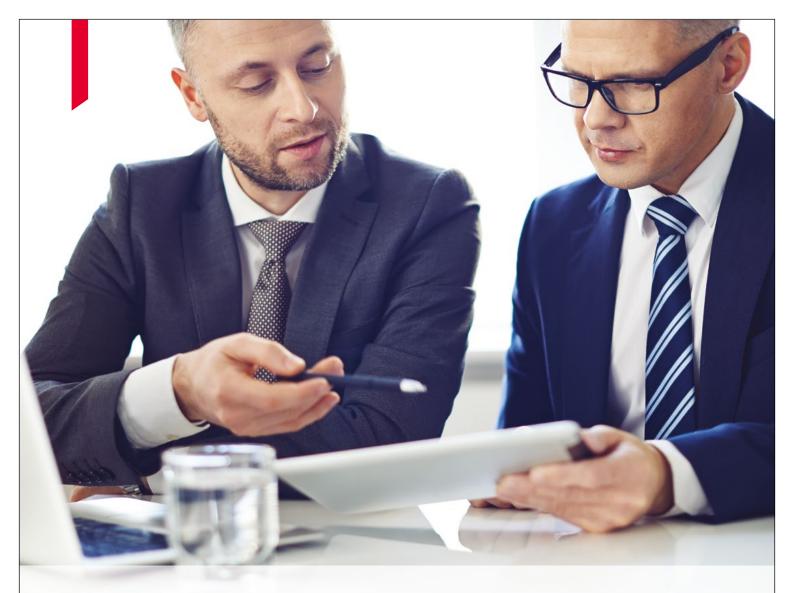
Fintech Disruptors Report UPSTART Banking NORDIC EDITION







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A business partner for fintech

With our own track record of solid growth in the private sector, BDO looks upon the emergence of Norwegian fintech businesses with great interest. With their impressive growth and mounting significance, Norwegian entrepreneurs that develop future technological solutions for the financial sector are undoubtedly at the vanguard of fintech development globally. At BDO, we believe that fintech will be a large and significant sector of Norwegian industry, owing to high competency levels and favourable conditions in Norway. Considering the range of services that BDO can offer fintech businesses, we look upon the sector as a particularly attractive and important market.

With a wide provision of advisory, tax, audit and accounting services, BDO is a valuable business partner for any ambitious fintech business. Our services in accounting and auditing manage, streamline and provide assurance on our clients' economic processes, while our tax department provides advice on legal conundrums of any complexity. Our advisory department help clients navigate challenging conditions, providing advice in relation to risk, governance, restructuring and business development, continuous improvement and finance. With expertise in finance, technology, entrepreneurship and other relevant competencies, BDO can offer fintech customers comprehensive professional services of the highest quality.

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For contact details and an overview of the services we deliver, please visit www.bdo.no/en

We hope you enjoy reading this report and find it useful as you continue your own, unique fintech journey.

Trond-Morten Lindberg

Managing Partner BDO AS



FOREWORD

From START-UP to Nordic UPSTART banking

When we started the project to interview the makers of European banking's digital revival it was clear that the forces shaking the industry from its foundations are contributing to a radical rethink of business models right across the industry. From traditional multichannel incumbents to new digital-first market entrants, the era of Start-up Banking is well underway.

Nordic banks are also being confronted by the challenge from new fintech innovators. Their progress along the path to digitisation, and their protection from a largely trusting customer base relative to the rest of Europe however, means their sense of urgency to reform, and their support for local-market digital upstarts, so far has been muted.

In response to this, the Fintech Disruptors Report: Nordic Edition takes stock of the shifting currents of fintech innovation across Europe and the Nordic countries to chart the course for the new phase of financial services delivery.

The report is the result of interviews with more than 30 start-ups and incumbent banks across Europe and the Nordic region. Conducted between November 2015 and February 2016, it explores the breadth of the fintech ecosystem and makes the call for the continued support of the region's raft of upstart innovators as they seek to re-make finance for the digital era.





INTRODUCTION

Must be something in the water

It is no surprise that the Nordic region, home to global digital brands Skype and Spotify among others, and a byword around the world for accessible, affordable design that meets the needs of modern consumers, has developed a vibrant financial technology industry.

The region's unique characteristics – affluent, welleducated, technologically-literate societies with a sophisticated banking industry to match – has contributed to the development of a dynamic fintech enclave.

In the last five years, the region has spawned several high-profile successes including payment technology companies iZettle and Klarna – two of only seven unicorn status (companies with a valuation of around a billion dollars or more) in Europe – in addition to a long list of successful fintech innovations across the full spectrum of financial services.

This list includes Norway's answer to Kenya's M-Pesa that is helping to improve financial inclusion across the emerging world as well as companies advancing authentication and biometric technology (BehavioSec and Zwipe), peer-topeer lending (Lendify), financial planning, and business banking (Meniga and Holvi).

As this report shows, in marked contrast to banking peers in other advanced markets, the region's own financial crisis in the 1990s has given Nordic banks a near threedecade head-start in the automation of traditional banking processes and greater use of innovation to tackle the high costs to serve customers profitably.

This uniquely Nordic ecosystem, a microcosm of the entire global fintech start-up scene, has been spurred on by a combination of heavy smartphone penetration and regional rates of internet availability that are among the highest in the world.

Early examples of Nordic financial innovation stretch back beyond 2010 to the creation of Swedish OM Group's electronic trading platform in the 1980s that played a pivotal role in switching the world's stock-markets to electronic trading from the open outcry system in use for much of the twentieth century. A launch that helped foster an early wave of regional fintech innovators and played a vital role in the expansion of the global financial services industry in the process.

The current boom in fintech investment is helping to continue that tradition. In Europe, only the UK and Ireland secured more investment in new and early-stage fintech companies than the Nordic region in 2014. At the same time less than 6 percent of payments across the region are made with cash, making Scandinavia a pioneer in mass adoption of electronic payments.

Innovation by and for the banks

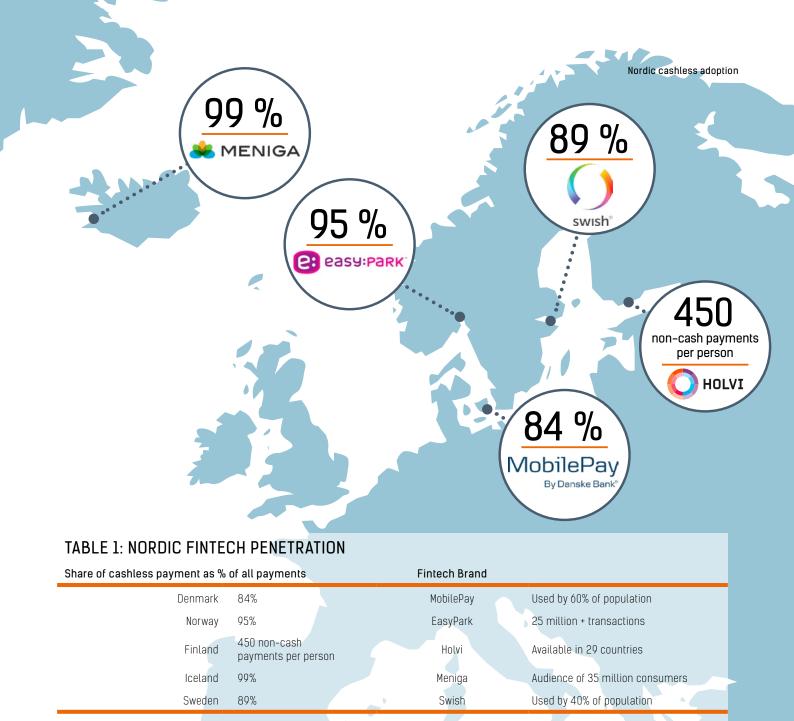
As this report explains, it is the region's banking culture that has done most to inspire fintech innovation. Widespread banking automation through the early years of the century and several high profile collaborative bank technology projects have helped create a financial services market on all sides, from public to private sector and consumers, fully accustomed to the use of digitised services for everyday banking.

As automation took hold several high profile examples of inter-bank cooperation followed. In Finland, the country's banks set up a joint ATM company and in Denmark and Norway jointly owned companies were established for card payments adding to the inertia fuelling the move away from paper and cash.

More recently, bank-owned mobile payment projects in Denmark and Sweden have created what are arguably the most successful examples of mobile payments anywhere - with over 40 percent of the population country now using the MobilePay service, in the case of Denmark.

As this report underlines, there are signs that the collaborative zeal is slowing. Upstart fintechs report that it is often hard for them to gain access to the bankdominated financial services market and with the region's banks well trusted, and generally liked, by consumers, the impetus for banks to cooperate has been diluted.

But collaborate they must. A smaller pool of venture capital across the Nordic countries relative to other fintech hubs, means that enabling the region's wealth of fintech talent to thrive will depend heavily on their access to support from incumbent banks and financial services organisations, among others. Success will mean the growth of the region's digital banking industry; failure may force a generation of digital upstarts to look to other regions.



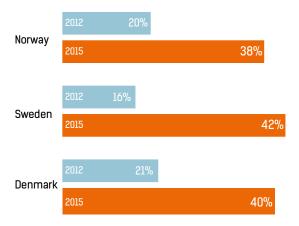
Source: Computerweekly.com, DIBS Nordic E-commerce report, Meniga.com, MobilePay, World Payments Yearbook 2015

TABLE 2: NORDIC FINTECH STARS

\$ raised to date		
Klarna	\$280 million	Online payment
iZettle	\$166 million	Payments
Trustly	\$30 million	Online payment
BehavioSec	\$8.2 million	Biometric security
Meniga	\$6.5 million	Financial planning
Zwipe	\$7 million	Biometric security
Lendify	\$3 million	P2P Lending
Holvi	\$3 million	Business banking

FIGURE 1: MOBILE PAYMENTS ADOPTION IN

SCANDINAVIA (% of all transactions)



Source: MagnaCarta Research

Source: Nordic e-Commerce Survey 2015, DIBS Payment Services

KEY FINDINGS

UPSTART Banking

The consequences of the financial crisis of 2007-2009 were far-reaching. They are still being felt today – the difference in European output in the second quarter of 2015 compared to that predicted by pre-crisis levels is equivalent to the size of the German economy.

The longer-term implications for the financial services industry are still being interpreted. For one thing, the implosion of global banking and the consequent loss of trust in institutions has opened the market to non-bank competitors that were previously unable to compete. A sea-change supported by favourable regulation to introduce more competition into retail financial services, and cheaper access to consumers through the smartphone revolution.

While Nordic banks fared better than their peers in the rest of Europe, having learnt the lessons from their own regional crisis in the late 1990s, a new breed of customer-first digital upstarts are challenging cherished business models which promises to threaten the relatively protected position of the region's financial services industry.

The report identifies and discusses seven, inter-dependent themes set out below that are dominating the agenda for incumbent banks and financial services organisations, and new fintech entrants. As they seek to define, or redefine, their market position many are asking themselves fundamental questions as to how to transform the digital divide into a digital dividend.

Uprising

The interviews reveal the breadth of the Nordic fintech ecosystem and a region fast establishing itself as a pioneer in the creation of customer-first, digital financial services. At the same time, regional success in creating a new generation of global fintech brands will depend on support from the financial services industry and other export-focused institutions to allow new digital upstarts to complete the revolution in financial services delivery.

Partnership

The report underscores the degree to which traditions of collaboration and co-operation within the banking sector have fostered the development of a vibrant financial services industry, globally-renowned for cost-efficient innovation. Traditions that have served the region well since the late 1990s but may now be flagging. Maintaining this legacy will allow incumbent banks and the wider economy to profit from a digital dividend and grow the size of the financial marketplace in the process.

Simplicity

Easier access to consumers through digital channels, and specifically smartphones, is driving the trend to straightforward products distributed by new fintech entrants, in most cases themselves simple, single product companies. While this strategy may be impractical for multi-channel institutions, the research highlights the opportunity for banks to simplify the user-experience, rationalise product lines and improve returns, which now stand on a level comparable to utilities companies.

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FIGURE 2: FINTECH INVESTMENT BY REGION 2014 (\$)

Trust

Trust in Nordic banks remains strong but so does local enthusiasm for technology and innovation. While many of the region's fintech start-ups have yet to be tested by a downturn, waiting for the next crisis to halt their advance is not a viable option. The research shows that in order for banks to maintain a loyal customer base they will need to place an emphasis on customer-first product experiences, and continue to support the sector's admirable culture of innovation and collaboration.

Agility

Smartphone app use has radically altered consumer demand for innovation, with new products launched more quickly, tested in the open market and continuously refined. Organisations in this report underline how banks are adapting to this cultural change with innovation initiatives that include venture capital investment, internal development and acquisitions. Most critically however, greater collaboration with third parties outside the bank and, paradoxically after a wrenching financial crisis, 'getting over the fear of failure' are increasingly viewed as essential ingredients to an agile innovation strategy for large institutions.

Relationship

The focus on user experience by fintech entrants, including those in this report, is drawing attention to the opportunity to redraw the relationship of financial services providers with their customers. For banks, this will mean seizing the potential to leverage deep pools of data for greater customer insight to understand how to monetise their services transparently in a way that fosters the longer-term relationship.

Transparency

The price transparency enabled by the first internet wave at the beginning of the century, in the form of price comparison sites such as Moneysupermarket.com, has been complemented by an influx of new entrants with straightforward pricing and simple business models in the age of the mobile internet. For banks, often characterised by complex businesses and opaque pricing, a response will require a root-and-branch commitment to transparency to help restore trust and re-build the connection with customers.

FIGURE 3: FINTECH FOCUS AREAS OF 12 TOP VC INVESTORS SINCE 2007



PAYMENTS

CB Insights Disrupting FS Webinar

Rod

FINANCIAL PLANNING



LENDING



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UPRISING

A Nordic cottage industry

The range of businesses represented in the report highlight the breadth of Nordic innovation. And the degree to which the regional fintech scene is a microcosm of the global digital shake-out impacting banking delivery. The region is home to early stage companies representing all corners of the financial services marketplace, from blockchain to payments and business banking. Many of which have been interviewed for this report.

Is the revolution coming?

Despite the appearance of a dynamic fintech ecosystem, and the obvious exception of some regional, albeit mainly Swedish, success stories in iZettle, Klarna and Seamless, the interviews reveal the obstacles encountered by many of the latest run of digital challengers. Struggling to succeed in countries where progress is often eclipsed, or even thwarted, by bankowned fintech initiatives.

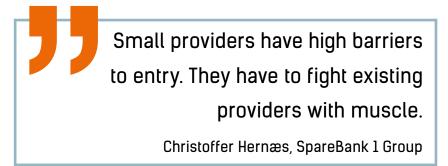
In the near three decades since the Nordic banking crisis, the region's banks have rebuilt their balance sheets, re-positioned themselves as innovative, reliable service providers and restored the trust of their customers. Often in collaboration with each other, as economic necessity forced greater cooperation to keep costs down.

The value of this thirty-year collaborative dividend is evident in consumer take-up of mobile payment solutions such as MobilePay in Denmark, and Swish in Sweden. With a level of success that remains unchallenged by peers in other advanced economies.

As some of the interviews for the research underline, more recently there are signs that the collaborative zeal may be fading (see Partnership section). Having learnt the lessons of the 1990s, the impact of the global financial crisis on the Nordic banking industry was felt less sharply in contrast to the US and the rest of Europe.

Complacency is not an option however. As new entrants fight to gain access to a closed banking market that discounts their potential threat, a regional industry study revealed that 88 percent of banks recognise a need to rethink their current strategy and business model two compete in the digital era. Of those surveyed less than 40 percent had a clear plan in place to achieve this.¹

They may need each other more than they think. Insights from the interviews hint at future opportunities



for a symbiotic relationship that benefits upstarts and incumbents alike. Trond Mellingsæter, country manager for Norway of pan-Nordic Danske Bank, explained the challenge of multi-channel service delivery for the bank, "it is challenging [building a] seamless multi-channel environment and no one has done it yet. Traditional organizing in divisions and silos within banks are a challenge in order to make seamless solutions and exceptional customer experiences."

Despite the innate ability of fintech start-ups to build services from the ground up that explicitly meet consumer need, the bar for success for Nordic fintech upstarts is high. Apart from a regional population that is relatively content with the service they get from their financial service providers, the research revealed the challenges of overcoming entrenched corporate cultures and attracting suitably-sized partners to help them grow.

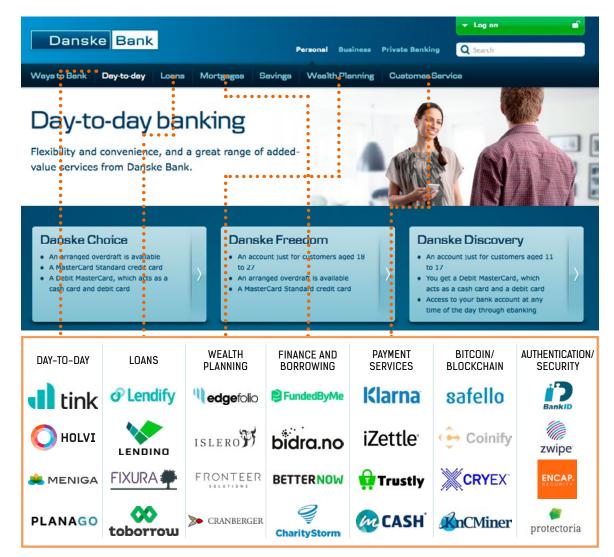
Christoffer Hernæs, vice president of Norway's SpareBank 1 Group, that recently acquired mobile payment start-up mCash, explained, "small providers have high barriers to entry. They have to fight existing providers with muscle. It's very hard for new entrants."

A view reflected by Axel Sjøstedt, chief executive of insurance technology start-up Cloud Solutions, "insurance is a traditional industry and the mind-set needs to change. It is seen as a cost and the barriers are high." In the longer-term there may be some additional advantages to the region's export economy of having to compete in a relatively small but already highlyautomated, banking market.

The research revealed widespread recognition among startup founders and senior bank managers that local banking sophistication is already forcing fintech entrepreneurs to create solutions that are more than just window-dressing. As one interviewee commented, and repeated elsewhere during the research, "you need to know your own way. It's important not to do the same thing with new tools."

The scale of what the region can achieve is evident in the two highest profile Nordic fintech successes so far, Klarna and iZettle. Mobile POS technology company iZettle, launched in 2010, is now available in thirteen countries. Founder Magnus You need to know your own way. It's important not to do the same thing with new tools Fintech start-up, Norway

Nilsson attributes the company's success to a business model that prioritises an unserved market, "[the SME segment] is approximately 30–60% of our business and our main segments are retail, hospitality and business services. These markets are underserved... and iZettle has a different business model to the banks."



Source: Christoffer Hernæs

Finnish business banking start-up Holvi, although at a much earlier stage of development is plotting a similar path to growth. The company's solution is now available in at least 29 countries across Europe. Small local and regional markets are forcing fintechs to be globally focussed from inception.

Ensuring that the Nordic region's fintech ecosystem continues to flourish however will depend on more than the ingenuity of individual entrepreneurs to breach competitive barriers at home in order to be able to venture abroad. In a region where access to investor capital is relatively constrained, fintech success will still need to rely on the traditions of partnership, collaboration and experience that have been established over the three decades since the Nordic banking crisis.

The future of Nordic banking may depend on it. As the cooperation between banks in Sweden and Denmark to drive take-up of mobile payments has shown, collaborative innovation creates a larger banking market that benefits everyone. Banks now need to take up this mantle to enable the uprising of its enviable pool of fintech talent before it looks elsewhere.

Adjusting to the digital age: Danske Bank

Pan-Nordic Danske Bank is a multi-channel financial institution serving personal and business customers in Denmark, Norway, Sweden and Finland in addition to operations in the Baltic States and Northern Ireland. Here, Danske's country manager for Norway, Trond Mellingsæter, talks about the bank's efforts at rising to the digital challenge.

What is the greatest challenge Danske Bank faces in terms of innovation?

Danske Bank: The biggest challenge is to readjust our bank fully to the digital world. This involves everything from the customer interface to culture and our business model. Although traditional banks are still our main competitors, we follow the market closely for new entrants and fintech disruptors.

How is Danske Bank responding to the challenge?

Danske Bank: By prioritizing and preparing new innovations both in terms of digitalisation but also how we should disrupt ourselves in terms of our way of working and our products and services.

Innovation provides us with enormous possibilities with big data and streamlining. We have to think outside the traditional bank environment and work together with partners and customers to utilize own innovation and innovate and develop new solutions together.

How do you handle the challenge for financial services providers such as old legacy systems, regulation, among other things?

Danske Bank: We build solutions on the side of old legacy systems. Mobile Life is an internal program in the bank were

we have recruited 65 new employees including robot engineers. Sunday is a project we run to combine residential/housing and financing. We disrupt ourselves from within.



Is the shift in delivery of financial services simply a migration from branch and direct sales to web/ smartphone or is it more complex?

Danske Bank: It is more complex than reducing our branches from 55 to 30 in Norway. We will continue using the branches for counselling primarily on major life events like pension and house lending.

How challenging is the multi-channel sales environment for large banks? What dictates how you decide to reach your customers?

Danske Bank: It is challenging creating a seamless multichannel environment and no one has achieved this yet. Traditionally organizational structures of divisions and silos within banks are a challenge in order to make seamless solutions and exceptional customer experiences – both for private and business customers. Customer behaviour is dictating our decisions, and the opportunity is to lead or lag.

PARTNERSHIP

Proprietary to Partnership

There's no "I" in digital

The forces currently driving the development of new forms of financial services delivery in the Nordic region largely match their counterparts in the rest of the advanced world, with one notable exception.

While banks and the closed loop payment networks, among others, across the rest of Europe are coming to terms with the implications of the open source, open API, collaborative economy for their businesses, Scandinavia's experience of nearly thirty years of inter-bank, partnership have made the region a testbed for new models of fintech development and innovation.

Proof of the potential value of partnership to financial services revenues is evident across the region. Mobile payments adoption is the most recent example of this. MobilePay in Denmark, created by Danske Bank to help shift payments from cards to mobile is used by nearly 60 percent of the population. Adoption of mobile payments in Sweden has been boosted by Swish, launched in 2012 by six Swedish banks and now used by 40 percent of the country.

Regional success in mobile payment penetration has been enabled by now long-established traditions of cooperation

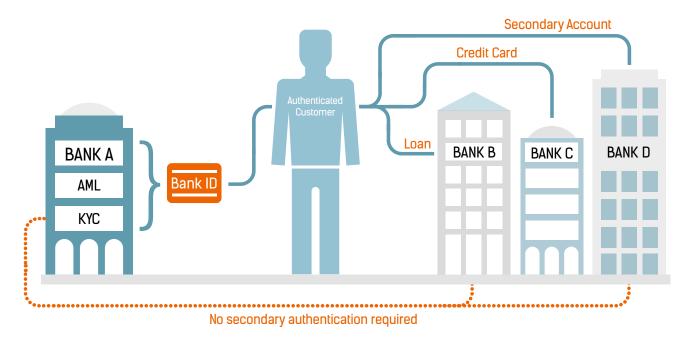
that have helped shape how consumers access banking services from payments to account management. As a reasonable comparison ApplePay was used to buy goods in physical stores by a little over 5 percent of iPhone 6 owners in the US, in the first year after launch.

A deep financial crisis in the 1990s accelerated the move to automation and shared development that has contributed to a banking market that is more accustomed to remote banking via digital channels and less sensitive to the shift away from branch-based banking than their peers in developed countries. The region has some of the lowest ratios of bank branches relative to population in Europe (see table). In Sweden 82 percent of the country used online banking and nearly half the country used mobile banking in 2014.

One early beneficiary of the collaborative culture was BankID, developed in 2001 as a secure easy way for online banking customers to prove their identity. The solution was developed by a consortium of Sweden's largest banks including SEB, Swedbank and Nordea with a mobile version released in 2010. BankID is now the primary mechanism for businesses and the public sector, banks and consumers to identify themselves online for services ranging from signing agreements to tax declaration and online banking and used by over two thirds of the country.

Figure 4: BankID: The value of partnership

Inter-bank collaboration to enable easy consumer authentication benefits the whole banking market





The success of the project has inspired successors in other parts of the region. BankID Norge, interviewed for this report, was first launched in in 1998 and later established as a cooperative owned by Norway's banks in 2014 (see infographic below). "Today Norwegian citizens can access 670 public electronic services with different electronic IDs and BankID Norge has gained a 50 percent of the market for public sector identity authentication use with over 3 million unique users," according to Odd Erling Håberget, the company's managing director.

The benefits of this early collaborative spirit for the rest of Europe are now only being understood. The success of the BankID schemes has drawn the attention of the European Commission and Barclays to discuss a pilot e-ID project to help improve access to public services to European citizens.

Attempts by banking sectors in other countries to emulate the partnership approach to development to overcome current challenges in the short term may be overlyoptimistic. The collaborative dividend that the Nordic region is benefiting from now is the result of nearly three decades of shared experience.

As Mr Håberget notes, it was nearly 14 years before the BankID Norge project took off, after several rounds of adjustment and re-launch, "what is unique in Norway is that we have a strong culture of trust between banks for many years. We're a small country and a trusting society. We built the infrastructure together to help cut costs. Today [banks] share a common infrastructure but they still compete."

The research reveals that, while some regional fintech start-ups are thriving, the collaborative zeal of the banking industry may have dissipated in recent years as banks close in to protect cherished revenue streams and dismiss the threat of fintech upstarts. This, combined with the smaller pool of available investment capital in the region compared to global fintech hubs in London or Silicon Valley is raising the bar for the region's new generation of fintechs. Trond Lemberg, chief executive of Protectoria, a Norwegian cybersecurity firm explains the challenge for innovative companies with proven technology struggling to find the right partners to get lift-off,"it is the chicken and egg dilemma. We have to seed the market before distributors' jump on, while new and prospective customers may be reluctant to sign up with a small start-up without backing from a preferred local partner."

Whereas retail banks in other parts of Europe are under multiple pressures to reform after the turmoil of the global financial crisis of 2008, Scandinavian financial institutions were better protected, having learnt the lessons of the regional crisis in the late 1990s. A fact that perhaps partly explains some hesitancy toward working with new, often unproven, entrants.

As Mr Lemberg reflected on his own experience, "disruptive innovation that does not fit the status quo will be fought... state-owned businesses like DNB, Posten and Telenor acting with their end-user market share and routes to market, through companies like Evry, Nets, BankID, prohibit competition from SMEs with new and innovative approaches to resolve customer needs."

In spite of a protected position, relative to their European peers, complacency is not a viable long-term option for Nordic banks. Recent analysis estimates that up to a third of Nordic banking revenues are potentially at risk from new competitors.²

The warning has not gone unheeded. In recent years, to help them meet the competitive threat, pan-Scandinavian banks Nordea and Danske are among the region's institutions with the most prominent efforts to court new fintech talent. Nordea's approach is similar to that of UK bank Barclays, with a dedicated accelerator to attract and identify fintech entrepreneurs with useful products or services that can later be connected to the bank's network or back-office operations.

2 Digital Disruption in Nordic Retail Banking, Accenture 2015

As Randi Marjamaa, deputy head of banking at Nordea Norway reflects, "Open innovation is at the heart of the digital revolution. For large organizations like Nordea this means engaging with external technology solutions, knowledge capital and resources, and opening up the organization's own intellectual property, assets and expertise to outside innovators to help generate new ideas, change organizational culture, identify and attract new skills, and discover new areas for growth."

Danske in contrast launched its MobileLife programme, an internal initiative to recruit developers to help the bank "disrupt from within", as Trond Mellingsæter, country manager of Danske's Norway operations explains, "MobileLife is an internal program in the bank were we have recruited 65 new employees including robot engineers. Sunday is a project we run to combine residential/housing and financing. We disrupt ourselves from within and we will not buy a new legacy system." Both from the perspective of financial stability and global export potential, the cooperative, collaborative culture across Scandinavia has served the longer-term interests of the region and their individual countries well. The creation of tech titans, Spotify and Skype, and fintech pioneers iZettle and Klarna are proof of the region's ability to exploit a digital dividend.

Turning its back on partnership with digital challengers, and their potentially disruptive businesses would be a mistake, forcing future export champions to go elsewhere where capital is less constrained as Mr Lemberg remarks, "too many have left this market and too many are sold abroad." Limited access to risk-friendly capital in small markets can make the difference between global success and local sob story. The Nordic tradition of partnership with technology innovators offers a viable third way to help the region thrive in the new digital era.

Open innovation is at the heart of the digital revolution. For large organizations like Nordea this means engaging with external technology solutions, knowledge capital and resources, and opening up the organization's own intellectual property.

Randi Marjamaa, Nordea Norway

SIMPLICITY

Exploiting the digital dividend

As the popularity of the mobile web has grown, the limitations of smartphone screens are contributing to the need for digital services that have been carefully designed to engage users in order to ensure their success.

The need for greater simplification of business lines in banking was already apparent before the financial crisis – a report by Oliver Wyman identified that despite growing revenues between the big bang of 1988 and the big bust of 2007, financial sector productivity has not improved since 2001.³ A decade later and the growth in fintech start-up activity is revealing the risks of ignoring the need for reform.

This desire to simplify often naturally-complex financial services businesses may in itself be an over-simplification. Even before the era of smartphone banking most banks were expected to service customers through a wide range of channels, often struggling to end products and channels long presumed irrelevant. The UK backlash against doing away with cheques in 2011 is a case in point.⁴

All of this has stretched financial services firms as they battle to serve widely varying customers across geographies, differing demographics and sectors, and across multiple product lines and channels. Frequently with inadequate legacy IT infrastructure, often inherited from a previous merger or acquisition.

While today's climate of low interest rates, increased regulation and financially-straitened customers is driving demand from boards and shareholders for cost efficiency. Quite often this is not taking into account the need for dramatic organisational overhaul that is required if returns to pre-crisis levels are to be achieved again.⁵

Much like its 2001 counterpart, the first internet boom, the era of the smartphone has added an additional layer of complexity for financial firms. Increased consumer demand for pricing transparency, lower prices and fees, usually coupled with expectations of a redefined user experience are pushing the bar for incumbent banks even higher.

A challenge that was reflected by the variety of opinions

expressed in the research for this report. Insights from interviews identified the twin competing currents reshaping the delivery of financial services.

An internal demand for cost efficiency among banks and large financial organisations, and an external threat of margin compression from new market entrants – often single product entities – better placed to take advantage of the falling cost of serving and acquiring customers profitably through an "innovation dividend".

Craig Moore, founder and chief executive of Dubai-based online peer-to-peer lending start-up Beehive.ae estimates that the cost of launching a new financial business in 2015 has fallen 80 percent compared to ten years ago. Operating from modest offices in central Dubai, the company has already been able to service over a thousand customers with a small staff.

Discussion with the founder of Sweden's iZettle also highlights that widespread adoption of smartphones Is creating a new, truly global, universal platform for financial services delivery. Founded in 2010, the mobile POS technology company is now available in 11 countries. Holvi, a business banking start-up is selling its solution in 29 European markets.

An opportunity that is allowing single product financial services businesses to establish themselves in new markets, and become global or regional players, much more quickly than was possible even after the first internet wave.

It is up to the bank to create a unified experience regardless of its internal operations. It is not enough just to create a solid strategy for each channel, but it is essential to embrace a holistics view of all of them.

Randi Marjamaa, Nordea Norway

4 Source: www.dailymail.co.uk/news/article-2013953/Cheques-scrapped-2018-better-alternatives.html

Simplification from within

Simplifying product ranges and service delivery is as much a cultural challenge for large institutions as it is a commercial dilemma. Large organisations, typically encumbered by layers of internal management and a more conservative approach to risk, particularly after the financial crisis, have been struggling to innovate on the scale of their start-up peers.

In response, many financial institutions are choosing a hybrid model for innovation – seeking to leverage the innovation dividend without costly and risky internal change initiatives – by creating dedicated innovation or start-up incubation 'hubs' that sit outside the organisation.

Nordea's fintech accelerator and Dankse Bank's MobileLife programme are examples of this. In both cases, the firms are seeking to harness the breadth of fintech talent and foster a culture of innovation without the bottleneck of corporate compliance. This involves putting entrepreneurs and start-up founders through an intensive programme with the potential to commercialise their business later with the programme sponsor or as independent businesses.

Frustration at the speed of internal decision making

Streamlining the product range

Beyond their in-built culture of innovation, for many of the start-ups interviewed for the research their ultimate advantage in the smartphone age lies in the simplicity of their product range. with larger organisations was expressed by several interviewees and often cited as a key obstacle to building a culture of innovation. As Adam Davidson of Currency Fair commented, "I'm driven by having the ear of the founder and management team – that's the advantage of working in a start-up and the digital sector sometimes – there are fewer hoops to jump through."

The approach of travel money provider Travelex, a large business established around 40 years ago, is to build an innovation culture from within the organisation. Dave Wascha, the company's chief product officer, previously with Microsoft and online printing company Moo.com, has been tasked with spearheading the company's digital efforts by building a software development company at the Travelex headquarters in London.

For a firm like Travelex, the choice was between what Mr Wascha calls, "a sequestered approach to innovation, through innovation labs outside the organisation or an embedded one, where you're really seeking to change the culture of the organisation." To achieve this the company is forcing senior corporate employees to work directly with their newer peers on the digital side of the business.

As mentioned above many of the highest profile fintechs of recent years are single product entities, with a simple commercial premise. A better customer experience combined with transparent pricing at (often much lower) cost than mainstream competitors.

The Big Issue - iZettle's story of easy acceptance

When street sellers start taking card payments it's fair to say that the days of cash and coins are numbered. Launched in 2013, a scheme to enable vendors of the Swedish equivalent of the Big Issue, a magazine sold by and for the homeless to accept electronic payments has seen vendors start accepting credit and debit card payments using technology from mobile payments firm iZettle. "Sweden is getting closer and closer to a cashless society as most people here prefer to pay by card. Cash is still important but if you don't accept cards you will miss out. We're very happy to make it possible for organisations like Situation Sthlm to accept cards," said Jacob de Geer, CEO and cofounder of iZettle.



Source: ITProPortal

With the possible exception of new retail bank Atom, this was the approach of all the new market entrants interviewed for this report. The commercial attraction of the mono-line product strategy is obvious.

Whether by lowering the absolute cost of the transaction in the case of WorldRemit, or a combination of lower cost and exposing the hidden costs of foreign exchange at Currency Fair or financial planning app Squirrel, new entrants are able to exploit the advantages of the low cost of innovation and translate this into a compelling marketing message to win market share. Increasingly across multiple markets and regions within a shorter timeframe than was previously possible.

While single product focus is unlikely to be a realistic option for large multi-channel banks, consumer expectations for product simplicity and transparency in terms of pricing, design and user experience are something to which banks can respond robustly.

The proliferation of single product fintech start-ups partly reflects customer preference for digital channels. Research of banking customers shows that preference for internet, mobile or social channels is growing for simple transactions such as checking balances and making payments. For almost anything else the branch remains overwhelmingly the preferred channel indicating a window of opportunity for multichannel banks.

Although their track record at leveraging their retail footprint through more effective use of technology has so far been patchy. Banks often feel compelled to jump when their competitors issue products based on new technology, for fear of losing out. As Randi Marjamaa, deputy of banking at Nordea Norway explains, "a consumer doesn't care about the integration behind the scenes and the different departments and various analytical tools that vary by channel. It is up to the Banks need to be relevant for the customers in the right context. Products will be fragmented.

Christoffer Hernæs, Sparebank 1 Group

bank to create a unified experience regardless of its internal operations."

Ms Marjamaa cites the savings and investment industry as an example of this, "customers have little or limited knowledge in the savings area. We need to simplify the messages and make investments and asset management more available for non-professionals."

Fintech initiatives from Barclays, Nordea, Danske and Visa Europ show signs of a shift in attitudes however and explicit acknowledgement that the banking model, largely unchanged for much of the last century, is due for a tune-up.

A realisation reflected across all the banks interviewed for the report. Highly aware of its customer's shifting expectations and the need to respond or lose out, Bank of Ireland has prioritised customer research as a means of understanding how best to interact with customers through a mix of digital and traditional channels. David Tighe, the bank's head of innovation explains, "we're undertaking regular customer research, we're talking to Bol customers on a monthly basis and ensuring continual interaction through digital mailings and the same for the executive team."

TRUST

People are happy to trust their cards with the vendors because they trust the card system. This is a milestone for us as it's taking our vision to democratise payments to another level.

Jacob de Geer, iZettle

From watchword to 'once' word

In the decade after the global financial crisis, maintaining trust of has been the central focus of regulators everywhere and, often begrudglingly, of financial services providers. Apparently with not much success. In fact, the situation has deteriorated further since 2008. The financial services industry as a whole is among the least trusted global industries with a trust score of 54 percent, compared to 78 percent for the technology industry, according to a global survey.⁶

By some measures, the global financial crisis marked the end of trust in finance. While the extent to which it underpinned the financial system was laid bare, the fintech revolution that has followed it is changing its role in shaping and defining the financial services landscape substantially.

A 2014 study of banking customers in the UK showed less than a third of consumers said they trust their bank.⁷ More damaging, the same study revealed that customers are largely apathetic to their bank's initiatives to restore trust, choosing only to stay with existing providers because there's nowhere else to go.

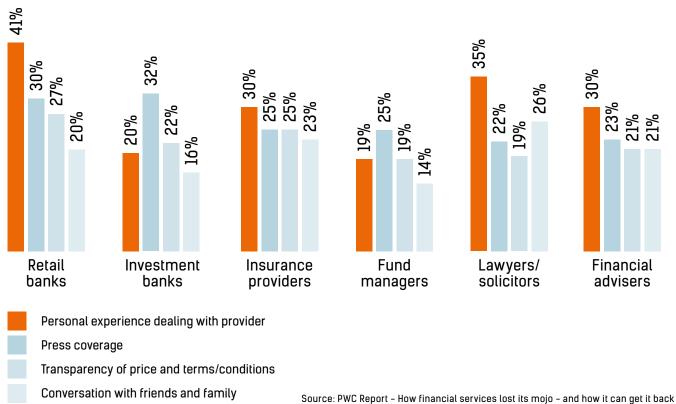


FIGURE 5: INFLUENCERS ON PEOPLE'S TRUST IN FINANCIAL SERVICES PROVIDERS

6 Edelman Trust Barometer, 2015 7 Stand out for the right reasons, PwC, 2014

Poor credit history

Since banking's inception, implied trust, backed up by regulation, sat at the heart of what made it a reputable business. The dividing line between shifty loan sharks and thrifty, responsible bank managers. The financial crisis to one side, repeated mis-selling scandals, data breaches and opaque pricing have made that line increasingly invisible. At least in customer's eyes. The perception of financial services as a 'sick' industry has infected every area of banking operations from products to pricing and staff pay.

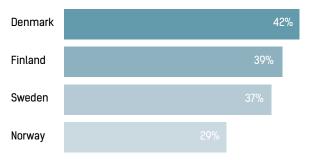
Perceptions that have been brought blinkingly into sharp relief by new digital entrants suddenly able to charge fees between 50 and 90 percent less than traditional banking incumbents.

The implications of this are only starting to become clear now. The creeping of digital technologies into nearly every aspect of consumer life has also increased their reputability, opening doors previously closed to new, nonbank financial services providers in the process.

The threat of retail financial services being offered safely and securely, beyond the confines of the bank, was perhaps first understood with the success of M-Pesa in Kenya at the start of the century, creating a whole new market at low cost, without the hefty burden of banking infrastructure. The pace of smartphone adoption in the developed world since then has furthered the cause, enabling a long list of new entrants to break into every corner of the marketplace from lending to payments, to financial planning, fund management and retail banking.

Worryingly for banks, often with startling results. P2P payments app Venmo, popular among American teenagers, already processes around \$2 billion in payments every quarter just three years after launch. Irish online currency broker Currency Fair, interviewed for this report, says revenue and customer numbers for its service are doubling every year. Proof, if needed, that a reliance on trust as the primary means of differentiation between banks and their upstart non-bank competitors is no longer the expensive barrier to entry it once was.

FIGURE 6: % OF CUSTOMERS WITH POSITIVE BANKING EXPERIENCE



Source: Digital Disruption in Nordic Retail Banking 2015

Nor is regulation on their side in quite the same way. Scrutiny of account opening practices and regulatory incitement to encourage account switching, such as the UK's account switching guarantee scheme, is piling on the pressure. More damagingly, the continuous flow of new rules is sustaining a prevailing view that banks are inherently like naughty children, needing constant supervision, or customers will lose out.

While the majority of new fintech entrants, including any of those interviewed here, are yet to be tested in a downturn, a strategy of 'wait-and-see' for the next financial crisis to unfold before responding, as the ground shifts beneath them may be too late. The technology on which bitcoin is based, the blockchain is already attracting attention for its ability to replace third party human intermediaries in financial transactions with an automated process that quite literally manufactures trust (see box). Banks need to take action soon or risk irrelevance.

Re-establishing the connection

The research indicates they can. While trust in finance may have been damaged over the last decade it is not beyond repair. In the same study of UK consumers referred to above, nearly 70 percent ranked experience and pricing transparency as the main influences behind consumer distrust.

Banks need to understand however that the perception of trust in financial services providers has changed, and not

just among next generation millennial customers. A large proportion of Currency Fair's clients are older customers with second homes overseas. As Edward Twiddy at Atom Bank notes, targeting customers for some new entrants is "actually less about demographics than it is an attitudinal issue – because we're a full service bank, there's no single age group we're going after." Fintechs in every corner of the marketplace are pointing the way forward, including those that operate behind the scenes. We have been paying meticulous attention to customer and partner feedback to inform our product design, build our reputation and win trust in the open market.

Kim Humborstad, Zwipe

Consumer comfort with the digitization of personal life, including payment and financial data increasingly means the key to regaining customer trust for tomorrow's bank requires that window-dressing is replaced with a strategy for packaging safe, secure, reliable services into friendly, friction-free experiences, "build it well and in a bombproof fashion," in the words of Mr Twiddy. Fintechs in every corner of the marketplace are showing the way. Even, Nordic region fintechs, where trust in banks remains high. As Magnus Nilsson, founder of iZettle remarked, "I believe in physical meetings since the world is still 10% online and 90% physical. It takes time before the world becomes truly online and physical meetings are needed to build trust and provide advice."

Restoring the lustre

Restoring a tarnished reputation along these lines implies a fundamental overhaul of company culture, hand in hand with a commitment to transparent, fairer pricing and communication. For financial planning app, Squirrel this meant targeting customers on lower incomes with an affordable product that helps them meet financial goals.

Where new challenger banks – Atom, Moven, Fidor among them – are going, some incumbents are starting to follow. Barclays launched its accelerator programme in conjunction with Techstars to highlight the importance of partnership. The proliferation of bank and high-finance sponsored incubators, labs and accelerator programmes around the globe also signifies the seriousness with which the threat to the traditional banking relationship is being taken. There are some chinks of light. In the everythingconnected, digital world, data security is increasingly the battleground on which reputations are fought, or forged. Despite the damage to their reputations over the last decade banks consistently outperform other industries in perceptions of customer data protection – three times as much as social networks and more than twice as much as retailers in one study.

Using affordable digital channels to drive openness, and improve the customer experience, banks now have a window of opportunity to profit from the digital dividend by building on a trusted reputation as custodians of their customers' finances.

Minting trust: the Nordic blockchain

With trust in the global financial system severely tarnished, blockchain technology is increasingly viewed as an automated alternative to human, third party intervention in traditional banking processes. Although trust in the Nordic banks is higher than in the rest of Europe, the region is home to an array of blockchain start-ups. Danish start-up Strawpay has created a payment network offering efficient, secure micro transactions on the blockchain. Coinify, also from Denmark, is a platform that allows merchants to accept bitcoin and blockchain payments and get paid in their local currency, as well as a place for traders of bitcoin to convert their local currency into bitcoins and vice versa.

Nordic bitcoin start-ups are also moving into the real economy. Examples include Denarium in Finland that has taken bitcoins out of the digital realm with the launch of a physical coin which is a store of bitcoin value. And Sweden's Safello, which operates an online bitcoin exchange, has partnered up with Barclays' to "explore how blockchain can be used in traditional finance."

AGILITY

Flexible friends

Start-up companies are agile by nature. The ability to make decisions quickly without being held back by layers of corporate bureaucracy is what gives them their 'edge' compared to established competitors, allowing them to respond or match customer demand more quickly. Fintech start-ups are no different, and agility is a defining attribute of the group of fintech start-ups interviewed for this report. More interestingly, in a sign of the competitive threat posed by digital-only entrants, it is also a widely expressed aspiration of banks and mainstream providers, keen to demonstrate their commitment to innovation, and their continued relevance, in the digital age.

New technologies are rapidly redrawing understanding of financial service delivery and product development. Previously dominated by a closed model of innovation, new financial products were designed and tested rigorously by companies behind closed doors before being released to the market.

As the fintech revolution gathers pace this model is fast being outstripped by consumer expectation for a process of continuous improvement, inspired by companies like Google and Apple – launching new products more quickly and then refining them by monitoring and responding to the data they generate as the products are used.

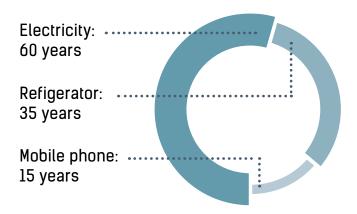
The interviews in this report reveal the extent to which this message is being taken to heart by large financial services organisations as much as their upstart peers. Adopting an open approach to innovation that relies on collaboration with external developers. In particular, the research reveals three approaches to addressing the innovation challenge among established providers, characterised here as 'build in', 'build out' and 'buy in'. FIGURE 7: SPEEDING UP THE SALES CYCLE

18 > 12 months weeks

A typical sales cycle is 18 months. Accenture Fintech Innovation Lab helps start-ups create and identify products and services for banks in 12 weeks

Source: CB Insights Disrupting FS Webinar

FIGURE 8: SPEED OF ADOPTION FOR US HOUSEHOLDS TO HAVE



Source: CB Insights Disrupting FS Webinar

Build out: Innovating outside the business

Interviews for the report identify the extent to which innovation in financial services is increasingly taking place outside the confines of the bank.

There are clear commercial benefits to such a strategy, particularly for constrained company balance sheets. Companies large and small are taking advantage of the quicker time to market and easier access to consumer insight enabled by mass adoption of smartphones and wider internet availability. Digital technologies have the added advantage of flexibility built-in, allowing providers to respond to customer demand more quickly and adapt their products accordingly. Adam Davidson of Currency Fair explained that improvements to Currency Fair's online foreign currency trading platform have included "improving our product by enabling regular payments. We also launched our first app – we relied previously on a phone friendly site. It was the first p2p currency transfer app and has around 80 percent of the functionality of the full site." The reality is that it's three times faster and cheaper to innovate this way (Barclays Accelerator Programme) than to do it internally

Derek White, BBVA

The growth in bank-sponsored incubators and innovation funds, Nordea's fintech accelerator and Danske Bank Mobile Life programme among them, is proof of how seriously the challenge to the traditional model of banking delivery is being taken. Available data suggests this is the right approach. Consultancy CapGemini estimates that over 40 percent of all financial products globally are already sold online.⁸ A trend that will continue as digital banking becomes the norm.

Digital technologies are at the heart of enabling agile innovation. Craig Moore of Beehive estimates that the time needed to launch a new product is now down to one quarter what it was a decade ago. Christoffer Hernæs of Sparebank 1 Group also reflected on this, "loyalty is already close to zero. There's loyalty to things that are cool. [Banks] need to be tactical on the go and look for black swan opportunities. [They need to] work on the hypotheses that are true and execute quickly." A feat that both Barclays and Visa Europe are trying to emulate with their 100-day acceleration programmes.

The cultural shift in approaches to innovation is epitomised by the change of heart at Visa Europe. Where once the company's innovation efforts were a closely guarded secret, the barriers have been lowered and the Visa Europe Collab is letting outsiders in to help inspire ideas that could become Visa products in future and improve the company's digital capabilities. Steve Perry, founder of Visa Europe Collab, explained that the launch of a new card with Citibank in partnership with an external provider presented "a eureka moment" and the sudden realisation that the organisation should stick to "building the stuff it understands and use trusted partners that are better at the areas outside Visa's specialism."

Buy in: Acquiring agility

As company balance sheets recover, investment in technology is also picking up. Derek White of Barclays admits that as the digital shake-out continues, a strategy for acquiring fintechs with the right product or cultural fit will form part of the strategy for many institutions as they re-tune their operations and seek to buy-in innovational agility. The acquisition of digital start-up bank Simple in the USA by Spain's BBVA is one example of this.

The payment schemes, American Express, MasterCard and Visa have been actively acquiring companies across a

range of fields. Both Visa and MasterCard have stayed close to their companies' core focus with acquisitions related to new payment technologies, authentication and biometrics. American Express has moved further afield

including a partnership with home rental site Airbnb and consumer focused acquisitions in digital retail. US payment technology vendor ACI has also been actively acquiring companies in a bid to keep up with rampant innovation on its home turf.

Build in: Innovating inside the business

The middle way, of innovating from inside the business, still has a role to play. Among interviews for the report this was best characterised in ACI and Travelex. Both companies aware of the importance of innovation for their businesses but still committed to innovation from within.

For travel money retailer Travelex this involved establishing a digital product development team in its London head

office. Dave Wascha says the team has already developed three products that are currently on trial and set for launch in 2016. Mr Wascha says although the business was established over forty years ago, the company's retail footprint affords them a head start over digital only competitors when it comes to launching new products. The challenge for large vendors of banking technology in the age of digital disruption to stay current is even more acute. US payment technology company ACI is fully aware of the dilemma. According to Sylvie Boucheron-Saunier, vice president and general manager Europe, the solution lies in the company's commitment to research and development. Mrs Boucheron says the company invests 20 percent of its annual in R&D, which translates to approximately \$200 million each year invested in new technology.

The company has two labs in the US where it experiments to test new innovations and understand how they can be integrated into ACI's existing products. Another is set to open

in 2016 in Ireland to accommodate growing demand across Europe, the Middle East and Africa, a move geared to enabling ACI to adapt better to the changing regulatory landscape.

The choice between innovating internally, externally, or by buying-in technology, each come with their own specific challenges. With far-reaching implications for company culture, service delivery and the business model. The interviews in the report underline that it is too early to tell which strategy will deliver the best results. More certain however is that for both new entrants and established banks a strategy for agile innovation will enable greater differentiation and play an essential role in their success.

Swipp it out: Disruption at the point of sale

Similar to the challenges faced by universal banks, speed of innovation is also a hurdle for the pre-digital financial technology providers. Often saddled with legacy processes, business lines and corporate culture that stifles, rather than supports, innovation.

As competition in the regional point of sale marketplace has intensified with the incursion of fintech start-ups like iZettle, POS terminal provider Verifone has been keen to overcome this and is exploiting the Nordic region's capacity for innovation to help them succeed in the digital age.

Verifone already has a strong footprint across the region. While merchant penetration varies between 30 and 65 percent, more than half of all the company's transactions in Europe now originate in Nordic countries.

Working in partnership with clients and technology providers to design new solutions or products is the cornerstone of the company's bid to succeed here, and elsewhere. Verifone has recently been working in partnership with Danske Bank to increase contactless payments in Denmark, and is now working in collaboration with Swipp, a Danish mobile payment app which will allow over 800,000 Danes with the Swipp app to pay for goods on their mobile phones at Verifone's Danish merchants.

The Swipp app is based on direct account-to-account payments, avoiding the need to use intermediaries to route payments, helping to keep transaction costs down while evading the risk of the payment not being received by the merchant. According to the company, direct integration with the app from Verifone terminals means no project costs, avoids the need for additional devices and should lower the barrier to adoption.

In Norway, the company has introduced a new service with Bember, a loyalty technology provider that allows retailers to recognise the customer based on previous transactions, whether the payment was made in store or online.

The company's European president June Felix says these ventures are all part of an initiative to move the focus of the business from making payment terminals to payment services that help retailers address the headache of retailing in the digital era. "We are increasingly working with partners to design and implement 'first of a kind' solutions to solve their problems in an innovative way. Scandinavia has a highly educated, technically savvy workforce open to experimentation, which provides ideal incubation for new ideas and insight into early trends."



RELATIONSHIP

For decades, the banking industry prided itself on its uniquely placed ability to maintain a strong bond with its customers first through the branch, then the phone and, more recently, online. This lucrative 'relationship premium,' aided by the high cost of entering the banking marketplace, a favourable regulatory climate, and limited transparency in the real cost of banking transactions meant that the banking landscape across most advanced markets remained largely unchanged.

If the first internet wave partially loosened the grip of financial services companies on their customers, by enabling direct price comparison between banking products, by some measures the mobile internet boom appears to be helping to disintegrate it entirely. New regulations designed to improve consumer choice, compounded by reduced respect for large banks, and growing consumer comfort with online-only providers has meant that the relationship between account holder and customer has become more fluid, even fickle.

Data from the first full year since launch of the bank account switching service in the UK, designed to make it easier for account holders to change banks, shows that the UK's four largest banks lost a quarter of a million customers through account switching in 2014. While consumer research revealing that around a third of customers were enticed by promotional rewards as one of the main influences to switching bank accounts.⁹

Against a backdrop of declining customer satisfaction with banks around the world, new fintech entrants are recognising the opportunity to redraw traditional means of customer interaction and engagement, with mobile at the heart of their strategy. the latest data on channel use illustrates why Nordic banks feel fintech innovators are successful (see figure 10).

While the concept of a direct relationship with their bank might still hold for some customers at the top of the income pyramid, 'the perfect storm', coupled with the success of technology companies like Google and Apple, has shifted consumer expectations of financial services delivery and accelerated banks' search for new ways to relate to their customers in the virtual world.

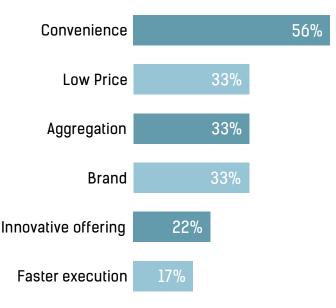
In particular, the research revealed the dual challenge confronting providers of banking services as they struggle to redefine banking relationships. Making consumer lives simpler through greater transparency in product benefits and costs, coupled with an easier user experience, at the same time as making greater use of technology to manage organisational complexity and improve profitability.

FIGURE 9: WHY SCANDINAVIANS ABANDON E-PAYMENTS MID-WAY

Cancellation of initiated online purchases (%)



FIGURE 10: WHY DISRUPTORS ARE SEEN AS BEING SUCCESSFUL BY NORDIC BANKS



25

It is more complex than reducing our branches from 55 to 30 in Norway. We will continue using the branches for counselling primarily on major life events like pension and house lending.

Trond Mellingsæter, Danske Bank

As Edward Twiddy, chief innovation officer at UK digital challenger-bank Atom, explained, "beyond everything to do with being direct and digital and being a full bank – which does differentiate [us] – the most important thing is that it's brand new – we've put together the components and revenue streams we wanted."

Taking inspiration from online gaming Mr Twiddy says the bank will introduce game-like features into bank account management when it launches in 2016. In a sign of the blurring of lines between banking, gaming and other digital technologies Atom, like Currency Fair, has intentionally combined staff with retail banking expertise alongside others from digital industries in its hiring strategy.

Using gaming to drive product use and improve engagement is also an approach taken by Moven in the US. The bank's founder Brett King reckons that millennial consumers are the least financially literate generation of the last fifty years. The Moven retail banking app helps customers manage their accounts better by using a traffic light system to indicate whether an account is in debit or surplus.

For mainstream banks, a complex product range is adding to the scale of the challenge ahead of them as they seek to streamline their relationship with customers. As an example, in the 20 years to 2013, the average number of mortgage products offered by the 20 largest banks in the UK grew from 10 in 1993 to over 60 in 2013. This complexity is not likely to go away. While digital channel use is growing, customer preference and use of branches holds strong.

Redefining the retail relationship is about more than using technology to cut operational costs. There may also be opportunities for preserving existing or adding new revenue streams. Consumers are looking for trusted advisors and the record of the mainstream banking industry in achieving this is uneven. One industry survey of banking consumers across nine developed and emerging markets, showed that 77 percent felt that banks failed to meet service expectations across a range of areas including helping customers stay in control of their finances.¹⁰

Derek White of BBVA, recognises what this opportunity means for a large institution, "our [product] design principles – are about a shared glass. Some things people are not comfortable doing themselves. [As consumers] we take comfort in taking guidance, from getting advice – and some customers will place a premium on the value of the personal interaction." A view shared by Trond Mellingsæter at Danske Bank, "It is more complex than reducing our branches from 55 to 30 in Norway. We will continue using the branches for counselling primarily on major life events like pension and house lending."

Taking a lesson from the new fintechs, rediscovering the relationship premium hinges on banks' ability to use technology to improve efficiency and deliver greater insight on their customers. Copying the success of Google and Apple, banks need the technical architecture to introduce processes of continuous product and service refinement based on customer data, breaking down the walls between siloed divisions in the process.

It is a race they need to enter soon or they risk losing out. As Todd Latham of Currency Cloud points out new payment industry regulation in the form of PSD2 will stretch the distance between bank and customer as it opens the market to new non-bank payment aggregators, "[while] banks are needed as the payment gateway and to access central bank funds, they are getting further removed from the point of the transaction... this is an ideal space for the likes of Facebook, Google, Microsoft and Apple – the opportunity to have sight of the underlying customer data and then be able to target financial products for example on the back of it is just too good an opportunity to miss."

10 FIS Consumer Banking PACE Index, 2015

While trying to understand how to integrate and make sense of data streams from multiple channels and products banks have been more successful at using technology.

Leveraging automation, advances in credit assessment and fraud detection are now already carried out by computers. Some banks in emerging markets have also made progress in adapting their product ranges to the new channels favoured by consumers. Turkish bank Deniz Bank uses Twitter to allow consumers to apply for loans and has launched a Facebook banking branch which the bank claims is now used by 10 percent of the bank's customers for money transfers and account management.

Using engagement to improve the relationship

The advantage of digital channels is the ability to improve customer engagement with the right strategy and combination of digital interaction backed up by robust customer service. Something that Bank of Ireland sees as pivotal to the bank's repositioning for the digital era "social media are being used extensively by our customers to contact the bank, request support and engage with the bank and also used by Bol to promote events, services, new products."

The key to success is more nuanced than adding Twitter or Facebook as yet another point of entry for a new customertype. Bank of Ireland's approach has also been to reflect customers' growing digital appetite in some of the company's branches. At a pilot branch in central Dublin cashless devices are supported with advice from branch staff. The bank has also based its innovation team there with space allocated for start-ups, co-working and fintech events.

Industry-wide investigation of potential to use blockchain to improve back office processes, including managing bank ledgers and storing documentation. Bank of Ireland is one of many banks exploring the opportunity of the blockchain to streamline internal bank management. As David Tighe remarked, "it's important to conduct the research first and it's still too early to talk about uses but we suspect considerable opportunities."

Specifically, the research revealed the breadth of recognition of this across the large financial institutions interviewed for the report. Payment scheme Visa Europe's new open innovation approach to product development – opening the doors to collaboration with other partners, including start-ups and entrepreneurs – and the Barclays' Accelerator programme are examples of this.

As David Tighe of Bank of Ireland notes "the key is working with partners and innovators to expand and improve its financial services and products, both in terms of offerings and geographic reach – e.g. from wealth management strategies to insurance to lending (crowd funding) and other areas that provide potential for new growth."

Companies like Atom Bank in the UK, and Moven and Simple, in the US are already transforming banking relationships by focussing on the customer. By placing greater emphasis on user experience, providing timely, relevant information and advice and easier to use products, they offer a glimpse of how the retail banking relationship is likely to develop.

The opportunity to redefine it however is still wide open. Both for start-ups and new entrants as well as incumbent providers. In an echo of Steve Jobs, customers don't know what they want – and don't know what the new model of banking should look like. It's up to the market to create the platform that will shape banking relationships for the next decade.

Built for innovation

- Danske Bank geared for the digital age



TRANSPARENCY

Visibly transparent

The concept of transparency as a value proposition for retail financial services organisations was first made apparent with the launch of price comparison sites in the first interent wave. Ever More connected consumers and a financial system deemed untrustworthy in the years since have thrown open the doors to non-bank competition, accelerating the transformation of transparency from regulatory doctrine to commercial priority.

The audit trail will be so much more transparent, and stronger than today, so from a regulatory perspective what I understand is things will improve if and when blockchain is implemented. Erik Zingmark, Nordea

In the decade and a half since, the scenario for mainstream providers has deteriorated further as successive waves of scandal have eroded consumer trust in bank communications, creating a deficit in trusted financial advice. At the same time banks have failed to respond to the threat to their business of direct price comparison on the internet by articulating the value they offer their customers.

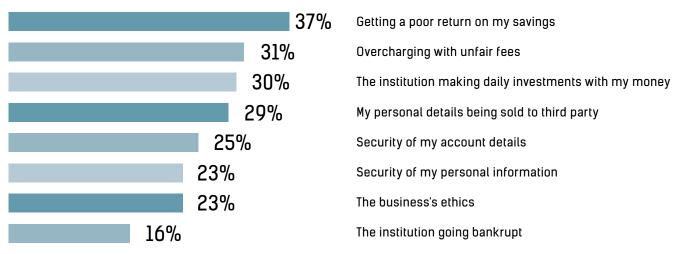
While transparency comes naturally to most fintech start-ups, including those interviewed for this report, the challenge for multichannel financial services organisations is more complex. Its impact infects every area of the business from management style to communications, product development and pricing.

Consumers want greater control over what happens to their money and much greater visibility of what the institution is doing with it when they decide to leave it with them. 'Doing transparency' much like 'doing digital' runs the risk of consigning organisations to irrelevance.

Paradoxically, increased transparency enabled by the advance of digital finance has probably contributed further to the loss of trust in banking. WorldRemit, Currency Cloud and Currency Fair, interviewed here, offer services as low as one tenth that of mainstream competitors, leaving a significant proportion of consumers perplexed as to what exactly they've been paying their banks for up until now (see Figure 11).

Failed attempts by banks in some markets to reintroduce fees for their current accounts provide a valuable lesson. It's not that customers won't pay, just that they want to know how the pricing is arrived at, and increasingly expect less rigidity. Being able to pay only for what they want or use just as they can with unbundled digital competitors.

FIGURE 11: CONSUMER'S MAIN CONCERNS



Source: PWC Report - How financial services lost its mojo - and how it can get it back

See through competition

Complex financial organisations are caught in a bind. While communications drawing attention to greater institutional transparency and disclosure are relatively straightforward to implement, research indicates this may not be enough. As indicated elsewhere in this report, these initiatives are likely to be dismissed, consumers are not likely to believe the information they receive from their bank is impartial. At the same time, banks' higher costs compared to new digital entrants mean they are unable to compete directly on price alone.

Re-installing customer confidence in their communications is the key to rebuilding the retail bank in the digital age. Achieving this will require a crossorganisational effort to explain the value providers offer their customers in a manner that they will trust. In the vocabulary of digital business this may involve providing services, advice or information that offer no immediate commercial benefit to the organisation.

Retail banks do have a track record here. In the pre-digital era UK banks were successful in attracting new student account holders through promotions and incentives. Creating a valuable stream of new customers and setting the foundation on which to build longer-term relationships with the affluent customers of the future. In the digital age providers need to rediscover their acquisitive zeal, underpinning this with honest, responsible communications and a user experience that keeps them engaged.

Digital challengers like Atom Bank and Squirrel in the UK, and Moven in the US, are seeking to help fill the advice deficit by helping customers manage their finances. Brett King, founder of Moven, reckons that millennial generation consumers are the least financially knowledgeable generation in decades – the Moven app uses an interface that takes its cues from gaming to engage customers and make controlling their spending intuitive. Atom Bank, when it launches in 2016, is planning a similar approach.

New companies offering remittance and international payment services provide the clearest illustration of the new model of financial services that prioritises fairness and responsibility, allied with price transparency. In the Nordic region The launch of Finansportalen in Norway is one example of how regulators and consumer bodies are encouraging consumers to shop around. A move to which local institutions will need to respond, to remain competitive.



Business models have had to change because people are no longer prepared to pay for what they see as basic services and we strongly believe that the mobile phone is fundamental to delivering quality, low-cost financial services in a way that is completely transparent

Alix Murphy, World Remit

With no hidden mark-up or price hike dependent on the destination of the funds. In some cases sending money to sub-Saharan Africa can cost two and a half times as much as sending to a developed country.¹¹

A sharp contrast to mainstream banks where the real cost of international transfers might be hard for the customer to determine. As Adam Davidson of Currency Fair notes, "[there's] quite a lot of disinformation out there, so although some providers might offer and advertise free transfers, banks are quite good at masking the true cost."

For banks to get customers to believe them again is not just about imitating new entrants through short-term price reductions or game-like gimmicks and free offers for which the music industry is well known. With the window of opportunity still wide open as the digital shake-out continues, investment in new technology platforms to combine the data streams from their customer's activity, often across multiple products, would finally enable the 'holy grail' of the single customer view. The enormous potential to tap customer insight, if used intelligently, could help rebuild the bond between bank and customer, and close the advice gap. Banks have less need to fear than might be imagined. One clear advantage of the collaborative era of innovation is that bank and financial product technology is increasingly being designed with a back-door to enable future evolution and update, while enabling easier integration between technologies.

As this trend plays out across the industry and across regions, the contribution it will make to ease of use of banking services will drive usage and likely help draw in new customers increasing the size of the overall marketplace. The growth of mobile money across Africa offers some valuable lessons here for the developed world.

Interviews for this research reveal banks are highly aware of the need to re-connect with their customers and making strident efforts. Initiatives to re-position bank branches and a less secretive approach to innovation are examples of this. What is yet to be established is whether this will be coupled with a sustained commitment to providing impartial advice that goes beyond selling products to meet short term internal targets.

Transparent to the point of invisibility

As discussed in the section on trust, cementing a culture of transparency in financial transactions will increasingly mean replacing human intervention by automated processes. The concept of using blockchain to prove ownership of an asset is one such example that could, if pursued, encourage wider participation across all areas of the financial marketplace.

In some places this is already happening. As Steve Perry of Visa Europe Collab underlines, while financial services brands will likely remain important guarantors of transactional security, in much the same way as the 'Intel Inside' principle of the PC industry, the best payment experience in future will be one that is invisible to the customer. Where Uber blazes the trail to easy, 'friction-free' taxi rides, the banking industry may be forced to follow.

The World Payments Report 2015 names 29 key regulatory and industry initiatives aimed at stimulating innovation, increasing competition and transparency, standardisation and risk reduction. The report shows that more than 50 percent of key regulatory and industry initiatives either directly or indirectly support payment innovation and this area is gaining genuine momentum. It states that in many cases where innovation is the primary objective, such as mobile wallets, the initiatives have resulted in more transparent and improved payment experiences for the consumer and has become an important focus when regulators design new regulations. Writers of the report believe that immediate payments will have a wide impact on origination, processing, and reporting of payment service providers. Such payments will also influence the pricing, features/options, and security of products.

For the consumer, immediate payments promise greater price transparency, faster transaction times, a safer payments environment, and enhanced user experiences.

Disrupting technologies

Many of what the industry calls 'emerging technology' have finally emerged and we are already witnessing some trends that show what the future will look like once banks, merchants and consumers fully tap into their potential.

In 2015 change has been particularly visible in the areas of foreign exchange trading and international money transfers traditionally associated with high fees, the long time it takes for money to reach the payee and hidden costs such as agent commissions.

The big enabler is mobile technology through closed loop cards/mobile applications, digital wallets and mobile money, otherwise known as the 'hidden payments market', which the World Payments Report 2015 estimates at between 6.3 percent and 10.5 percent.

WorldRemit born out of personal experience

For former London Business School student, Ismail Ahmed, sending money home to Somaliland has been a frustrating experience as it is for millions of others facing the fundamental issue of high fees and the time it takes to get money through to someone in another country. In fact, the experience was painful enough for him to tackle it personally.

In 2010 Ismail established WorldRemit, a start-up that vows to deliver this service instantaneously and at vastly reduced cost. In addition, the benefits of moving remittances online include a reduction of cash and anonymous transactions, robust authentication of payees and a digital audit trail to reduce the incidence of fraud.

Fundamental to WorldRemit's business lies the issue of transparency and, according to recently published figures, traditional practices could not be more ripe for disruption.

- The cost of transferring money internationally is still not settled. In developed markets the cost makes up 7-8 percent of a transaction. To send money to countries in sub-Saharan Africa, however, can cost as much as 12-20 percent of the transaction amount – fees being inflated to combat money laundering and fraud. (Source: World Bank Send Money to Africa Report)
- The World Bank estimates that money transfers cost Africans as much as \$2 billion each year. (Source: Africa Progress Panel Report)

"Business models have had to change because people are no longer prepared to pay for what they see as basic services and we strongly believe that the mobile phone is fundamental to delivering quality, low-cost financial services in a way that is completely transparent," argues Alix Murphy, senior mobile analyst at WorldRemit.

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