of fintech solutions.

Next challenges

» Exploiting a combination of fintech solutions to achieve outcomes more quickly while taking into account the different organisational culture of fintech companies.

- » Understanding how to plug solutions that have passed proof of concept stage into the distribution model of a large institution.
- » Right-sizing the data strategy for the organisation to avoid forming new data siloes, for example where fintechs manage and own customer or transaction data.
- » Building a data architecture that enables the bank to exploit data more effectively.

Progress

- » Improved efficiency in reviewing and piloting innovation – helping Santander to weed out technology that's "looking for a problem" instead of solutions that have been developed to tackle specific problems head-on.
- » Changed how the bank focuses on service delivery by using an agile approach to fund development costs that can be stopped when solutions aren't providing value to the organisation. Enabling a greater number of smaller bets on innovation and a more efficient model of allocating money to value-creating opportunities.



Ceri Godwin is CIO of Finance, Risk and Collections at Santander



BUILDING BLOCK 4 DATA

PROGRESS ALONG THE NEW ROAD

» Data is increasingly viewed as an asset – perspectives on its use differ widely.
» Management of data is the new competitive frontline for banks and fintechs.
» Emerging data asymmetry is storing up new systemic pressures.

DATA IS THE FOUNDATIONAL LAYER OF THE NEW FINTECH ROAD. BANKS AND FINTECHS HANDLE IT IN VERY DIFFERENT WAYS. IN 2019 THEY WILL NEED TO VIEW DATA AS THEIR MOST VALUABLE ASSET. AND TREAT IT ACCORDINGLY.

Data is the enabler of next wave fintech. Applying its insights enables the process of continual renewal that organisations need today to stay relevant. An open approach to sharing it will ensure they can leverage the

future opportunities of open data. And access to sufficient quantities of it will determine the effectiveness of advanced technologies like AI for a new generation of automated financial services.

Its management is also the key to incumbent banks' most valuable asset – customer trust. A decade after the financial crisis trust in banking has proved surprisingly resilient¹. High profile data breaches and the impact of social media on public life have sharpened customer attention on its importance. consumers realise there's no such thing as 'free' in the digital world.

When first announced, GDPR – Europe's new rules on data – looked like an own goal by European regulators by weakening the region's digital industries that were already way



"WE'VE BUILT A MASSIVE ECOSYSTEM OF MARKETPLACES AND SMALL BUSINESSES. BIG MARKETPLACES SUCH AS AMAZON WANT TO BE CONNECTED TO MORE SELLERS, WHO WANT TO CONNECT TO MARKETPLACES SO THEY CAN ENTER NEW GEOGRAPHIES AT SCALE."

> Daniel Mayhew Payoneer

behind giants in Asia and the US. By the time it arrived in 2018, it proved remarkably timely.

"There's a counter force against unfettered use of customer data that is changing the landscape and banks

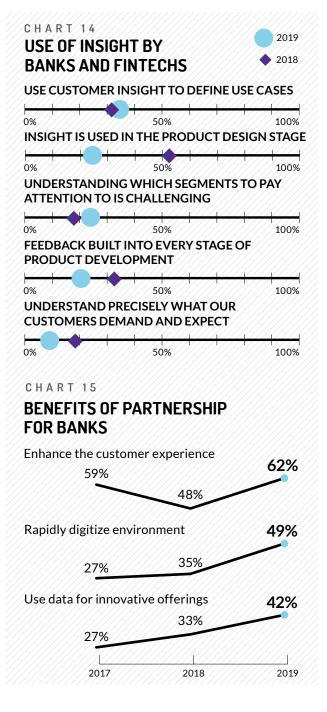
are not in bad shape – as they're generally more cautious about how they do it. GDPR has become a bit of a leveller for banks," says Alex Mifsud, head of strategy at Ixaris Technologies.

No longer fair game

Banks and fintechs come at the problem, or opportunity, of data from very different perspectives. Nearly double the proportion of banks as fintechs view data and analytics as a key opportunity in 2019.

Fintechs also make better use of insight to develop and improve what they sell. More than half of fintechs use customer insight to design products, compared to a little over one quarter of banks (see chart 14).

A perverse legacy advantage of siloed data within banks, paired with



institutional and industry traditions of client confidentiality, means most are unable to apply analytics to cross, upsell or update their products very quickly. Even if they want to. Fintechs, built on foundations of data and analytics, to respond to changing customer behaviours have no such legacy.

"Banks have always protected their customer's assets but if data becomes the most valuable asset what then? Facebook will have a difficult time convincing you that they are your data guardians. If banks can freshen up their data DNA – they have a huge future going forward – to play a data custodian role – but they need to prepare", says Mr Hohmann at Five Degrees.

As some banks succeed in breaking the walls between siloes, their advantage will be short lived unless they can combine tradition with a deeper understanding of what's important to customers, and when. For their part, fintechs will need to come to terms with the responsibility conferred by their deepening pools of data. And where to draw the line between promoting relevant services and pestering consumers.

Rubbish in, rubbish out

It's harder than it sounds. The scale economics of digital business are stacked in favour of those with data over those without it. The more I use Amazon, the more Amazon gets used. And so on.

"Real platform players are coming into the market from adjacencies such as big tech companies like Google, Amazon, Facebook, Apple, Alibaba – they don't have core banking experience but are looking at the world through the lens of consumers shaping attractive user experiences and have a real advantage," says Finastra's Mr Soni.

Exponential growth in data is also making it harder to know which data-streams to prioritise – and for what purpose. This will accelerate as growth of digital transactions pushes financial services deeper into the fabric of the industries they serve.

And gives technology companies that use data to drive commerce in its broadest sense a head-start over banks with a narrow focus on fees or interest-rate margins, "You've got to look at everything from the customer's perspective, and start from there," says Mr Rouse at Klarna.

The possibility of data dominance to enable the rise of a new generation of winner-takes-all scale players is a problem for regulators as much as for banks or fintech start-ups trying to break into a market. Without reliable data to interpret what customers need innovative solutions or technologies like AI are worthless.

If you don't know who your customer is exactly, or you have no access to clean customer data, it is simply not possible to launch marketing campaigns or apply advanced analytics to achieve (real-time) personalization and accurate cross/up sell offers," says Kostis Chlouverakis, chief digital officer at Eurobank in Greece.

Know nothing

As a data backlash gets stronger development of new "zero knowledge" systems might have the answer – enabling financial services providers to approve customers without taking on the liability of collecting personal information.

"By using zero knowledge proof we should be able to verify certain information without disclosing something we don't want to. This is a way to allow privacy for customers in the blockchain – so if you apply for a mortgage, the bank can check if I can afford it without learning how much I earn," explains Ms Gomez de la Villa at ING.

The sea-change in the perception of data opens new questions that break from the prevailing view of its

QUESTIONS DOWN THE ROAD

» Is data a profit pool or a new source of purpose?

- » Who should set the rules to ensure a level data playing field?
- » Can technology help decouple authentication from data sharing?

value since the birth of the internet. Is data a profit pool or the source of a new purpose for tomorrow's financial institutions? And if this is the new role for banks who should set the standards for governing them and the data they hold?

Global disagreement

It's a question beyond the reach of any individual institution, organisation, or government. And plausibly calls for a new Bretton Woods agreement. Particularly as separate, regionally-enforced regulations create an uneven competitive playing field.

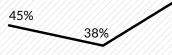
While that plays out, incumbent banks and new fintechs in Europe, and across the region, are adjusting to a new data roadmap, "We're looking at a three to five year timeline before we see a significant shift towards data-driven banking and banking-as-a-service, which we think the ultimate outcome is going to be," says Trade Ledger's Mr McCann.

"We're really learning how to use data. GDPR put people on alert about how to use it. A first step for us was to use it to provide appropriate offers for products and services" explains Ms van Gennip at ING. As traffic increases on the new road banks, and fintechs will have to decide carefully where they take their next step to avoid a data legacy becoming a liability.

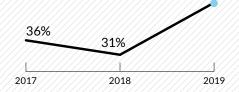
CHART 16 THE BREXIT EFFECT



Will accelerate growth of other 58% European fintech hubs



Companies will reconsider or suspend investment in UK fintech



49%

CHART 17

DOMINANT FINTECH THEMES IN NEXT 5 YEARS

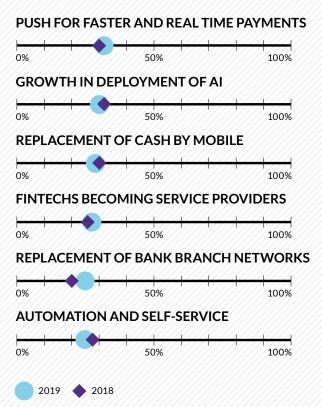
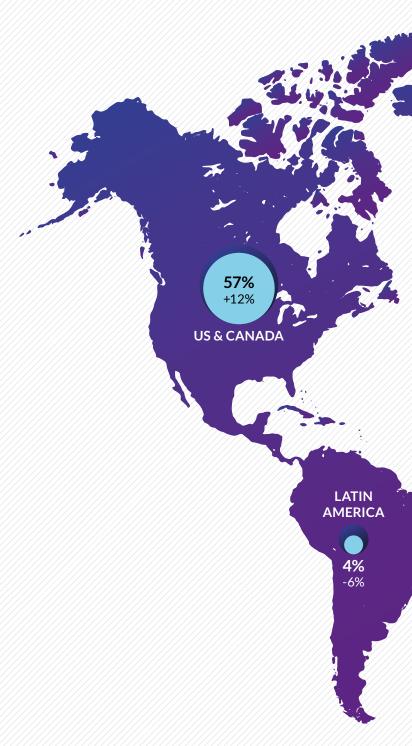
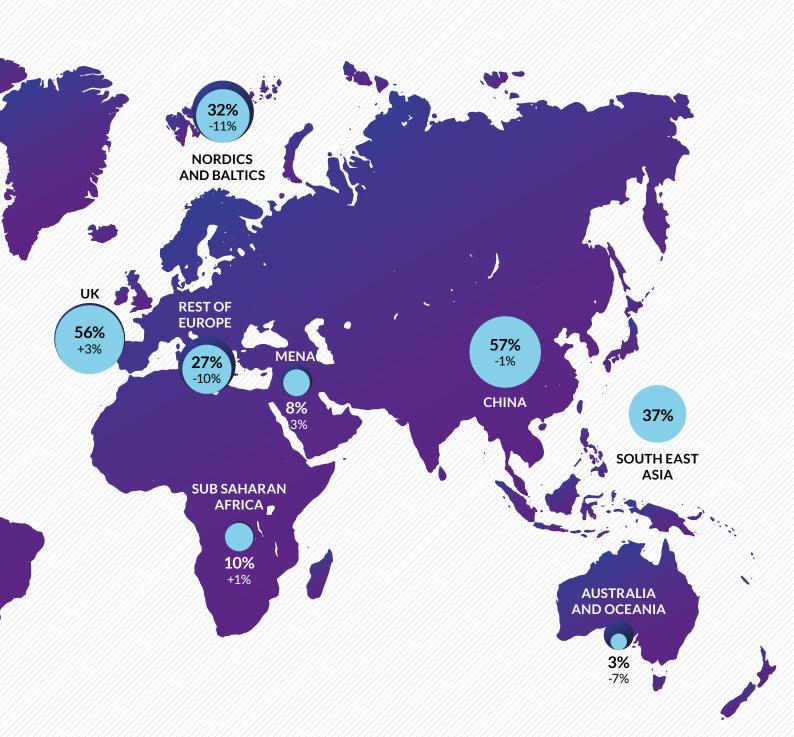


CHART 18 FINTECH HUBS IN 5 YEARS





BANKS PLAY CATCH-UP



THINK DATA IS AN OPPORTUNITY

CHART 19

HOW DOES CUSTOMER DEMAND AND FEEDBACK FIT INTO YOUR BUSINESS?

Insight is used in the product design stage

53%

Use customer insight to define use cases

42%

Customer feedback built into every stage of product development

32%

Understanding which segments to pay most attention to is challenging

26%

Understand precisely what our customers demand and expect

22%

Limited access to customer insight data



1 Trust in banks highest since 2012, Accenture, May 2018 https://www. accenture.com/gb-en/company-news-release-trust-banks-customer-risk

KLARNA: RE-WRITING THE RULEBOOK

Founded in 2005, Swedish fintech Klarna is now one of Europe's leading payments providers and a fully licensed bank. The company's success has been built on removing friction from the checkout process when customers shop online. Klarna's differentiation from an increasingly commoditised digital payments space is achieved by using advanced data and analytics to enable merchants to offer a better shopping experience for their customers. The efforts have paid off – the company is one of 7 fintech 'unicorns' in Europe, valued at \$2.5 billion in 2015.

Ambition

Helping consumers, merchants and partners to explore just how smooth the modern purchase experience can become.

Strategy

- » A maniacal focus on the purchase experience for customers to ensure that the whole customer journey is as smooth as possible. The transaction is only the beginning of the customer relationship and by offering a frictionless checkout, outstanding customer service, delivery information, easy returns and refunds as well as loyalty rewards, Klarna drives customer engagement and repeat purchases for its merchants.
- » Prioritising improved sales, increased average order value and reduced cart abandonment for merchants by offering a straightforward checkout

process for their customers, including reduced data entry requirements and one-click purchases.

- » Helping merchants stay relevant and meet customers evolving needs by offering a product range that helps people manage their finances at the right place and the right time. With 'Pay later' Klarna takes on consumer risk, paying merchants immediately and collecting payments directly from customers up to 30 days later. 'Slice it in 3' offers the customer a short-term instalment plan for free, using their debit or credit card as settlement source, helping them to spread the cost to suit their cash-flow.
- » Accelerating time to market for new products and services by implementing a new operating model with 250+ self governing start-ups owning specific products or problem spaces.

Results

- » Became one of Europe's first fintech unicorns in 2015. Acquired a bank license in 2017, allowing Klarna to be deeper in the value chain and offering a wider product offering.
- » Acquiring Sofort 2014 and BillPay 2017, to form the Klarna Group, Europe's leading payment provider. Acquiring Close Brothers Retail Finance 2018 to strengthen position in the UK market for retail financing.
- » Active in 14 countries, serving over 60 million consumers and 100,000 merchants, accounting for roughly 10% of e-commerce transactions in Northern Europe. Over 40% YOY volume growth.
- » High profile investors such as Sequoia Capital, Bestseller Group, Atomico, VISA and Permira.
- » Continuously growing the merchant base and adding

new customers. While dominant in Nordics, the huge potential in German market is being realised and it is now Klarna's largest market. Equally the UK market is also contributing notably to the continued strong growth trajectory.

» Product offering continues to evolve, recent examples being Boost, a financing program for SMEs, Slice it in 3 and 4 in the UK and the US respectively, and a regularly updated consumer app that helps customers take control over their personal finances through features providing flexibility in how and when to pay, account information, pictures over purchases, easy management of returns, receiving friendly reminders of pending invoices and a 24/7 customer service chat.

Next challenges

- » Offering a customised shopping experience, offline as well as online, for merchants and their customers through advanced technology.
- » Evaluating and implementing new opportunities that are available through the acquisition of a banking license.



Michael Rouse is Chief Commercial Officer, Klarna



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Klarna.

Klarna is one of Europe's leading payments providers and a newly-licensed bank, which wants to revolutionise the payment experience for shoppers and merchants alike. Founded in Stockholm, Sweden, in 2005, we give online consumers the option to pay now, pay later or over time – offering a simple, safe and smoooth checkout experience. Klarna now works with 100,000 merchants. Klarna has 2,000 employees and is active in 14 countries.

PARTNERS



