SUCCEEDING THROUGH
THE DIGITAL REVOLUTION
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About  IBC

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www.temenos.com
In this report, we have interviewed 11 disruptive new entrants to the banking industry to understand how they are taking advantage of digitization to launch disruptive new business models. What we learned is multi-fold, including that:

- banking provision is stratifying, with new entrants offering discrete banking services at lower costs and with better rates
- business models built around offering transparency and helping customers to manage their finances can be highly successful
- leveraging social media and big data can help firms to get a clearer picture of their customers’ lives as well as help them to determine customers’ creditworthiness
- digital-only banks can be truly viable
- transplanting a retailing model and mindset into the banking industry can work
- embedding financial services within a social network, where peers share information and advice, can produce impressive results
- many gaps still exist in either the types of financial services that customers would like to consume or in the way they are delivered.

But, perhaps the biggest finding is that traditional banks can succeed in the digital age. They have great assets, such as large customer bases, access to rich transactional data and the ability to offer integrated financial services. However, they must find a way to leverage these assets. In particular, they should concentrate on ridding themselves of legacy (legacy technology and processes), on developing a balanced multichannel delivery model, on deepening their data analysis capabilities and, lastly, on playing a larger role in their customers’ lives.

While much of the fatalistic talk about banks’ futures is overdone in our view, the threat from new disruptive, digitally-enabled business models is real and banks need to act quickly if they are to succeed in the digital age.

Executive summary

The banking industry used to enjoy strong barriers to entry, such as low customer switching, which protected it from the threat of new entrants and, in turn, allowed it to earn high returns on capital over extended periods. In the years 1980 to 2006, for instance, annual global banking return on equity (RoE) averaged 16 percent.

Digitization is changing the industry’s dynamics. Cloud computing is lowering the cost of doing business. Improvements in mobile technology are rendering banking anytime, anywhere and accessible over any device. Big data is making it possible for firms to draw major insights into customers’ lives from their transaction and other data. And social media is providing the opportunity to inject a social context into banking services.
The banking industry is changing

INTRODUCTION

It is commonly recognized and widely discussed that digitization is changing the banking industry. In particular, it is acknowledged that digitization is opening up the industry to new, and potentially non-traditional, competitors.

Our intention with this report has been to try to bring greater clarity to this discussion. Firstly, we have looked at the factors that are driving digitization of the industry. Secondly, we have examined and interviewed several of the new entrants to the industry to understand how they are exploiting digitization to launch disruptive new business models. Lastly, we have tried to interpret our findings and distil them into a set of imperatives for traditional banks if they are to succeed through this digital revolution and withstand the threat from these new entrants.

In compiling the report, we have drawn on the experiences of a much larger population of companies than firms just using Temenos software; in fact, the majority of companies interviewed are not Temenos customers. In doing so, we hope to have gathered findings and recommendations that are of general and broad import.

BANKING’S MOAT

Warren Buffett once said, “in business, I look for economic castles protected by unbreachable moats”. This analogy encapsulates his investment strategy of investing in companies and industries that can easily repel competitive threats, through the existence of strong entry barriers or sustainable competitive advantages, and so earn high returns on capital over sustained periods.

The banking industry used to be protected by an unbreachable moat. If a new bank wanted to start up, it would have to obtain a banking licence; a process which in most countries is arduous, time-consuming and requires the applicant to set aside large amounts of capital from day one. A new entrant would also have to make a heavy investment in IT systems (which the UK Office of Fair Trading once suggested could make up around two-thirds of start-up costs1). In addition, a new entrant would have to build a network of branches in order to service their customers. Lastly, even if a start-up managed to do all of the above, it was far from certain that it would be able to attract significant customer numbers – according to the Centre for Economics and Business Research, even as recently as 2003, annual customer switching rates were only around 2 percent in many developed markets.

Consequently, few new banks or other market entrants were created and, together with other factors such as high leverage, created the conditions for sustained periods of very high returns on capital. In the period of 1980 to 2006, for instance, the average annual Return on Equity (RoE) for the global banking sector was 16 percent.

THE MOAT IS DISAPPEARING

Nonetheless, the situation is now changing and technology is playing a pivotal role in stripping away these barriers to entry. It is true that technology is not the only factor at play – changing customer behaviour (in particular, the growing propensity to switch providers – see chart below) as well as a regulatory agenda that seeks to introduce new competition to contain the problem of banks that are "too big to fail" are also weakening historical barriers to entry. But the role of technology change is critical.

Percentage of customers who opened and closed accounts and services in the past year

<table>
<thead>
<tr>
<th>Service</th>
<th>Opened (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total opened or closed account/service</td>
<td>52</td>
</tr>
<tr>
<td>Switched all accounts to primary provider</td>
<td>2</td>
</tr>
<tr>
<td>Opened at PFSP</td>
<td>35</td>
</tr>
<tr>
<td>Opened at other provider</td>
<td>18</td>
</tr>
<tr>
<td>Closed at PFSP</td>
<td>7</td>
</tr>
<tr>
<td>Closed at other provider</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: EY Global Consumer Banking Survey 2014.

1 Office of Fair Trading November 2010, “Review of barriers to entry, expansion and exit in retail banking”
The banking industry is changing continued

There are four principal technology trends that are driving the digitization of financial services (and other industries), putting at risk existing business models and threatening industry profitability. These are what Gartner, the US information technology research and advisory firm, has termed the "Nexus of Forces" and are discussed below.

**CLOUD**

By allowing firms to share IT costs, cloud computing is lowering the costs of doing business. According to Early Bird Venture Capital, the cost of starting a consumer internet company has reduced from EUR1.5m in 2000 to EUR5,000 in 2013. In the banking industry, the advent of cloud computing is not only helping to neutralize one of major barriers to entry, but it also allows firms to operate profitably at much lower levels of scale. As such, it is also contributing the "unbundling" of financial services with new entrants often just offering one discrete part of the banking value chain, like FX transactions in the case of Currency Cloud.

**BIG DATA**

The amount and sources of data are exploding but so, crucially, is the ability to process this data and draw meaningful insights from it. It is estimated that in the last two years we have generated more data (a zettabyte) than was created in the whole of history up until that point. This, coupled with rising computing power (Moore’s Law stipulates that computing power doubles every 18 months) and falling prices (in 1980, 1 MB of memory cost $6,500 compared to 5c today), means that we can now do something with this data. In a banking context, it means it is possible to analyse customer data and use it for value-adding purposes, such as determining credit risk or to offer appropriate products and services (at the right place and time). Where this trend benefits new entrants or non-banking firms stems from their proficiency, in terms of IT systems, existing business models and mindset (with banks seeing themselves more as data custodians than data analysers).
MOBILE

Advances in mobile technology have rendered banking service provision anytime, anywhere, and accessible through multiple different channels and apps. This means that a new entrant can set up a bank without having a branch network, but this is not new. What it does mean, however, is that banks now can offer a much wider range of products and services that make it more likely that a digital-only model can be truly viable. Further, the proliferation and sophistication of new devices is accelerating the move away from the branch as well as increasing the number of interactions that individuals have with their banks. In this context of more interactions but fewer trips to the branch, the industry dynamic changes from economies of scale to ‘economy of access’, and it becomes a competition to own the point of customer interaction. This poses a threat to banks, which risk losing the end customer contact – and by extension, any control over pricing – disintermediated by digital wallets or by “front-end” banks like Simple (now part of BBVA).

Exhibit 1 - Amid an explosion in the number of customer contacts, branch traffic has decreased

Customer contacts with banks (indexed)

<table>
<thead>
<tr>
<th>Year</th>
<th>Branch</th>
<th>ATM</th>
<th>Internet</th>
<th>Mobile</th>
<th>Call centre mobile</th>
<th>Relationship manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>100</td>
<td>75</td>
<td>17%</td>
<td>5%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>2012</td>
<td>195</td>
<td>48%</td>
<td>15%</td>
<td>6%</td>
<td>5%</td>
<td>1%</td>
</tr>
</tbody>
</table>

From 2004 through 2012, contacts with branches declined by a CAGR of 3 percent

Sources: Council on Financial Competitiveness; estimates based on BCG case work.
Note: Because of rounding, totals may not equal 100.

SOCIAL MEDIA

Social networks have become part of the fabric of society. According to Experian, people are spending around 15 minutes of every online hour on social networks. We use social networks for a variety of reasons, such as to keep in touch, to share news, to blog, to seek and give advice, to research products and to look for jobs. There is also the potential to embed more of a social context into banking. On one level, this might help to restore the personal interaction lost as customers jettison branch visits (establishing a dialogue on Twitter, for example), but there is also the possibility to build financial services social networks, where users can share information and give each other advice. There is clearly an opportunity for social media networks to branch into financial service provision directly, or to white label such services (Facebook recently announced that it intended to offer remittances and electronic money), but there is a further opportunity to start something new, a new proposition, as eToro has done with its social investment network.

While traditional banks are unlikely to disappear overnight, it is clear that these technology changes, underpinning the digitisation of banking, are putting pressure on the status quo. They are simultaneously handing more power to customers, who have more choice and better information than ever before, while opening up the industry to more competition. While regulation will still protect some parts of banking, there are many areas at risk and new entrants will likely focus on the sweet spot of areas that have high margins and low regulatory oversight (see our matrix below). Accenture, the management consulting, technology services and outsourcing company, estimates that digitization puts at risk 30 percent of banks’ revenues.

A view of banking activities according to their vulnerability to disruption

Source: Temenos

4 Accenture, "The Everyday Bank: How Digital is Revolutionizing Banking and the Customer Ecosystem"
New business models and trends

In this section, we look at some of the key trends and new business models that we observe in the industry, drawing heavily on the interviews with digital disruptors that we include in full in “The disruptors tell their stories”.

LEVERAGING THE POWER OF SOCIAL MEDIA AND BIG DATA

Lenddo, a financial services provider focused on emerging markets that was started in 2011, is using social media and big data to help it to develop deeper relationships with its customers, as well as to build a picture of their credit risk.

Regarding customer relationships, its goal is to go “back to basics”. In the same way that a traditional community banker knew his customers personally and so could offer the best advice, Lenddo analyses customers’ social media activity to piece together a detailed picture of their lives.

As Jeff Stewart, CEO, says, “We are looking at who the person is rather than their transaction history. In these [emerging] markets there is not a lot of transaction history to work with.”

Lenddo also uses social media to inform its credit scoring. What they have determined is that the behaviour of people is influenced by the people they are connected to, even on social media. “We can map back to see how connected they are to good payers and bad payers. It is very, very powerful.”

Lenddo’s business model is made possible by the amount of data that customers share, but also by the capabilities that now exist to analyse this data. As Jeff Stewart puts it, “We have more computing power in our smartphones than Citi had in its world headquarters in 1980. And then you connect that to the cloud and it’s more power than all the banks in the world in 1980 – the power is there.”

CREATING SOCIAL PLATFORMS

Other models focus not on using social media to inform banking, but rather on creating a social community in which to embed the financial products. This is the model that players like Fidor Bank and eToro are using. The concept is simple but impactful: a network of people who share common interests and goals, who give each other advice and share information.

eToro, a social investment network with three and a half million users across 170 countries, says that its users are very happy to help each other out. What is more, they observe that, unlike dealing with professionals, financial advice given by peers is typically given in language and at the level of complexity that is appropriate to each user. The network, which refers to itself informally as the “Financial Facebook”, has as its goal to remove the barriers to investing. Part of this lies in de-mystifying the jargon, but it also uses Contracts For Difference (CFDs) to allow its customers to lower the financial barriers (allowing customers to acquire parts of securities, like half a share in Google).
CHANGING CUSTOMER PREFERENCES
A TIMEBOMB FOR WEALTH MANAGEMENT FIRMS?

$1 trillion
per year in wealth being transferred down to generations X & Y (USD)

90% of beneficiaries have little interest in staying with their forbearers’ wealth manager

61% of Gen X & Y millionaire investors in the US make their own decisions but collaborate with wealth management advisors for second opinions and validation

50% of wealth management advisers in the US rely on their executive (i.e. older) team to generate new ideas

55% of wealth management firms in the Americas feel that their product/portfolio management systems are not (or only somewhat) effective

80%+ of Gen X & Y millionaire investors like to try new technologies and devices; 25% of boomer millionaires do

~35% of wealthy investors use social networks to find a trustworthy wealth management adviser through peer recommendations

25% of advisers using Twitter and LinkedIn at Morgan Stanley Smith Barney won new customers with more than 1 million dollars in assets

Source: Temenos, Leveraging Technology to Capitalize on the Transfer of Wealth to Generations X & Y
The eToro platform has one especially unique and defining feature: it allows users to see the portfolios of all other traders and to copy the best-performing ones. In return for letting other users copy their portfolio, the traders will gain followers and also a financial reward – with the best traders earning as much as USD100,000 per month. As Nadav Avidan, a company spokesperson puts it, this copy-trading makes for much better goal congruence than giving money to a professional portfolio manager: “If you copy me, I am working on my own portfolio trying to make money for myself. If you go to a bank or broker, your interests aren’t aligned at all. You want a good portfolio; he wants to make money from his job. In eToro, if I say you should buy Apple, you can check my portfolio to see if I have bought it – that’s how you can see who is walking the walk and who is just talking the talk.”

According to research commissioned by the company, copy-trading delivers better results: a 10 percent higher return than individual discretionary trading.

The peer-to-peer lending model is assumed to disintermediate banks, by removing them as intermediaries between lenders and borrowers and, by extension, offering more attractive rates to both parties by cutting out the banks’ margins.

What is interesting about Lending Club, the peer-to-peer lender based out of San Francisco, is the extent to which banks form a significant part of its lending base. According to Scott Sanborn, COO, banks have been lending through Lending Club because it allows them to outsource unsecured lending while still holding onto their customers. Unsecured lending, along with small business lending which Lending Club launched in March of this year, is an area that is under-served by traditional banks. This tends to be because banks have simplified their businesses in the wake of new regulations, such as Basel III, or because they lack the know-how and technology to manage risk well – or at least profitably.

He says, “We aren’t competing with the bank for deposit services. The bank keeps the relationships and has delivered the customers a service. If Lending Club can help a bank deliver more services to its customers, because Lending Club has a highly automated solution to underwrite the borrower and determine income. As such, the bank can provide a financial service while retaining the customer.”

By helping banks to fill the gap in unsecured lending, Lending Club is enjoying strong growth. It has facilitated over USD4 billion in loans since it was started in 2006 and, underlining the rate of growth over that period, USD2 billion of the loans were made in 2013.
SOLVING PRACTICAL ISSUES

Like so many successful start-up companies, most of the companies we interviewed were founded to solve a practical, everyday problem.

In the case of Square, a company which makes it simpler and easier for merchants to take card payments, the product was born out of a lost sale. As Jim McKelvey explains:

"I was trying to sell a piece of glass to a lady who only had an American Express card, which I can’t take in my studio. So, I lost the sale. And that afternoon, I was holding an iPhone in my hand and I was like, this device could have saved my sale if only we’d had this system. And that was the inception of Square."

For nD bancgroup, a bank that intends to make real the promise of real-time mobile banking, the realization of the size of the opportunity came on a visit to a local Panera Bread restaurant. Gordon Baird, CEO and founder, found that he had forgotten his wallet. He did have his mobile phone, however, but it wasn’t equipped with any sort of payment service. People are more apt to carry their cell phone than their wallet was his insight. His conclusion was that he should build a bank that could deliver the sufficiently differentiated mobile banking experience that would see customers adopt mobile banking in much greater numbers.

In Lenddo’s case, the idea to create a financial services company came from observing how difficult it was for people to get credit in the Philippines. As Jeff Stewart, CEO, says:

“It didn’t make a lot of sense. These were super-educated, hard-working people whose incomes were going up and they couldn’t get credit. Or if they could, it was very expensive or cumbersome. After many requests, the idea hit us that maybe there is a problem beyond the places we have done business, maybe it is broader… What drew us to start a business was the magnitude of the problem.”

I was trying to sell a piece of glass to a lady who only had an American Express card, which I can’t take in my studio. So, I lost the sale. And that afternoon, I was holding an iPhone in my hand and I was like, this device could have saved my sale if only we’d had this system. And that was the inception of Square.

Jim McKelvey - Co-Founder - Square

Read more on how Square manage their business through solving practical issues in the case study on page 24
HELPING CUSTOMERS TO MANAGE THEIR FINANCES

Another common theme we note across this group of disruptors is a desire to help customers to manage their money better.

Take Simple, for example. It offers very basic tools to its customers: a mobile phone app, a debit card, a relationship with a bank, and some easy-to-understand money managing software. But, that is the point. The service is designed to work the way people live. One of most interesting features, is a “safe to spend” balance: that is, instead of just showing a bank balance Simple monitors a customer’s income and spending. So it can see when a customer gets paid and how much she pays out for rent or a mortgage, phone bills, groceries and medical bills, for example. It uses machine learning to register the patterns without requiring the customer to key in a lot of information and track every receipt, the way most personal financial management programs do.

Simple prides itself on its transparency. As its website says, “Simple never profits from fees. That’s not who we are,” and as John Reich explains, the concept was created as very much an antithesis to how he perceives traditional banks operate: “Large banks seemed to make money by keeping their customers confused. I thought there might be an opportunity to fix it.”

Simple’s other goal is to help its customers to save, which people are typically not very good at doing. The “safe to spend” reflects not just anticipated outgoings but also takes into account the customers savings goals, such as paying off student debt, retiring credit cards or putting money aside for a vacation or a down payment.

As Reich puts it, “People didn’t understand the connection between their spending habits and their ability to save. At the end of month they would get a statement and try to internalize the information – how did buying shoes impact my vacation plans? With Simple, you swipe your debit card and your phone knows. It closes the feedback loop between swiping your card and being aware of your goals. Obviously mobile and real-time are critical for us.”

LEVERAGING MOBILE TECHNOLOGY

Mobile banking interactions are growing extremely rapidly, but they still account for a small share of overall banking interactions and an even smaller share of revenue-generating transactions.

Believing that mobile banking can play a much larger role in overall transactions, Gordon Baird founded nD bancgroup. Part of the issue with mobile banking, says Aditya Khurjekar, executive vice president at nD bancgroup, is that “consumers have not yet been offered a ten times better experience in mobile payments for them to change their current habits. The industry needs to invest in platforms and infrastructure that will enable many compelling value propositions to be easily created and adopted at scale.”

This is exactly what nD bancgroup is doing. It is building a state-of-the-art secure, cloud-based infrastructure to realize the promise of mobile banking. As Mr Baird puts it, “we have real-time processing, real-time analytics and real-time business rules running on highly fault tolerant systems with in-memory data models. Our analytics and reporting can monitor payments and accounts on a real-time basis and set financial and compliance limits on an account by account, and transaction by transaction basis.”

But, nD bancgroup isn’t doing this purely for its own sake. Its view is that, encumbered by decades-old legacy systems, other banks will choose to white label nD’s infrastructure so that they can give customers what they want and so retain them. “We want to service other banks and companies that have existing customer bases with better payment and banking solutions.”

A look at the Kenyan banking market illustrates just how pervasive mobile banking adoption can be. The M-Pesa mobile payment service is used by a staggering 70 percent of the country’s adult population.

To build on the success of M-Pesa and to increase access to not just payments but a full banking service, Safaricom entered into partnership with Commercial Bank of Africa to create M-Shwari, a mobile-only banking service. From account opening to savings and lending, customers initiate their accounts from their phones, triggering automated processes to verify KYC information in a few seconds. Customers can access their M-Shwari interest-earning accounts and apply for 30-day loans without ever stepping into a branch or filling out paperwork.

One of the key success factors for M-Shwari was speed to market. The bank went from conception to three million customers in under 10 months, a feat most banks would struggle to replicate, given the prevalence of legacy systems in the industry.

By dint of being the first mover, M-Shwari has enjoyed massive success. It has so far collected more than Ksh10.6 billion (~USD120 million) in deposits and dispersed more than Ksh10.6 billion (~USD120 million) in loans. Further, its default rate, at 3.1 percent, is materially below the national average of 5 percent.

At the time of writing, M-Shwari, started at the end of 2012, had more than 7 million customers.
SNAPSHOT OF UK MARKET

302 million
the number of texts sent by Lloyds Banking Group to its customers last year

4m
users of the RBS and NatWest banking apps expected by the end of 2014 – 1/3 up in a year

24
the average number of times a typical Barclays customer uses mobile banking each month

40%
increase in the number of weekly downloads of Santander’s app between 2012 and 2013

64%
the percentage of HSBC text messages warning that a balance had dropped below a point specified by the customer

£

39,999,149
average mobile and internet banking transactions per week in 2013

Source: BBA, Banking on the move
New business models and trends
continued

BRINGING A RETAILING ETHOS

Vernon Hill, who owns several Burger King restaurants, has a retailer’s mindset. He successfully built Commerce Bank from a single branch in 1973 to become one of the largest banking groups in the US (before its sale to Toronto-Dominion Bank for USD8.5 billion in 2007).

Now Vernon Hill has brought his distinctive model of customer-centric banking to the UK with Metro Bank, which when it opened in 2009 was first new retail banking entrant for over 100 years.

The concept is built around great customer service (turning customers into fans) and convenience. Like retailers, Metro’s branches (or stores in its parlance) are open seven days a week: “You don’t have to think about what time a Home Depot, a McDonald’s or a Starbucks is open,” Hill says. “They’re open. You just go.”

In terms of great customer service, Metro opens new customer accounts and issues customers with their debit card in 15 minutes; it is dog friendly, with dog bowls of fresh water in the lobby; it has free coin counters in every store; cyclists can ride in, lean against the counter and make a transaction, no need to chain the bike outside; and, the bank has zero tolerance for unnecessary complexity or silly rules (“If we can’t explain it to our 18-year-old team members, it’s too complicated”).

Could such a model be successful in the UK? “Metro Bank is growing at three times the rate Commerce did when it went into New York City” says Hill and now has GBP1.6bn in deposits.

BANKS FIGHTING BACK

Contrary to the impression that may have been given up to this point, the ability to be innovative and potentially disruptive is not the sole preserve of new entrants, whether they be created as banks or not.

BforBank is a new banking concept created by Credit Agricole. Like many of the disruptors we have reviewed in this report, it was created to fill a gap left by other financial services providers. An online bank, BforBank caters for the demographic of people who have money, but want to take a more active role in managing it themselves. This is a demographic that typically isn’t well served by traditional retail banks and falls under the radar of traditional private banks.

Also, like many other disruptors, it is a model which is predicated on advanced technology. As André Coisne, CEO, says, “Technology is key for BforBank. Without technology we don’t exist.”

The BforBank concept is based on giving consumers the tools to become their own asset managers (as the bank’s slogan puts it, “Mon Banquier, C’est Moi”). Its website has many interactive tools to track investments, run simulations, set risk parameters and check the tax efficiency of investments. It includes more than 50 videos with expert advice, and over 1,000 articles with financial advice and planning and has data feeds from the Paris Bourse.

BforBank has proved to be a big hit. In the past four years, it has taken more than EUR3 billion in deposits and despite greater competition – from rival internet banks beginning to offer similar money management tools and from the financing arms of major car companies competing for deposits – it continues to grow strongly.

It may just be that there is still a place for traditional banks in the digital age.
Some imperatives for the banking industry

As BforBank demonstrates, traditional banks can be successful in the digital age. The fatalistic prognoses that abound are easy to make, but are too simplistic. The fact is that traditional banks have great assets with which to be successful in the digital world – they have large customer bases, they have massive amounts of transactional data and they have integrated capabilities that can join together different parts of the value chain. The challenge for banks will be to leverage these assets, and to do so quickly before they see too much of their existing business eroded by new competitors. Below we share what we believe to be some of the imperatives for the industry.

REMOVING LEGACY

That BforBank is successful owes as much or more to the fact that it was set up as a different entity as to its being part of Credit Agricole.

As André Coisne puts it, “What we wanted to do was to start something new, something fresh. The internet is a new territory. The easiest way to reduce complexity and create agility was to start again. A different name, a different pricing offer and a pure digital experience…Banks have many great assets, but they are encumbered by legacy.”

Many banks will no doubt go down the same route as Credit Agricole in setting up new companies, free from legacy systems and legacy processes. But others will address head on the legacy problems within their existing business. Either way, the issue of legacy must be overcome if banks are to be successful in the digital age.

A key strength of banks lies in their ability to offer integrated capabilities – across financing, deposit taking and payments, for instance. As Gordon Baird says, so much of nD bancgroup’s competitive advantage stems precisely from the fact of being a bank: “As a bank, we have the underpinnings for money movement, and the ability to hold money on an intraday basis with the right capital, the right systems and the right compliance.”

However, to leverage this advantage, banks must be competitive at every step of the value chain otherwise they risk being disintermediated – by vendors who can operate at lower unit costs, like Currency Cloud or Traxpay, and by the actions of consumers who are prepared to suffer the inconvenience of managing multiple relationships because the price differential warrants it.

Spending hundreds of millions of dollars annually on legacy IT systems will preclude banks from being price competitive. A recent Temenos/ Deloitte paper found that banks running modern core banking systems had, on average, a 6.5 percentage point lower cost-to-income ratio than banks running legacy systems⁴.

But, the issue with legacy systems is not just about cost, it is also about flexibility and agility. Agility to deploy new products and services into any channel quickly and cheaply. Flexibility to be able to compete in any part of the value chain, front, middle or back office without being disintermediated. It took Apple just seven years to become the world’s largest music distributor. It took M-Pesa four years to gain 14 million customers. It took M-Shwari four months to gain three million customers. For banks to successfully compete in this fast-moving world, they need systems that allow them to launch new products and services quickly and to personalize them according to individual customer requirements. For many banks, this is impossible with the systems they run today.

*Temenos and Deloitte, “Restoring Profitability in the Digital Age”
As Jim McKelvey, co-founder of Square, says, when discussing why traditional banks will struggle in the digital age, “The fundamental job of a bank is to not have their money stolen. If you fail at that job you don’t have a bank, so they have a conservative, security-minded bias.” He is illustrating the inherent conflict between a traditional banker’s mindset and the kind of risk-taking mindset that tends to produce innovation. But, the same issue also affects banks’ use of data. Bankers tend to see themselves as data custodians, whose job is to make sure that customers’ sensitive data is not compromised, but they must also become data analysts. Banks have vast amounts of transactional data that should be a source of sustainable competitive advantage in the digital age. But they have yet to take advantage of it. Banks need to use this data to serve their customers better – offering the products and services they need at the time and place they need them – but also helping them to manage their finances better.

Furthermore, digitization exposes the problem with papering over legacy IT systems. In the early 2000s came the advent of internet banking. Banks were able to cope with internet banking without having to renovate IT systems by using middleware to expose the information from multiple systems to the customer logging in once or twice a week over the web. Crucially, it didn’t matter if that information wasn’t real-time. But now, in the digital world of instant gratification, customers expect real-time information. With mobile phones, customers are interacting with their banks several times a day and expect up-to-date information. With the internet of things (where more and more inanimate objects will be fitted with processors and connected to the web), our household appliances will be interacting with our bank several times a day and requesting real-time information. And, to be able to keep up with the market offerings from competitors like Simple, whose customers’ “safe to spend” balance relies on real-time information, banks need real-time capabilities.

**BECOMING DATA ANALYSTS**

As Jim McKelvey, co-founder of Square, says, when discussing why traditional banks will struggle in the digital age, “The fundamental job of a bank is to not have their money stolen. If you fail at that job you don’t have a bank, so they have a conservative, security-minded bias.” He is illustrating the inherent conflict between a traditional banker’s mindset and the kind of risk-taking mindset that tends to produce innovation. But, the same issue also affects banks’ use of data. Bankers tend to see themselves as data custodians, whose job is to make sure that customers’ sensitive data is not compromised, but they must also become data analysts. Banks have vast amounts of transactional data that should be a source of sustainable competitive advantage in the digital age. But they have yet to take advantage of it. Banks need to use this data to serve their customers better – offering the products and services they need at the time and place they need them – but also helping them to manage their finances better.

**THINK MULTI-CHANNEL**

While the model of digital-only banks like M-Shwari and BforBank will become more prominent, for most banks a balanced multi-channel approach will be required to be successful. The march towards digitization is inexorable, but there will always be customers who remain analog or inbetweeners. In general, banks won’t succeed by just closing branches and moving more services online. A balanced multi-channel approach is a better strategy, blending the needs of the different generations with the advantages of different channels (as the diagram to the right shows, customers use different channels for different purposes and, while changing fast, the branch still plays an important role in certain interactions such getting advice around a complex product).

The importance of social media has been underlined in this report and banks will need to do more to embed social media into their businesses. It will be a more important channel for interacting with customers (in part compensating for the loss of in branch contact), for customers to research and seek advice about products and services and as a distribution and marketing channel, making customers aware of new products and offers and allowing them to adopt them.

The important thing to note about multichannel is that the experience must be both rich and seamless. The fact is that transactions will be originated and executed on different channels and consumers must be able to switch between them seamlessly. In addition, all transactions must become self-service and it should be possible to offer any service on any channel (stopping and starting standing orders, adding and deleting a beneficiary, etc). Lastly, banks will need to offer friendly order management which sends customers confirmations of every transaction and keeps them updated of the status of all pending transactions, just like online retailers do today.

**Distribution transformation is massive**

**Evolution of client distribution preferences**

**Percent of clients**

<table>
<thead>
<tr>
<th>Sales</th>
<th>Simple/ Small ticket</th>
<th>Complex/ Large</th>
<th>Transactions/ Info requests</th>
<th>Support/ Complaints</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>2015</td>
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TAKING A GREATER ROLE IN CUSTOMERS' LIVES

Part of taking a greater role in customers’ lives revolves around helping customers to manage their finances better and take better decisions. As companies like Simple and Lenddo have shown, customers value highly the providers that can do this.

But another aspect relates to helping consumers with more than just budgeting. Banks can help customers to make better decisions about what purchases to make, as well as when and where to make them, based on their transaction and other personal data. Digital wallets are trying to put together the transactional information that banks already have. What is more, banks can give customers access to networks of affiliated suppliers in order to secure better rates for them – lawyers, for instance, for a house purchase – much like many e-commerce vendors do. This is what Accenture refers to as being an “access facilitator”.

CONCLUSION

There is much disruption happening in financial services. New, digitally-enabled business models are emerging, which threaten the status quo. However, while digitization is inevitably going to push some banks out of business, there is no reason why the prognosis needs to be universally gloomy. While it is true that digitization opens up the industry to new competitors and gives more power to consumers, those banks that react quickly can be highly successful. Our view is that a response built around removing legacy, introducing a balanced multi-channel distribution model, learning to take insights from transaction data and taking a bigger role in customers’ lives will see banks continue to be successful in the digital age.
Technology innovation to support lending in emerging markets

The idea
CEO Jeff Stewart and Co-Founder Richard Eldridge were running technology companies in the Philippines and several other emerging markets when the frequent requests for loans from their smart young staff led them to investigate a perceived gap in the lending market.

"It didn’t make a lot of sense. These were super-educated, hard-working people whose incomes were going up and they couldn’t get credit. Or if they could, it was very expensive or cumbersome. After many requests, the idea hit us that maybe there is a problem beyond the places we have done business, maybe it is broader. As we dug into it, we found there are over billion people are moving into this middle class in emerging markets and almost all of them are underbanked to some degree. What drew us to start a business was the magnitude of the problem.

“So we assembled a research team and stumbled on microfinance. We saw repayment rates as high as 98 percent, and that got our attention. We saw the same high repayment rates in multiple countries and regions in mid-2010. That drove us to drop everything and start researching. Our Aha! moment was when we thought about how we use online social networks... these are real relationships.

"The best microfinance operations in terms of repayment are like Grameen, the Nobel Peace Prize award-winning group in India, where lending takes place within groups with very tight connections, sometimes with even joint liability, so a failure to repay has consequences within the community.”

The group starting Lenddo thought that if it works in a physical community, it should also work in an online community.

“Luckily we had started a big data company in the mid-2000s, so we were very familiar with the technology and what was possible. One of the things we knew was that the most important thing was to have the right data, the right algorithms and the right people working on them. We had people who had worked with us analyzing big data for hedge funds and then had worked for our CTO Dr. Naveen Agnihotri on machine-learning around large data sets. We had so many shared connections to developers and we knew machine-learning, so in January 2011 we launched the company and by March we had issued our first loan.”

Data and algorithms replace FICO
Today, Lenddo members have shared over 3.5 terabytes of data and, as more join, Lenddo’s data store grows and it uses this information to better manage risk and connect the members to appropriate products.

“Our members choose to share their online digital activity – their network, messages, tagged photos, browsing, search, geo-spatial data – the phone is a data exhaust device. That data can be used to empower individuals. Banks think these are thin file clients, without any useful credit or even transaction history, but our analytics transform their social media interactions into a rich relationship. Then we can connect them to the right product and feel comfortable in who we are dealing with. We have spent three years building a system that understands community, how people fit into that community, their character and their reputation.

“We showed this to an old-time retired banker. Then he turned to us and said ‘That’s the way banking used to work, before FICO and people got obsessed with payment activity.’ When he got his first loan in the ’50s, his father knew the loan officer and loan officer’s son played football with him. We are going back to basics and looking at who the person is rather than their transaction history. In these [emerging] markets there is not a lot of transaction history to work with.

“We are an international company, headquartered in Hong Kong with a team spread around the world. Our mission is to help the emerging market middle class. As we go into a new country, the regulators are generally predisposed to our mission because we are extending credit where it is generally hard to get. This is very different than the US where the default condition is most people can get credit. While we have 30-50 million unbanked people in the US, it is not at all unusual for there to be a credit card solicitation waiting in the mail box. We are not starving for credit the way many in the emerging market middle class are. Regulators offer to help us to go faster. In Colombia for example we were decorated with the ‘Order of Pedro Nel Ospina’ awarded in the Colombian Congress for contribution to the social development of Colombia. We have been recognized by the Center for Financial Inclusion, and honoured at the World Economic Forum as a top Technology Pioneer.”

"We have more computing power in our smartphones than Citi had in its world headquarters in 1980.

Jeff Stewart - CEO - Lenddo
Mobile and social will compel change
“Those mobile devices combined with social media will completely change financial services the way social media ripped apart publishing and music.”

Most of the markets Lenddo is entering – and it is starting with English- and Spanish-speaking countries where its algorithms have the greatest proven potency – have significantly higher social network participation rates than the US and Europe.

“It’s down to demographics,” he explained. “Many of these countries have very young demographics – Gen Y consumers. They have more Gen Y as a percentage of the population, and you know about millennials’ attitudes toward banks. The point is, if you were born after 1980 you ask: ‘Why should I be going to a bank branch? That’s not how I interact with Google or a theatre when I buy a ticket. Who goes to Blockbuster anymore?’ I think the same thing will happen to retail banking.

“We have more computing power in our smartphones than Citi had in its world headquarters in 1980. And then you connect that to the cloud, and it’s more power than all the banks in the world in 1980 – the power is there.”

Lenddo has just launched a co-branded credit card with Scotiabank in Colombia.

“We are using social graphing to help determine who we should issue cards to, while avoiding bad borrowers and operating at a lower acquisition cost. If you can avoid your bad borrowers, that has a profound impact on quality of the portfolio and creates savings that should eventually benefit all customers. I would like to think we are not flying blind because have three years of experience evaluating borrowers with our technology.”

Homophily is at the core – of course
Stewart likes to say “Birds of a feather flock together.” It turns out that that’s true in social media. While many algorithms look for patterns, Lenddo has algorithms turned to homophily, the tendency to have a similar lifestyle to a person you are connected with – whether that is saving money or sexual permissiveness, smoking or obesity.

“If you hang out with a person with certain tendencies, you are mathematically much more likely to behave that way, and it even happens over social networks over distance. It applies to financial health in connection with your friends and your friends’ friends – three layers out – there is signal on a social network. On a social network almost everyone is connected by about four degrees – everyone is connected to our hundreds of millions of profiles, and we can map back to see how connected they are to good payers and bad payers. It is very, very powerful.”

Lenddo targets people making $400 to $600 a month and offers them small loans, so they don’t get bogged down into debt, for good purposes such as education or health. It plans to expand into helping people understand how to create and sustain financial health.

“Credit bureaus and agencies are designed to serve lenders and begrudge dealing with consumers. We flipped it around and asked people if they would like to use their personal data to prove their trustworthiness. In the future of consumer finance, people can use their own identity and choose how to use it for their own benefit. Legacy systems/bankers are going to have trouble getting their minds around how powerful smartphone consumers are about to become.”

Stewart plans to expand beyond lending and expand into financial health, perhaps with partners.

“It is so important for people to understand how to manage their finances, how to make tradeoffs and budget. What’s happened is that typically people learn how to manage their finances from their parents. You see that multi-generational learning here in the US, but in emerging markets there are hundreds of millions of people who are moving into the middle class and making ten times what their parents made, and they are much less likely to learn how to save or make an investment from their parents.”

He thinks financial fitness needs to be broken down to bite-sized components. His model is Farmville, which trained 50 million in how to run a farm and made it fun.

“We want this to be a vibrant conversation among people – anyone who can contribute to improving financial literacy should. This has to be something someone will look at on their mobile while waiting for the elevator.”
Metro Bank

Building loyalty in an age of commoditization and customer control

During the time most American banks were pushing customers to ATMs or online services, Vernon Hill was opening branches of Commerce Bank across New Jersey and keeping them open for long hours, seven days a week. He expanded the model into New York City and other locations in the eastern US in the face of widespread skepticism, and achieved huge success. Now he’s doing something similar in London with Metro Bank, where he has also confronted, and confounded, skeptics.

“Other banks decided to push consumers out of the branch because it is the high-cost delivery channel,” he told an interviewer. “They wanted to push them online. We totally reject that. You can’t name me one retailer in this country that has pushed people where they don’t want to go and succeeded.”

Over 34 years Commerce built up from one store to 440 in six states with $50 billion in assets.

“The secret of Commerce Bank – and now Metro Bank – was that not only did we have the most rapid growth in our deposit base, we also had the lowest cost of deposit funding. The customer exchanges what they considered a better retail experience, of which ours was one, for a lower yield on their money – giving us more of their low-cost money. We competed on service – not price.”

Think retailing. Fast food. The whopper bank.

Hill, who owns several Burger King restaurants, has a retailer’s mindset, even calling the bank operations stores rather than branches.

“You don’t have to think about what time a Home Depot, a McDonald’s or a Starbucks is open,” Hill says. “They’re open. You just go. My theory was, if you advertise that [your bank is] open on Sunday, the consumer will automatically believe you’re open all the time. That message is more important than the savings.”

Metro Bank branches/stores aim to collect deposits, and they have succeeded. The bank recently announced Quarter 1 results that showed deposits at £1.6billion, and this is still growing rapidly.

“Supposedly we are the first new high street bank in over 100 years,” said Hill. “The risks were could we get a licence, raise the money, recruit people and build a modern IT system? Then would British people accept the American model? We are running the exact Commerce Bank model; if you walked into a Metro Bank in London you would say you were back home.” In fact, Metro Bank is growing at three times the rate Commerce did when it went into New York City.

A packaged IT system was a prerequisite for opening a new bank, Hill said, and Metro Bank chose Temenos T24 on an outsourced basis.

Would British people accept the American model? In fact, Metro Bank is growing at three times the rate Commerce did when it went into New York City.

Vernon Hill - Founder - Metro Bank
“There had never been pay as you go, but Temenos was open to that idea.”

For a bank that thrives on customer relationships, the full integration of banking functionality in Temenos, and its ability to integrate with Microsoft Dynamics CRM and Windows 8 on Samsung tablets for the store staff to use in opening accounts and serving customers, was a key to the bank’s success.

“Temenos adapted their T24 to connect to debit and credit card printing machines and to the tablets. It’s really slick software,” he said. “In most UK banks it can take days or weeks to open an account; we can do it in 15-20 minutes.” That includes printing debit and credit cards and cheques.

So far Hill hasn’t seen any competitive response from UK banks, and he doesn’t really expect to. In the 20-plus years he ran Commerce Bank, the American banks didn’t match his approach.

Convenience and service is at the core of what we do, not an afterthought, and it is why we are successful.

“The way we look at things is so dramatically different that it is almost impossible for traditional banks to respond. Convenience and service is at the core of what we do, not an afterthought, and it is why we are successful. At Metro Bank if a customer asks you for something, it takes one person to say yes, it takes two people to say no. If a colleague can’t solve your request, then he has to find someone who can.”

Technology supports customer service
Technology is key to a bank’s success, but it is the tool of business, not the driver.

“Our approach to technology is to start with the result we want and then work backwards to figure out how to get there. I sent my former head of IT at Commerce over to Temenos to tell them the result we wanted and asked them to make it happen. If you start that way, it is about adding value. When the business needs information, it has to define what it wants and how they want to get it, and then it’s IT’s job to deliver,” says Hill.

Like Commerce Bank, every Metro Bank store has a coin counter (Magic Money Machine) that is free for anyone to use. They can take the slip from the machine to deposit or to get the money bills, whether they are bank customers or not. It’s a popular place for cabbies and small businesses, especially since the stores are open until a few minutes after 8. (Metro Bank opens 10 minutes before its advertised hours and closes 10 minutes after.)

Hill says the coin counters are a great example of a service that doesn’t necessarily generate any measurable revenue, and that’s a part of the Metro Bank culture which big banks find so hard to copy.

“Imagine you are retail head of another bank and are getting beat up in some branches by a nearby Metro Bank. You want the coin counting machines which cost 20,000 pounds. You tell your boss, who asks you to write a report and so you can take it to a committee. You say you want to spend one million pounds to put in coin counters. They ask the return, and you say no, they are free, we just make more friends. It just wouldn’t happen.”

Hill wraps the coin counters in marble, includes a screen for games, like guess how much you are dumping into the counter. One American competitor bought some machines but stuck them in the lobby in their plain gray metal with a hand written sign.

The coin counters are also used to introduce kids to banking. In the US, Commerce staff taught a one-hour banking course in the schools for four weeks, and Metro Bank is doing the same — teaching kids about money and banking and then on the fourth class bringing them to the bank to see the vault, use the coin counter, and get a free pen. The bank has a £5 for £5 Club — kids under 15 who deposit £5 in their account from the Magic Money Machine every month for five months, get £5 from Metro Bank into their account in the fifth month. At 16 youngsters can have a Metro Bank account in their own name. As Hill repeatedly points out, another bank can copy any one of these innovations, but it’s the totality that makes the culture and distinguishes Metro Bank from any other.
The branch is dead. Long live the branch.

Our stores deliver a united experience. Someone writes that Commerce was the Apple of banking. Nobody buys Apple on price, and only the guys at the top can force integration of all the parts.

In the US, the average bank branch was opening 25 new deposit accounts a month, Commerce was opening 300 and Metro Bank is opening more than double that.

“I am in the new account opening business,” Hill explained. “We are 50 percent commercial, and we will be even more commercial in the UK than we were in the US because banks treat the SME (Small Medium Enterprise) segment so badly. It takes weeks to open an account, much less borrow money. British banks believe when you open an account for a small or medium business they treat it like a loan and go through a credit approval process. No one in America does that.”

Vernon Hill has written a book about his banking experience, called “Fans, not Customers: How to Create Growth Companies in a No Growth World”. It has an impressive foreword by Tom Peters, and is a great guide to building a successful company around excellent customer experience.

“We learned it’s not just about the parts of a model; it’s how they fit together,” Hill says in the book.

Metro Bank has a number of unusual customer service features, including being dog friendly, with dog bowls of fresh water supplied in the lobby, plus Metro Bank bandanas and treats. Now Metro Bank is the official bank for the Kennel Club and does doggie adopt-a-thons with the Battersea Dogs & Cats Home. All the Metro Bank Stores have regular adopt-a-thon weekends.

Meanwhile, cyclists can ride in, lean against the counter and make a transaction, with no need to chain their bike outside.

In reference to staffing, Hill’s maxim is “hire for attitude, train for skill,” and he fills his book with examples of great staff attitudes, including this one: “Croydon colleagues helped a customer whose handbag was stolen the day before she was due to leave on holiday. Colleagues kept the store open until the customer was able to get there at 8:45 p.m. They printed her a new card and ordered in food to share with the happy customer. Then they walked her to her car and even paid her parking fee.”

Free pens are a Hill obsession, or one of his obsessions, when it comes to service. Why banks chain pens to the desk eludes him – he wants to give away thousands to get the bank’s brand widely seen so they are free for the using, and free for the taking.

Above all, Metro Bank is committed to zero tolerance for unnecessary complexity or silly rules.

“One of the things we did throughout the years at Commerce and now do at Metro Bank is to make sure that when we deliver a new product, whatever policies, procedures, and products we create are based on a simple standard. If we can’t explain it to our 18-year-old team members, it’s too complicated,” Hill says.

Hill on British banks:

Hill professes to be astounded by the British banks, happily so, as a competitor.

“There are only four or five big banks in Britain, and they have a philosophy they are doing you a favour by letting you bank with them. They haven’t been threatened, they over-charge, under-serve and massively under-invest. The British banking IT is far behind the US.

In Britain, the computer systems put incumbent banks at a severe disadvantage.

Many British banks commit a full third of their retail space to ATMs because they don’t want customers to talk to their customer service representatives.

“Where else in Britain except a Metro Bank can customers meet the founder or the CEO? Nobody here has ever seen a bank CEO in a branch before.”

Other British banking habits he finds remarkable:

Cashiers who go to lunch during the customers’ lunch hour – which is when the customers are going to their bank.

The odd London practice of closing on Wednesday for unannounced lengths of time for training… the branch will open whenever the bankers finish their training.

“It’s an insane, insensitive customer policy. It’s all about the bankers and what is convenient for them.”

To open a new account at a British bank requires a valid driver’s license, passport, utility bills, etc. At Metro Bank, a license or passport is usually enough. No need for an appointment to open an account – walk in and open it, walk out with cheques and cards.
LENDING CLUB

Meeting the demand for unsecured credit

Filling a gap
While you might not think a company called Lending Club, which provides peer-to-peer loans to individuals and small businesses, would be seen as a threat by banks, it has drawn their funding support, along with funding from individual retail investors, hedge funds, and high net worth individuals. Based in San Francisco, CA, Lending Club has facilitated more than $4 billion in loans, and $2 billion in 2013 alone. Using technology to lower the cost of credit, as of March 31, 2014 the Lending Club platform has issued more than 225,000 loans to residents of 44 states.

Sometime over the past 10 or 15 years, many banks lost the ability to make unsecured loans. The Economist Intelligence Unit, writing about the Irish market, said: “like many developed markets, banking has shifted to make unsecured loans. The Economist Intelligence Unit, writing about Sometime over the past 10 or 15 years, many banks lost the ability to lower the cost of credit, as of March 31, 2014 the Lending Club platform has issued more than 225,000 loans to residents of 44 states.

So while Lending Club may have started as an interactive marketplace linking people with money to people who needed money, it has also become a way for banks to outsource their lending while holding onto their customers.

“It didn’t take long for them [banks] to understand it,” said Scott Sanborn, COO of Lending Club. “We have gotten mostly strong expressions of interest from everyone we have talked to, although that doesn’t mean things move quickly. Banks have to conduct due diligence, and they have to see we have proper compliance.

“For the unsecured individual side of the business (i.e., loans apart from mortgages, business loans secured by houses, cars, etc.) there has been a pretty dramatic decline in both consumer credit as a percentage of bank portfolios as well as in loans to small businesses as a percent of bank portfolios,” said Sanborn. “On the consumer side, it is because credit cards have been taking off since the 1980s, and that became the de facto way for individuals to get credit. Now the majority of that market is in the hands of the few very largest banks. On the small business side, the banks have struggled with efficiently underwriting smaller size loans in a way that can be cost effective.”

In the aftermath of the financial crisis of 2008 and 2009, many banks were forced to simplify their portfolios, he said, and some dropped lines of business that were working well because they needed to de-complicate their business. Now some banks are sitting on a decent amount of deposits and are looking for ways to deploy them.

“For small community banks and credit unions, technology has taken over as a way of enabling more frictionless lending. If they don’t have the resources to develop lending platforms they are competing with giant companies who do. It is harder to remain in the unsecured lending business. If you are a small bank, you have to build an app, build a credit engine, develop models to effectively underwrite, put compliance in place – the list goes on and on. It’s a daunting task for smaller banks. So they look to us as a way to put their deposits to work in assets they understand and we are enabling them to serve their customers in ways they currently can’t.”

Lending Club offers banks a way to provide loans to customers. Lending Club assigns a letter grade, from A to G, for each loan. A bank can choose to fund the whole loan, take part of it, or let Lending Club connect the borrower with other sources of funding. Either way the bank maintains the customer relationship.

Helping banks to keep their customers
“We aren’t competing with the bank for deposit services. The bank keeps the relationships and has delivered the customers a service,” Sanborn said. If Lending Club can help a bank deliver more services to its customers, because Lending Club has a highly automated solution to underwrite the borrower and determine income, the bank can provide a financial service while retaining the customer.

Lending Club’s investors range from individuals investing a few thousand dollars to firms investing hundreds of millions.

“One of the advantages of the model is we have a pretty diverse array of funding sources – different buyers in different places on the yield curve,” said Sanborn. “Banks and insurance companies have lower return requirements, and then we have professional investors and high net worth individuals looking for higher yield. We start at an APR of 6.78 percent and end at 29.9 percent, although we don’t do much over 20 percent. Ninety percent of our lending is in the lower range with an average interest rate around 12.5 percent for 36 month loans, which is our core. Paying off credit card debt is the top use of our product for individuals who want to eliminate higher priced variable debt. The average interest rate on credit cards is close to 17 percent. In a survey we do, our customers who use a Lending Club loan to pay off credit cards tell us their interest rate with Lending Club is about 28 percent lower than what they were paying.”

Lending Club has a dominant position in the US, with close to 80 percent of the market, and it continues to grow fast.

“Since it is a network business – as we get larger we attract larger investors and more borrowers,” Sanborn said. “The solidity of Lending Club means there is a lower risk premium so we can offer better rates to borrowers. More borrowers equates to more opportunity for investors. There are people entering adjacent markets such as student lending and trying to apply a similar business model, but most of those are still relatively smaller.”

The company launched small business lending in March, another area banks are interested in but find difficult to achieve cost effectively. Its business loans will range from $15,000 to $100,000 initially, increasing to $300,000 in the future, carrying fixed interest rates starting at 5.9 percent with terms of one to five years, no hidden fees and no prepayment penalties. In April it acquired Springstone Financial, which provides affordable financing options for consumers looking to finance private education and elective medical procedures.

“Now we can apply our transparent and cost-effective model to families looking to finance elective medical procedures like braces or for private education,” Sanborn said.
Realizing the promise of real-time, mobile banking

The state street of mobile payments

Gordon A. Baird, nD bancgroup’s chief executive officer, aims to become the State Street of mobile payments. Leaving the branding and marketing to technology companies, retailers, wireless carriers who want to get into payments, he is content to provide the infrastructure they can white-label to their hearts’ content. He can hold deposits directly and move money, something payment providers like PayPal, Moven and Dwolla can’t do by themselves. He can hold deposits directly and move money, something payment providers like PayPal, Moven and Dwolla can’t do by themselves.

Just as State Street, where Baird once worked, does the custody and back office work for big mutual funds which spend a lot to promote their brands and investing genius, nD bancgroup wants to use sophisticated software to support new entrants into real-time mobile banking.

Baird thinks mobile is ready to expand rapidly.

The importance of the mobile phone was driven home for him when he took his sons to a local Panera casual restaurant, only to discover he didn’t have his wallet. He did have his mobile phone, but it wasn’t equipped with any payment service. His takeaway – people are more apt to forget a wallet than a phone. There was no takeaway from Panera, however – not until he drove home for his wallet, anyway.

A technology problem

Mobile payments have had a slow start in the US. One reason, suggests Aditya Khurjekar, executive vice president at nD bancgroup, is that “consumers have not yet been offered the ten times better experience in mobile payments that would inspire them to change their current habits. The industry needs to invest in platforms and infrastructure that will enable many compelling value propositions to be easily created and adopted at scale.”

Much of banking in the US lags other industries, Baird explained: “Look at the major disconnect between the US payments system, the big banks and where modern technology is today. 99 percent of the banks in the US are running off technology that is 20 years old. Billions of dollars have been spent on integration, mergers & acquisitions, but the majority of the technology spend is fixing problems while leaving in place these legacy systems.”

The exciting aspect of banking, he added, is with phone and mobile networks where there is a chance to build a new infrastructure for payments and banking, but doing it very much in secure cloud-based systems.
The advantage of being a bank
"As a bank we have the underpinnings for money movement, and the ability to hold money on an intraday basis with the right capital, the right systems and the right compliance."

He described nD bancgroup as a hybrid of a bank and a technology company, with global processing and clearing capabilities, and a balance sheet.

Looking at the competitive landscape, many traditional technology providers are trying to become more vertically integrated, not just licensing, but fee-for-service companies.

"But one thing they will never be is a full vertically-integrated solution. It’s important to have a balance sheet and the ability to hold and move money to compete in the long-term and to be a low-cost provider with modern technology."

While the Fed would like a better, more efficient payment system, many legacy industry incumbents are opposed. With the huge sums the largest are spending to comply with new regulations, it is unlikely they will replace legacy core systems this decade. Baird believes this creates a big opportunity for others to get into payments.

"We want to service other banks and companies that have existing customer bases with better payment and banking solutions", he said.

nD bancgroup can provide something similar in mobile payments. MCX, the consortium of major retailers that is challenging MasterCard and Visa, needs to eventually work with banks to reach its goals. Baird thinks banks like his can help.

"We think we have a better, more cost effective model, because you need a front-to-back solution to be able to achieve the ultimate objective – more efficiencies, more flexibility, better user experiences and better security and risk controls."

As a bank, nD bancgroup can use all the payment rails – ACH, EFT, or Fedwire. nD bancgroup will operate in real-time as well as be backward compatible to other legacy networks.

"We have real-time processing, real-time analytics and real-time business rules running on highly fault-tolerant systems with an in-memory data models. Our analytics and reporting can monitor payments and accounts on a real-time basis and set financial and compliance limits on an account by account, and transaction by transaction basis. Very few financial institutions have that ability," Baird said.

Change is coming
His message to industry participants is to avoid executing long term contracts, because change is coming. Many consumers are starting to move their financial lives away from traditional providers. Their old banking relationships may stay in place, but when they want to open a mobile payment account it could be completely separate from their current bank.

The change is overdue, he added.

"You can take your debit card and go to any bank machine anywhere in the world and pull out instantaneously $100. Why then can I not use debit to give my neighbour $100? Why do I have to write a cheque that takes 3-7 days for the payment to reach him?"

The bank has some baseline customers as it gears up for a broader rollout later in the year.

"We will have a small number, with more types of transactions, working our business on a smaller scale," Baird explained.

The company also plans to grow its traditional bank in Greenville, using a mix of physical branches and digital channels.

"We strongly believe in the community baking model –by serving our customers as well as the community. We think it’s important that community banks thrive in the long run and one of the ways this can be achieved is through the adoption of new technologies. We will continue to open branches, but using more modern technology to do that. Today they are very traditional, but we envision down the road having modern channels to interface with the consumer. Nothing is definitive yet, but we are doing a bottom-up assessment of the modern consumer and how they interact with consumer services and banking in particular," Baird added.

"Twenty years ago the concept of a bank branch inside a larger store was revolutionary and wildly successful. Soon I think there will be a new wave, driven by technology but not necessarily leading to a standardized one-model-fits-all. We think there is a combination of physical delivery, from traditional brick and mortar all the way to your mobile popup branch."
SQUARE

Giving merchants simple, affordable, and accessible tools to manage their businesses.

The problem with banks
Jim McKelvey, a co-founder of Square, can understand why banks are conservative.

"The fundamental job of a bank is to not have their money stolen. If you fail at that job you don't have a bank, so they have a conservative, security-minded bias," he said. "That is the opposite of what the innovative companies practice, which is risking, innovative, unconstrained, unproven, not certified. The people who seek banking as careers tend to be very comfortable with regulation; people who seek invention tend to have high tolerance for failure and experimentation."

Now banks are threatened by new companies taking away parts of their business. In the past, the banking world has been able to protect itself by regulation and keeping people out, but that is changing as emerging competitors offer new ways to receive, send, share and lend money, and pay for things in stores and online.

"In this new world of mobile finance, traditional bankers are at a disadvantage because of their DNA," said McKelvey.

Solving an everyday problem
McKelvey is an example of the threat to conventional banking – he is a professional glassblower who sparked the creation of Square when he missed out on a significant sale because he couldn’t take credit cards in his studio.

"I was trying to sell a piece of glass to a lady who only had an American Express card, which I can't take in my studio. So, I lost the sale. And that afternoon, I was holding an iPhone in my hand and I was like, this device could have saved my sale if only we’d had this system. And that was the inception of Square.

What banker would ever have thought a glassblower could be a threat?

Okay, a glassblower who wrote the computer programming textbook for his university, studied at the London School of Economics and was a visiting scientist at IBM's Los Angeles Scientific Center after he graduated. He started and still owns a publishing company which moved from document imaging to trade show publishing to conference publishing, demonstrating an impressive ability to pivot with market changes.

Still, the credit card business rankled, so he and his friend Jack Dorsey, a co-founder of Twitter, developed Square.

"It took three weeks to build the hardware and software, and 18 months to get the necessary licences to use the product," said McKelvey. Approval times from regulators are dropping, he added, and something like Bitcoin can be accepted in a few months.
Approval times from regulators are dropping, he added, and something like Bitcoin can be accepted in a few months.

That means the protective wall around banks is eroding.

"My message for bankers is that their ability to protect the banking eco-system from outside disruptions is going away. And it’s not just Silicon Valley, it’s the telcos, it’s the software vendors, it’s all these other industries which are starting to get involved in the rails of moving and transferring value. It is about to get a lot more competitive and bankers are fundamentally disadvantaged because of the way their industry has been practiced. It is very strange when you take somebody who moves very carefully at 20 mph and someone who moves casually at 150 mph," he added, contrasting the caution required in banking with the speed of the computing and communications businesses.

More than just a card reader
Square plugs into the microphone port on a smartphone or tablet and lets a merchant swipe a credit card to accept a payment. It takes Visa, MasterCard, American Express and Discover, charges merchants 2.75 percent and provides next-day deposits.

"Merchants can sign up in three minutes or less and start taking payments," explains Sarah Friar, the company’s CFO. "We offer free hardware (users who buy the $10 reader receive a rebate) free software, free analytics, all for the cost of 2.75 percent per transaction."

Although it is best known for its free card reader, which allows businesses to accept credit cards anywhere, anytime, for one low, transparent rate, Square provides several other services to support small businesses.

Its business tools include Square Register, an analytics dashboard, Square Market, and Square Stand. Square also created Square Cash, an easy way to send money with a debit card and email.

In addition to its own analytics, Square has partnered with Intuit and Xero, popular small business accounting packages, to transfer data directly into their systems, saving business operators hours a week in what was previously a largely manual process.

Square also offers inventory tracking software, which gives sellers a free way to track their item stock when selling in person and online. Sellers manage their inventory in their web dashboard, including setting up stock alerts so they are never caught off guard by low inventory.

As the company’s website says, it aims to do much more than just helping merchants to take payments, "Square makes it easy for local sellers to run and grow their business with simple, affordable, and accessible tools. From a revolutionary card reader to an online marketplace, we’re helping local sellers connect with customers everywhere," says the Square website.

Started in 2009, Square today serves more than two million small businesses and individuals in the US and processes more than USD15 billion in annual payments.

A St Louis start-up saint
McKelvey is also doing lots of work to promote economic development in his hometown, St. Louis, Missouri. For instance, he is involved with:

- Arch Grants, named after the St. Louis arch. The programme provides $50,000 grants to startups from around the world who will move to St. Louis.
- Cultivation Capital, a VC firm started by McKelvey and four partners.
- SixThirty, a financial tech accelerator programme, which works with the city’s financial market in St. Louis which includes companies such as MasterCard, Wells Fargo, Edward Jones, Scottrade and Stifel Financial. Each company selected for the accelerator programme is given a $100,000 investment.
- LaunchCode, a program to educate computer programmers using Harvard’s CS50 online course.

"LaunchCode is the crown jewel of the effort," said McKelvey. "It takes people who would otherwise not be programmers and turns them into programmers and gets them jobs. It’s not some limp educational effort."

Or as McKelvey described it in a post on edX, "There’s Ben who with no prior coding experience, quit his 20+ year job as a truck driver and dove head first into CS50. There’s Sam, who, finding himself stuck working retail jobs after graduating college with an English major, is crushing CS50 and gotten to the point where he is actively helping other students."

Programming can be a great fit for people who have not necessarily done well in traditional educational programmes, said McKelvey.

"What is interesting about St Louis is that we seem to have recently made very good progress after being asleep for 100 years. This was the third most populous city in the country 100 years ago. It was considered a spectacular gem, a world city in 1904 and then it fell off the radar."

It is now a world leader in life sciences, particularly plant science, he added. Washington University in St. Louis’ medical school is ranked number one or two in the country, so it’s also a good location for medical startups.
The disruptors tell their stories continued

ETORO

A mission to make trading social, transparent, universal

A social investment network

Over 3.5 million users in more than 170 countries worldwide are trading currencies, commodities, indices and stocks online through eToro, which describes itself as a social investment network.

Participants can invest from as little as $50 as the initial amount, and open trades with just a few dollars (trades are denominated in dollars even though the company is headquartered in Cyprus and has most of its development staff in Israel.) They can invest on their own, they can watch how others are investing, and they can arrange for their trades to automatically be copied from a successful trader, who in turn gets rewarded for the number of follows and his or her trading record.

The company started in 2007 as a way to open the global markets for anyone to invest in a simple and transparent way said Nadav Avidan, a spokesman for the company. "That sounds like a slogan, I know – but it really is what drives people here."

At first eToro launched with a platform to gamify finance, but founders Yoni Assia, Ronen Assia and David Ring quickly saw that members were not interested in playing games, although they loved the idea of being able to chat to other investors and discuss trading strategies. That led the three founders to the understanding that social network and finance can co-exist, and more than that – that social network is just what the financial world needs to find its way to generation Y’s hearts and minds.

A discussion of the USD against a variety of other currencies drew comments from Thailand, New Zealand, the Czech Republic, Brazil, France, Spain, Germany, Malta, Singapore, Pakistan, Egypt, Malaysia, Israel, Austria, Taiwan, Russia, Sweden, Poland, Greece, Indonesia, Saudi Arabia, Norway, Maldives, Slovenia, Botswana, India, Argentina and the UAE.

OpenBook, eToro’s social network, launched in late 2010.

"In social networks, you have Facebook, the mother ship," said Avidan, "and then LinkedIn, if you’re looking for a job or career related content, Instagram for social photography, Twitter for people who like to follow important people. Every social network has a niche. Every vertical has a niche of choice in only three clicks. We want to make sure that whoever wants to invest, say $500, and then everything that Joe does in his portfolio is executed in yours at the same proportion," said Avidan. According to the company, copy trading delivers 10 percent better returns than individual manual trading, according to an academic research they have recently conducted with MIT.

Copy trading delivers 10 percent better returns than individual manual trading, according to an academic research eToro recently conducted with MIT.

Copy trading

"You search for investors and find Joe, who is a great trader. We share the percentage a trader gains, but not the amount he has invested – whether it is $10 or $1 million it is the same to us. All of Joe’s strategy is open – all the trades he has and the investments he has made in the past – stocks, indices, currencies, commodities. You can decide to invest money in Joe and click 'copy'. A pop up window asks how much you want to invest, say $500, and then everything that Joe does in his portfolio is executed in yours at the same proportion," said Avidan. According to the company, copy trading delivers 10 percent better returns than individual manual trading, according to an academic research they have recently conducted with MIT.

The minimum amount to start investing at eToro is $50 and the average is about $500, Avidan said. As the list of commenting countries showed, investors come from around the world, mostly from Europe but also from the Middle East, South America and the Indian subcontinent.

The company makes its money by charging a small brokerage fee, but it does not sell advertising on its site or sell its user list, Avidan added.

"You can decide to invest only $100 in Apple stock, for example – you don’t need to match the real price of the stock. That’s the advantage CFD is giving you, and since we do not offer leverage on stocks, the execution is basically the same as the stock preforms – nothing more, nothing less. Just like in e-commerce, you open the order to invest in your stock of choice in only three clicks. We want to make sure that whoever wants to invest in a stock or anything else doesn’t have to go through an intimidating funnel that "looks like finance."

"If you are sitting in front of a banker, and you are trying to understand what he is explaining about your mortgage, something you are going to pay for 20 to 30 years, and he is talking high-level words and you ask what he means about the interest rate and he gives you that look which says don’t interrupt me while I am talking. Ask the same thing on Facebook and you will get 30-50 responses and none of them say, why are you bothering me?" said Avidan.
Unlike a typical stock broker, everyone on eToro has the same agenda – to help other investors.

The difference with other social trading websites is that eToro deals in real money and real investments, not just ideas and insights, he added.

"If the conversation is not based on what you do with your own money, then it is just bar talk."

Top traders get rewarded based on their skills and the number of followers they have – they can earn up to $10,000 a month.

"You need to perform well and have people follow you," Avidan explained. "We want to encourage people to be the best they can be for themselves and for the community. You can create discussions, and if you are interesting and know what you are talking about, then people will look at you, and if you have good stats they will follow you and then they will eventually copy you. We are not trying to make people into marketers who push themselves, because that drifts away from the basic desire they have to make money for themselves. We don't want them more engaged with promoting themselves than with their portfolio. The best social interaction is always the organic, effortless one."

As traders gain followers they become a little more conservative, eToro has found. Holding periods of minutes or hours are extending now that the site offers equities.

"When a lot of people start to copy you, you start to become socially responsible. You understand it isn’t just your money you are investing but a lot of other people and they trust you, so then we see a big shift to mid-level or a low amount of risk. You tend to be more responsive and reactive to questions."

About 30 percent of users access the site from mobile devices.

The site added equities in 2013 in a modest rollout, starting with 100 companies and then added another 130, including well-known brands such as Apple, Coke, Facebook and Vodafone. Among the stocks is the complete FTSE100 and the German DAX30. While currencies have a fairly short holding period, investors hold equities longer, often for months, he said. The company trades about 250,000 shares a day, with a counter on the home page tracking the activity.

"We also have Bitcoin which we encourage people to look at as long term investment. We want people to think if you invest in Bitcoin today you are not hoping the $500 today turns into $600 later in the day, but that $400 will turn into $5,000 six months from now."
Lowering costs
The Currency Cloud is filling a gap that banks created in foreign exchange through high prices and complexity.

"Making an international payment through traditional channels can be expensive, opaque and complicated due to outdated processes and high margin foreign exchange practices. The Currency Cloud is a software-as-a-service company, which believes small businesses and consumers deserve a better service, and that technology is the way to deliver it," the company explains.

The company provides a simple API which allows users such as payments firms, banks and e-commerce companies to connect and access a global network for quick, transparent and secure international payments. It offers full transparency on its margins, providing customers with the wholesale rate and even showing its own markup.

The Currency Cloud works with the banks, which do after all have the benefit of the banking network, explained Mike Laven, CEO of the company. Barclays or Citi or Deutsche Bank charges customers, including The Currency Cloud, fees based on volumes. The question for The Currency Cloud is how much to mark it up.

The company does not push the banks out of the market, but it may squeeze their margins.

"The banks may be losing certain consumer business, but we have to work with them, so they are not totally cut out of the business. The banks' profits on certain parts, like FX (foreign exchange) and wire fees may be squeezed, but they are not going to zero. They might lose the FX, but they still have the account."

The Currency Cloud specializes and doesn't use one type of transaction to subsidise our other costs, we can take a lot of cost out of international payments. A major impact of this model could be the forcing down of prices within the banks for them to remain competitive.

Mike Laven - CEO - The Currency Cloud
Unbundling
Rather boldly, Laven compared what he is doing to the airlines’ strategies – unbundling. Airlines charge more for a few inches of legroom and a glass of inexpensive sparkling wine in “premium economy”, and for every piece of checked luggage. In contrast to the airlines, however, The Currency Cloud is unbundling the payment services and charging less.

“It’s the usual internet story, Laven said, “Because The Currency Cloud specializes and doesn’t use one type of transaction to subsidise our other costs, we can take a lot of cost out of international payments. A major impact of this model could be the forcing down of prices within the banks for them to remain competitive.”

Traditionally, this business is owned by banks and one or two vendors, said Laven. But in the cloud, multiple vendors can focus on a piece of the payment value chain and optimise it through remote hosting to reduce costs. The company currently has more than 125 platform customers serving 50,000-plus end users.

This separation of service has occurred in other many other industries. It’s been particularly prevalent in the music industry where the digitization of the industry has seen the rise of online companies, such as iTunes and Spotify, together with the decline of traditional record labels. For the financial services industry it has taken much longer because it is so vertically integrated.

“The overwhelming volume of transactions are sent through the banks. At least in the payments part of the world we are in, in Europe, people feel the international transit costs. Bringing transparency to that problem gets tremendous press, although the volumes we move are still modest,” said Laven.

“While 85 percent of international payments go through banks, more and more businesses are now turning to us to provide their international payments capabilities,” he added. “Unlike other payments providers, we make cross-border payments transparent and frictionless. New clients can also get set up with our service quickly via our developer-friendly API.”

The Currency Cloud offers a regular service to 28 countries using a network of trusted banking partners, and providing the payment within three days at a relatively low cost. Its priority service can reach 212 countries, and 95 percent of the payments will arrive within 24 hours. The Currency Cloud provides tracking of transactions, supports automatic notification of recipients every time a transaction is sent, and shows the mid-market rate so customers can see what the FX conversion costs. The firm is regulated by the UK’s Financial Conduct Authority.

“A B2B service
The Currency Cloud is not focused on end consumers but on servicing firms such as small banks, payments companies, and exchanges – firms that are making payments for their customers, not the customers themselves.

“We have focused a lot on startups because there are so many in FinTech and banks have a hard time dealing with small and medium-size businesses while providing the services we do. We are willing to talk to the startups because if you believe you are in a market that will expand – and a lot of startups are going to grow – we help them to roll out when they can barely afford it and we aren’t making a lot in the expectation that they will become very profitable for us as they expand,” said Laven.

The company’s typical client is based in Europe, and about 80 percent of the transactions are dollars/euros, or sterling in various directions.

Laven’s faith in startups extends to his own.

“We can build a very big company. Business payments amount to $100 billion USD a day so you only have to get a small market share to build a very large company,” he said.
The disruptors tell their stories continued

COMMERCIAL BANK OF AFRICA

Broadening financial inclusion with M-Shwari

Building on the success of M-Pesa
Kenya-based Safaricom, whose M-Pesa mobile phone payment system has attracted worldwide attention for its broad and deep reach across the country, has built on its success with M-Shwari, a new banking product for M-Pesa customers that allows them to save and borrow money through their phones while earning interest on money saved.

The service is a result of a partnership agreement between Commercial Bank of Africa (CBA) and Safaricom (which is the leading mobile phone operator in Kenya and 40 percent owned by Vodafone). In 2012, the two partners decided to launch a mobile banking platform that would tap into the 15 million people using M-Pesa mobile money transfer system. M-Pesa makes money from transaction fees when customers withdraw or transfer cash at any of the 70,000 M-Pesa agents in Kenya.

M-Shwari is a completely mobile-centric suite of banking products that are offered to M-Pesa customers via their handset to enhance the M-Pesa value proposition. With M-Shwari, customers have access to deposit and loan products that are convenient, reliable and cost-effective for making savings and taking loans. Customers initiate the creation of their own accounts from their mobile phones, triggering automated processes to verify KYC information and subsequently calculation of their credit limits within a few seconds. Customers can access their M-Shwari interest-earning accounts at CBA and apply for 30-day loans without ever stepping into a branch or filling out any paperwork.

M-Shwari has no minimum balance and does not charge a fee to move funds between M-Pesa and M-Shwari. Anyone who has been an M-Pesa customer for six months is eligible to join M-Shwari, which is kept separate from traditional accounts at the bank.

First mover advantage key
Once CBA and Safaricom had agreed to develop a mobile-centric banking app, they turned to Temenos to make it happen. CBA had already been a Temenos customer for its traditional banking operations for a number of years. In the face of fast-paced competition in the Kenyan market, the bank gave Temenos six months to set up M-Shwari, integrate T24 with the M-Pesa payment system, and make sure T24 was ready to scale from the first day. Using its Temenos Integration Framework, Temenos delivered the banking system in five months with full pre-integration for components operated internally at the bank or from other vendors, without writing code, through a central integration hub.

M-Shwari was a huge success from the day it launched, where 70,000 customers successfully registered for the product. In the first three weeks, it signed up 850,000 new customers, gathered Ksh 1 billion in deposits and processed more than 2 million transactions.

Financial services companies will need to have a solid foundation to help them not only survive in such times but also allow them to grow. There’s no better way to start doing so than having a reliable technology partner that’s a known leader in its market and has a strong desire to continue leading through innovation; Temenos is a good example of this.

Mohammed Dalal - Technical Services Manager - CBA.
Now the bank has a clear competitive edge in the Kenyan market through provision of financial services exclusively delivered through mobile phones with no paperwork; features that have been purely enabled by the integration of many different systems at the bank. T24’s rapid implementation boosted CBA’s return on investment and shortened its time to market strategy that ultimately lead to the M-Shwari product being launched ahead of the competition. Transactions are entirely automated with 100 percent straight-through processing and the system has been supported by only 20 back office and IT staff.

Since its launch in November 2012, Ksh 66 billion has so far been deposited into customer’s M-Shwari accounts. The service has so far successfully offered over 10 million loans with a value of Ksh 11.6 billion which is about $137 million. Earlier this year, the bank reported that only about 140,000 loans were in default; a 3.1 percent average – a very good number compared to the current national industry average of about 5.8 percent. Defaulters can lose access to their mobile phone facilities and/or be banned from new loans for a period of time. Nairobi Wire reported that more than 25,000 customers who were blacklisted for failing behind on their loans have since paid up.

M-Shwari has lifted Commercial Bank of Africa to the position of the country’s second largest bank, in terms of number of customers, moving it ahead of Co-operative Bank, KCB and Family Bank. The head-start into the mobile banking market has been valuable for CBA; especially because it has been able to offer its target customer a product with a much better value proposition than its competitors.

Mobile banking has received support from the Kenyan government:

“Accessing all bank services through the phone encourages people to make commitments; we hope to see the banked population rise with more of such products from all sectors,” said Fred Matiang’i cabinet secretary in the ministry of Information Communication and Technology, as reported by The East African.

M-Shwari, like M-Pesa, is a lesson of what can happen when a financial services provider gets the proposition right – in this case, a convenient service offered at the right price point over the right channel.

CBA’s view of the M-Shwari story so far and what lies ahead in future:

“At CBA, we do acknowledge the fact that technology will continue to significantly influence business models over the coming years. As demonstrated by M-Shwari, this effectively means that we will continue witnessing quite a number of disruptive business models in the financial services market. The new business challenge will be how to get the best value from the disrupting yet energizing effects of technology changes. Financial services companies will need to have a solid foundation to help them not only survive in such times but also allow them to grow. There’s no better way to start doing so than having a reliable technology partner that’s a known leader in its market and has a strong desire to continue leading through innovation; Temenos is a good example of this” – Mohammed Dalal – Technical Services Manager, CBA.
Giving people the tools to become their own private bankers

Starting something new
When BforBank was launched in 2009, the online bank offered savings, brokerage services and insurance products only.

“When you start doing business online you have to simplify the product offering and then simplify the process attached to it,” explained André Coisne, CEO of BforBank. “While most systems at larger banks accommodate for five or six different mortgages, in an online bank it is only one.”

The bank, which has grown to more than €3 billion in deposits in four years, recently announced that it will offer a full range of services including banking accounts, credit cards, mortgages and consumer credit.

“Since 2012 in a low interest rate environment growth is more difficult, André Coisne said. Getting people interested in stocks is not easy since French people are very conservative and the markets are frightening. Our biggest challenge is inertia.”

“We saw a gap. By providing people with a rich, interactive experience and the same tools as an asset manager, we are helping people to become their own money managers; their own private bankers.

As André Coisne - CEO - BforBank

A subsidiary of Credit Agricole (CA) the online bank has a completely separate identity. The parent bank is composed of 39 regional banks, which decided collectively to create a separate internet bank.

“What we wanted to do was to start something new, something fresh. The internet is a new territory. The easiest way to reduce complexity and create agility was to start again. A different name, a different pricing offer and a pure digital experience.

André Coisne - CEO - BforBank

BforBank runs its operations on the Temenos T24 platform, hosted by a Credit Agricole data centre, providing a significant saving in operational costs by leveraging the bank’s existing facilities to host its modern banking platform.

André Coisne thinks that many large banks may go down the route of launching new offerings – digital banks or line of business services – using a different vehicle. “Banks have many great assets, but they are encumbered by legacy.”
André Coisne said that BforBank arrived ten years after some of the other online banks in France, so it has tried to learn from their experience to implement best practices, especially in customer service online or over the phone. In 2013, the bank won the award for best client services for a direct online bank in France.

**Giving people the tools to manage their own money**

The bank targets the mass affluent – doctors, lawyers, entrepreneurs and business owners who have €50,000 or more in savings. A series of sleek black and white adverts show a woman handling a 15-metre sailboat on her own through empty waters, a handsome man piloting a twin-engine plane swoops along a coastline and over an island, and a sophisticated woman emerging from a Mercedes to take her place aboard a sleek TGV, placing an expensive-looking leather overnight bag in the storage above her seat.

Affluent, independent, ready to act – they fit the BforBank slogan of “Mon banquier, c’est moi”, the demographic of people who have money, but want to take a more active role in managing it themselves. Moreover, this is a demographic that typically isn’t well served by traditional retail bankers and falls under the radar of traditional private banks.

“We saw a gap. By providing people with a rich, interactive experience and the same tools as an asset manager has, we are helping people to become their own money managers; their own private bankers,” said Coisne.

The average age of BforBank clients is around 45.

“It is a massively urban demographic with a higher proportion being executives or lawyers, these kinds of people,” Coisne added. Most of them come from retail banks or from other direct banks.”

The bank’s website has many interactive tools to track investments, run simulations, set risk parameters and check the tax efficiency of investments. It includes more than 50 videos with expert advice, and over 1,000 articles with financial advice and planning and has data feeds from the Paris Bourse. When it started five years ago, it was the only direct online bank offering such tools but competitors are now catching up, he added. It also has financial advisors ready to help customers online or by phone.

Some of the bank’s web visitors are not clients, but as they try out the tools, BforBank hopes to convert them to customers with its attractive rates, he added.

In future, he sees competition coming from some of the technology companies like Google and Facebook. He also is looking at new opportunities such as crowd-funding and peer-to-peer lending.

“As a bank you have restrictions and you cannot offer investing in a company that could potentially collapse in three months, and that is what crowd funding is all about.”

Social media is something of a puzzle, since banking is not a hot topic, he said. The banks can push information with Twitter but on Facebook and LinkedIn, BforBank seeks to build an image that is not strictly limited to banking, so it has started a contest to name the entrepreneur of the year and invited people to cast votes.

“The challenge for us now is to develop more and more functions over the net and over mobile. Signatures have to be electronic — all these have to be embarked in our strategy to ease our client experience and, give clients quick access to things they value when abroad. We have to think from the client perspective and bring any smart services that we could develop to their mobile or the web site.”

Technology is key for BforBank. Without technology we don’t exist,” he finished.
When Josh Reich left Australia and moved to the West Coast of the US ten years ago, it was because the engineer by training wanted to be part of the wave of technological innovation, and America was the place to be for that.

Then he opened a bank account with a bank in Oregon and received a box of cheques.

“I came to be in the heartland of innovation and banking was a complete mismatch. I never had to write cheques in Australia. I went through three banking relationships trying to get on top of my money and felt extreme dissonance. In Australia I didn’t feel I had to fight my bank.” In fact, he had been a contented, life-long customer of Commonwealth Bank of Australia. In the US he found himself caught in overdraft fees and late fees, with banks changing the payment dates for credit cards.

In the US he found himself caught in overdraft fees and late fees, banks change the payment dates for credit cards.

“Large banks seemed to make money by keeping their customers confused. I thought there might be an opportunity to fix it.”

Reich didn’t have a background in banking, but he did have a friend from his MBA days who was a specialist in payments and banking at McKinsey. They started working on a solution in 2009 and obtained their regulatory approvals to launch about 18 months late. It wasn’t a time, said Reich, when the FDIC was enthusiastic about innovative new ventures in banking; they had seen quite enough innovations blow up during the financial crisis.

If regulators were a little skittish, and concerned about what new legislation like Dodd-Frank was going to dump in their laps, consumers had developed a newly skeptical, one might say cynical, understanding of the role banks played in the economy.

If regulators were a little skittish, and concerned about the consequences of new legislation like Dodd-Frank, consumers had developed a newly skeptical understanding of the role banks played in the economy.
Consumers were ready for change.
At its core, Simple really is simple. It consists of a mobile phone app, a debit card, a relationship with a bank, and some easy-to-understand money managing software. It is designed to work the way people live. Instead of just showing a bank balance (and with most banks the balance is outdated or displayed with “pending” against deposits or spending that hasn’t cleared yet, Simple monitors a customer’s income and spending. It knows when a customer gets paid and how much she pays out for rent or a mortgage, phone bills, groceries and medical bills, for example. It uses machine learning to register the patterns without requiring the customer to key in a lot of information and track every receipt, the way most personal financial management programs do.

Then it can show on the phone how much is safe-to-spend alongside savings goals, such as paying off student debt, retiring credit cards or putting money aside for a vacation or a down payment.

Customers love it. One wrote:

Just wanted to share with you guys that I paid off one entire credit card and my outstanding tuition at school, thanks to the Goals feature! That’s about $3000. I had no idea how to save before Simple. Now I have three more credit cards to go and feel confident I will pay off soon enough now that I can visualize where my money is going. It’s a tough road, but we’ll get there together.

As Reich said, the problem is people get paid at the beginning of the month, have money to spend, and spend it. Money dwindles as the month goes by, and some of those dinners or groceries go on a credit card, or the customer is reduced to sandwiches and ramen noodle packages. Or customers worry they’ll run out, so they don’t save as much as they could, because they don’t know how much they need.

The importance of technology
Simple uses technology to provide useful information without requiring customers to do any work.

“Most people don’t even know what they want when it comes to banking,” Reich said. “We are a tech-forward company, heavy on technology. We don’t allow customers to modify the alerts we send them. It would have been easy to let users fine tune their accounts. If you ask them, they say they want to do that, but to actually use those you have to know a lot about your own financial behaviour. Our approach, rather than give them a lot of knobs, is that we use machine learning and statistics to infer how people behave. The changes on your account are driven by your behaviour. For example, we do a lot of work to detect recurring transactions. You could imagine a workflow where you ask a customer how often they get paid and how often they pay rent. Why not just use the implicit behaviour as inputs. That is the approach we take.” About 40 percent of Simple customers are using the ‘goals’ feature to put money aside for anything from rent to vacations to a down payment.

Banks are at fault for not doing more to help consumer save, Reich said.

“People didn’t understand the connection between their spending habits and their ability to save. At the end of month they would get a statement and try to internalize the information – how did buying shoes impact my vacation plans? Mint (a personal financial management programme) was successful for the 10 percent of people who are extremely organized. Ninety percent want to achieve their goals, but it requires a lot of work. With Simple, you swipe your debit card and your phone knows. It closes the feedback loop between swiping your card and being aware of your goals. Obviously mobile and real-time are critical for us.”

People tend to under-save because they are afraid that if they commit funds to savings account they won’t have immediate access if they suddenly need the money. And in many cases, they are right. Even moving money from a savings to a checking account at the same bank is almost never real-time.

“So you put a little less into savings to provide a buffer for unknowns. Behavioural finance has shown that people compensate for liquidity constraints by saving less. If you make it easy to drag money from safe-to-spend to your goals in a Simple account you can get to it quickly and rebalance your goals.”

Simple is actually a front-end, using a debit card, mobile phone and its own software, connected to Bancorp. The bank runs a core platform from FIS which isn’t real-time, but Simple runs on a wrapping that shows account changes in real-time and then processes it through Bancorp in a standard overnight batch.
The disruptors tell their stories

Simple built its system from the ground up with the latest technology, giving it a huge price advantage over banks operating with mainframe legacy core systems. Reich cited a presentation by Richard Cordray, director of the Consumer Finance Protection Board, who said it costs a bank $250 to maintain a personal checking account each year, the same as in 2010.

“Think of what has happened in tech, storage and processing cycles, during that time. We are running the cloud paying a fraction of a penny per transaction. Our tech costs are close to nothing, yet we are providing fully featured checking and savings accounts that people love,” Reich said.

Simple has been able to build everything from the ground up.

“It is hard when you are a multinational and have to move millions of people to your new platform. That requires a real belief in the future to make that investment and say if we want to survive 20 years from now this is what we need to do.”

Reich thinks Simple has a strong competitive advantage in its technology and what it aims to do.

“When you are running off mainframe COBOL batch-processed core, it is really hard to deliver a good mobile experience. COBOL isn’t designed for that. But even if you could copy the technology, the secret sauce is not so much the technology; it is our approach. We never want to profit from customer confusion and that’s a fundamental change in the way of banking. If you keep changing due dates on credit cards and adding overdraft fees, your customers won’t like the service. Our main source of customers is the largest five banks in America. Bank of America is spending a ton on mobile technology, and we are getting a ton of customers from Bank of America. We speak to our customers; their common desire is to have financial control, and banks have failed to provide that. We want our business model to be aligned with customer interest, and to jaded customers that is refreshing.”

He can see customer behaviour change as they use Simple:

“It’s a younger demographic. We see people using their debt cards far more as younger people move from credit to debit. In the first two months that our customers are with us, the number of ATM visits drops dramatically, not because they don’t spend money, but because they prefer to spend it through Simple cards because they provide tracking. When I spend cash, I don’t get a record and a geo tag.”
BBVA

Simple was acquired by BBVA, the global Spanish bank, in a deal that closed in April. Eventually Simple will move from Bancorp to BBVA for its banking. It will remain a separate operation, based in Portland, with its own board of directors, and not become part of a BBVA operating unit.

Reich said the link to BBVA came about almost by accident. Shamir Karkal, a co-founder of Simple, attended a conference sponsored by the venture capital firm that had provided Simple with funding, Dave McClure’s 500 Startups. In his talk, Karkal criticized banks’ technology and approach to customer service.

BBVA’s venture fund was a participant in 500 Startups and the bank’s chairman, Francisco González, sent Karkal a handwritten note after the conference. González, who like Reich was educated as an engineer, is a technology advocate. This spring he had an op-ed piece in the Financial Times warning that banks face competition not just from other banks but from leading technology firms like Amazon and Google.

Does BBVA bring synergy?

“Yes, we wouldn’t have done the deal otherwise,” said Reich. “They have made a huge investment in building their back-end stack and we have similar visions, probably because González and I both started as engineers and worked on the buy-side and in retail banking.” Simple started with the assumption that banks would eventually be real-time; BBVA Compass is the largest bank in the US that has a real-time core, so it makes an excellent fit.

BBVA backing provides Simple with solid finances, freeing it from venture capital investment, and the accompanying concerns over its short-term nature, and giving it the potential to scale up across the US and around the world with its core saving and spending tool, plus new products.

Simple on Twitter

This spring, Simple staff saw an interesting post on Twitter.

Does anyone know if @simple is reliable? I mean I wanna switch into them but wary still... still need to research tho because banks suck! :[
Glam & Gloom @glamngloom_

They asked for permission to retweet, got it, and here are some of the responses, taken from Twitter:

Steve Black Jr. @draggingalake 6h
@glamngloom_e @simple they are the best.

Bryan McLemore @Kaelten 6h
@glamngloom_e @simple Been using them for more than a year. Best bank I've ever had.

etherpunk @ether_punk 6h
@glamngloom_e @simple Been using them for more than a year. Best bank I've ever had.

Daniel Bentley @DJBentley 6h
@glamngloom_e @simple no complaints here.

Thomas Fiscoe @desterado 6h
@glamngloom_e @simple since I’ve been a member been one time where it was down and it was for a few hours maybe? It’s been almost 2 years

Dustin Tanner @dustanner 6h
@glamngloom_e @simple yep! I love it! Been using it exclusively for over a year with zero issues and great support.

Graeme Ravenscroft @HallowedCrow 6h
@glamngloom_e I’ve been with Simple exclusively for about six months and I love them. I can’t say enough about their truly excellent CS.

Don Nunn @donnunn 6h
@glamngloom_e I highly recommend @simple, the one time there was a questionable transaction they were all over it. Excellent service

Caleb Brown @calebrown 6h
@glamngloom_e been using @simple for ~2 years straight as my primary bank. Absolutely love 'em. Never had a prob. & best customer support!
Low-cost, less complex B2B payments

An oil and gas company in the UK was paying its Saudi and other suppliers $3-4 billion per year, using a letter of credit from its bank, said David Desharnais, SVP of products and chief marketing officer at Traxpay. The bank required the importer to keep $250 million of its working capital in the bank and charged it 2.25 percent interest on that amount for the service.

"Adding insult to injury, the importer was also required to pay another nearly one percent transaction fee to draw down on this account to buy oil," Desharnais added. "Placing orders for three to four tankers of oil at $15 million to $20 million per tanker added up to a big payday for the bank."

After signing up with Traxpay, a cloud-based network that combines real-time business to business (B2B) payments tied to relevant documents, this UK firm now pays much less than 1 percent for the entire transaction and no longer has to lock up $250 million.

B2B banking customers want to do business using 21st century technologies but banks, especially large western banks with legacy systems, are struggling to meet the demands of the digital marketplace and global commerce.

"You’ve got to start fresh and build a system that can do this from the ground up to meet the demands of modern commerce – digital, real-time, anytime, anywhere, and with complete transparency," Desharnais said. "That is exactly the vision that Traxpay had for its B2B dynamic payments platform from the very beginning."

"The founders of Traxpay recognized that existing traditional static B2B payment solutions had fallen far short of market demand, and a disruptive new approach was required – and that disruption of this kind would need to come from a non-bank provider."

What makes Traxpay different is its patent-pending platform that brings together secure, flexible, real-time, 24/7/365 electronic payments with structured and unstructured data related to a transaction.

In the past few years, traditional players like Ariba (now owned by SAP), Basware, and OB10 (now owned by Tungsten) have been joined by hundreds of new players fielding next-generation solutions.

This has driven a new era of enterprise technology that is centred on not only connecting businesses but also enabling easier communication and interactions across entire supply chains, coupled with related services such as real-time payments, dynamic discounting and supply chain financing.
Traxpay serves both the buyer and the suppliers. B2B traders are already using Ariba, Basware, OB10, Intuit, ERP systems, or a common sourcing website. Traxpay plugs directly into these systems to handle the financial clearing and settlement of the financial part of the transaction in real-time, while also carrying the remittance and data information.

"With the complexity of business today, you need to move the money with data, and be able to sync up the shoe supplier in Asia and the buyer in Frankfurt providing discounts for early payment or adjustments for damaged goods," Desharnais explained. "You can’t do that with a credit card or traditional bank today which offer fixed payment instruments or methods.

"To do this kind of modern transaction, you need a dynamic method of payment."

It seems to be working. Traxpay saw a 10-fold increase in customers and transactions during 2013 as it filed for new technology patents and opened an office in Frankfurt. 2014 will see Traxpay expanding operations on a global basis.
About us

THE AUTHOR

Ben Robinson is Chief Marketing Officer at Temenos, overseeing the group’s Strategy, Communications and Marketing functions.

Prior to Temenos, Ben worked as an equity analyst at Exane BNP Paribas, covering the European software and IT services sector, and as an auditor at Deloitte. Ben is prize-winning UK chartered accountant and holds a first-class degree in Economics from the University of Leeds.

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TEMENOS

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