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Wall-to-Wall Marketing

In the war for deposits, big banks have a major advantage over their regional counterparts: deep, deep pockets

By Kristin Broughton

As the battle for deposits intensifies, megabanks may be holding the pivotal weapon — an ability to pump out slick TV ads and well-curated Instagram feeds that attract customers perhaps as effectively as savings rates or flashy technology.

That's the concern of Kelly King, chairman and chief executive of BB&T, who said during a recent industry conference in New York that the "marketing scale" of the largest competitors is a serious threat to regional banks.

"Scale in regard to marketing is a whopping big deal," King said, noting that big banks have adeptly used branding campaigns over the past few years to attract new customers. "I give them credit — the largest banks are putting billions and billions very effectively into marketing, and it is swaying opinion, and it is swaying decisions, swaying behavior," King said.

King, whose $222.9 billion-asset company is based in Winston-Salem, N.C., shared the stage with Brian Moynihan, chairman and CEO of Bank of America. BofA recently launched a new brand campaign featuring the tagline "What would you like the power to do?" The campaign includes TV ads that prominently feature Moynihan, who — in a rare move for a big-bank CEO — introduces himself to viewers, saying, "I am Brian Moynihan, and I work for Bank of America."

King's comments are also notable given that analysts often cite technology, not marketing, as the critical factor that gives big banks an edge over their smaller peers.

BofA and JPMorgan Chase, for instance, planned to spend roughly $10 billion on technology in 2018, with just under half going toward innovation efforts. By comparison, regionals such as BB&T were spending one-tenth of that amount in 2018.

That is important, because big banks have also outflanked regionals when it
A Bank for the Unbanked

How MyBucks brought financial services to a refugee camp

At a refugee camp in Malawi in southeast Africa, a fintech and its bank subsidiary are helping to turn a seemingly hopeless situation into the beginnings of a prosperous community.

MyBucks has set up a branch of its New Finance Bank in the camp, which is said to be the first of its kind. The branch offers mobile banking, financial literacy training, professional training, group loans and personal loans. It opened in April and it’s already profitable.

It’s proof that it’s possible to give refugees financial help, even if they have no identity documents or assets. About 40,000 refugees live at the Dzaleka refugee camp. They have fled conflict in the Republic of Congo, Burundi, Rwanda and Mozambique.

Most of them arrive with no money, no government-issued ID, and no food or goods. The refugees don’t have bank accounts. What little money they have is typically put under a mattress.

“They come with nothing,” said Mark Vivier, chief operating officer for banking at MyBucks, which so far serves Africa, Poland and Australia.

“They walk a very long distance, all across Uganda to Malawi.”

The refugees are not given money. The United Nations and relief organizations provide food, medical services, schooling and psychological and social support. When refugees arrive, they are given iron sheets and poles they can use to build homes. That’s it.

The camp is cramped and electricity is spotty. Lights run on solar panels that generally work. But there are cooking fuel shortages and only one pit latrine for every 500 or 600 people.

The first thing MyBucks undertook was a three-week training program on financial management skills and the bank’s products, services and features. Fifteen hundred adults have gone through the program so far.

It is also engaging in entrepreneur training. Many of the refugees have skills — some make clothes or mats; others are farmers, barbers, hairdressers, teachers, doctors or nurses. The course helps them turn those skills into small businesses.

After the two rounds of training, the refugees form groups of 10 to receive group loans. Within each group, individuals apply for small loans, say $100, for their own purpose (toward a farm or purchasing materials for a small business, for example).

There’s peer pressure: members of the group back each other’s loans. If one person defaults, no further loans will be granted to the group. If the overall default rate is too high, the bank will stop lending to refugees in the camp.

“It’s in everyone’s interest to make sure they have as high a repayment rate as possible,” Vivier said.

So far, 72 loans have been made and none are in arrears.

Those that go through two group loan cycles successfully are then offered personal loans.

There’s an immediate necessity here. The United Nations’ World Food Programme provides food for the families in the camp monthly, but it has a budget shortage, so the food only lasts 21 days. For the remaining 10 days, refugees have to come up with their own resources to survive.

MyBucks has recruited refugees to staff the bank, so they can explain the benefits of the products to their peers, in their own language, and get them to sign up.

MyBucks handles the refugees’ lack of identification with the help of the United Nations. When a refugee comes into the camp, they go through a registration process and get a U.N./Malawian government refugee ID. Their photo is taken and attached.

Bank employees are given a tablet to use in the camp to create accounts, take photos, input information and verify the refugees. 

“They’ve become the ultimate virtual wallet,” Bakhshi said.

“MyBucks is the first in the industry to use its collective real-time payments technology off the ground has been a cooperative effort created or borrowed,” Bakhshi said.

Scale matters, and that can either be owned by the French banking conglomerate BNP Paribas. “Absolutely, scale matters, and that can either be created or borrowed,” Bakhshi said.

Moynihan also emphasized the importance of collaboration. He noted, in particular, that getting Zelle and real-time payments technology off the ground has been a cooperative effort by the industry to use its collective scale against fintech firms.
to use in the field to set up new accounts. The MyBucks app lets them take a photo of each new customer and uses facial recognition thereafter to verify the person’s identity.

“It’s sort of like a private banker for the unbanked to deal with customers in their environment, in their natural habitat,” said Dave Van Niekerk, founder and chairman of MyBucks, which is based in Luxembourg.

MyBucks offers the same mobile banking app it offers in other countries and a normal bank account in the camp. The app is multilingual.

The bank runs on an Oracle core banking system, with MyBucks’ artificial-intelligence-based banking and lending software on top. Among other things, the software helps predict borrowers’ ability to repay and helps with facial recognition.

— Penny Crosman

What Do You Think?
U.S. Bancorp enlists customers to help with product design

U.S. Bancorp relied on an important source of information as it developed a new small-business rewards credit card: its customers.

The $465 billion-asset company turned to co-creation to plan its Leverage card, inviting several dozen small-business owners to join the process. Satisfied with the outcome, U.S. Bancorp likely will increase efforts to include customers in the product planning process.

“Insights are the key to innovation,” Heather Wolfsmith, who heads the Minneapolis company’s small-business card division, said during an interview at American Banker’s Small Business Banking conference.

“With deeper insights we’ll have an opportunity to build more innovative products,” Wolfsmith said. “Co-creation brings all parties together. You’re not relying on the banker to be voice of the customer.”

Co-creating has been touted by banking consultants as an effective way for financial institutions to think more like startups.

U.S. Bancorp wanted to capture more business from higher-revenue companies and operations that spend a lot of money on items such as raw materials and inventory. At the same time, customers were asking for a new product where they could earn more rewards for large expenditures.

During March and April, U.S. Bancorp held co-creating sessions in Southern California and Portland, Ore. Each was attended by 10 to 15 business owners, representing a diverse field of industries. Participants, chosen because of their supply chain needs, were recruited by U.S. Bancorp’s bankers.

“We really handed over the reins to our customers and asked them to create their own ideal credit card product — with some limits,” Wolfsmith said. “They were asked to build a product that maximized their benefit but was still profitable for us.”

U.S. Bancorp has relied on co-creation for another project — the September launch of its online lending portal. The planned process included customers and bankers, along with the company’s software engineers and its credit and compliance teams.

The portal project reduced data entry points by 70% and has allowed more loan applications to be approved within a day, said Sam Castle, U.S. Bancorp’s business banking regional manager.

Co-creating has also helped with employee morale, Castle said. “It tells us that the bank is really listening by bringing in the people who call us and give us feedback,” he said. “It has been really refreshing.” — Paul Davis

U.S. Treasury Seeks Direct Express® Debit Card Services

The U.S. Department of the Treasury, Bureau of the Fiscal Service, seeks applications from qualified financial institutions to serve as a Financial Agent of the United States. The selected Financial Agent(s) will provide Direct Express® debit card services nationwide to recipients of Social Security and other Federal benefit payments, beginning in January 2020. Applications must be received no later than 5:00 pm ET February 15, 2019.

For more information, please visit: https://fiscal.treasury.gov/directexpress
A Real-Time Quandary at the Fed

Should the central bank build its own real-time payments network? Small banks tend to have a different answer than large ones

By Kevin Wack

The Federal Reserve may or may not opt to build a real-time settlement system, but whatever it decides, it is sure to ruffle a lot of feathers in the banking industry.

In October, the Fed sought public input on what its own role should be in an immediate, round-the-clock payment system. One of the key questions was whether the central bank itself should develop a real-time settlement service that operates 24 hours a day and 365 days a year.

The Clearing House, a payment company that is owned by many of the nation's largest banks, already operates such a service and is now planning to argue that a real-time service from the Fed would be duplicative. Its RTP system launched in November 2017, and its participants include JPMorgan Chase, Bank of America, Citigroup and seven other big banks.

But smaller depositories, which generally have been reluctant to sign up with The Clearing House, are planning to press the Fed to provide competition by building its own settlement system.

Cary Whaley, a vice president at the Independent Community Bankers of America, said in an interview that his organization favors a system similar to the one long used for automated clearing house transactions.

Banks have the option of routing ACH payments over competing networks, either one operated by The Clearing House or another by the Fed.

A Fed-operated service would ensure that all 11,000-plus U.S. banks and credit unions have access to real-time payments, Whaley said.

Big banks were expected to stake out the opposite position in comments that were due to the Fed by Dec. 14.

Steve Ledford, a senior vice president at The Clearing House, argued in an interview that a real-time service from the Fed is unnecessary because the RTP system was projected to reach 50% of
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all U.S. transaction accounts by the end of 2018. The Clearing House has a credible plan to reach all U.S. financial institutions over time, Ledford said.

In addition, Ledford argued that if the Fed decides to build its own settlement service, adoption of real-time payments will happen more slowly, given how long it will take for the work to be completed. “We all feel there’s a need to get there quickly,” he said.

In arguing that the Fed should take a smaller role, Ledford also pointed to technical challenges associated with making two real-time systems interoperable. Interoperability would enable a payment to be initiated on one of the two systems and completed on the other one. “I think that an assumption that these systems would be interoperable isn’t well founded,” Ledford said.

Consumer groups also will have a voice in debate, and Christina Tetreault, senior policy council at Consumer Reports Advocacy, indicated that her group plans to side with the small banks. “There is a role for the Federal Reserve to support the development of a new faster payments system, including as an operator,” she said.

The Fed is facing pressure to act quickly, as private-sector firms including The Clearing House, PayPal, Square and Early Warning Services, which operates the Zelle network, push ahead with their own technology. Real-time capabilities that connect all domestic banks have long been in place in the U.K., Sweden and other countries.

“It’s embarrassing that the U.S. is not even a fast follower globally,” said Stephen Ranzini, the chief executive of University Bank in Ann Arbor, Mich., and a onetime member of a Fed-convened task force that focused on payment security in a modernized system.

Over the last five years, the Fed has been pushing banks and other payment industry participants to forge a path toward real-time payments.

In July 2017, a Fed task force established the goal that within three years, anyone with a U.S. bank account should be able to receive payments that are highly secure and delivered in something close to real time. But the working group’s report was not clear on how to get there.

Then in October, Fed Gov. Lael Brainard warned that small institutions could be left behind if there is insufficient coordination in the development of faster payments. At the same time, the Fed released the 47-page request for comment on its own role in a future system.

Some of the issues that the Fed raised are not expected to generate much controversy. For example, there appears to be broad support for the Fed’s development of a liquidity management tool that would allow banks to settle payments around the clock.

Still, that there are opposing views on a Fed-built settlement service puts the Fed in a difficult spot, particularly given the lengths it has gone to avoid taking sides. “I don’t think we can predict at this point what the Fed is going to do,” said Sarah Grotta, a consultant at Mercator Advisory Group. “I think they’re doing a very good job of playing it close to the vest.”

All Talk, No Action

What will Congress do about data breaches besides gripe? As massive data breaches have become a regular occurrence, analysts now expect a similar response from policymakers: immediate outrage, some discussion of perennial bills to improve cybersecurity and data breach response measures, and ultimately no legislative progress.

And so was the sequence following news that as many as 500 million guests of Starwood hotels had their personal information exposed in a hack of the Marriott International subsidiary. Some lawmakers responded with revived calls for reforms like data breach notification standards, but then attention quickly diverted to other issues.

Some suggest that the public has now become so desensitized to data breaches that the lack of any policy response is a new normal. It may be up to the private sector to mitigate the harm.

“We’ve come to acknowledge that, unfortunately, breaches are going to happen, and discussions will really need to be centered on what companies can do to mitigate risks and potential consumer harm,” said Antonio Reynold’s, a partner at Buckley Sandler.

The Starwood breach came just over a year after the Equifax breach exposed personal information, including Social Security numbers, from the credit files of roughly 148 million people. Washington was up in arms over that breach, and lawmakers pushed for legislation. But the frustration subsided fairly swiftly.

After the Starwood hack became public Nov. 30, there were similar recriminations and calls for legislation. Analysts say that the hack could result in congressional hearings with Marriott executives, but that it is probably not enough to bring about legislation.

“It will elevate the issue. Whether it elevates toward congressional action is harder to say,” said Brian Gardner, a policy analyst at Keefe, Bruyette & Woods.
When you add on that it’s just a complex issue to begin with, I’m not convinced Congress is actually going to legislate,” he said. “I think there are going to be a ton of oversight hearings. I think that Congress will beat up on industry players. … Passing legislation is tougher to do.”

After the Equifax breach, several proposals were introduced and reintroduced, from mandating how companies notify customers of a breach, to a bill authored by Sens. Mark Warner, D-Va., and Elizabeth Warren, D-Mass., imposing hefty mandatory penalties for companies with lax security that results in the exposure of personal information.

But some lawmakers and industry groups worry the penalties would impose undue harm if the breaches don’t always involve negligence by the companies. “Efforts to pass federal legislation on data breaches have largely failed to get much traction, and broad measures that would hit companies with big penalties for breaches are a bit Draconian,” Reynolds said.

Rep. Blaine Luetkemeyer, R-Mo., a senior member of the House Financial Services Committee, introduced his own bill to enact a federal data breach notification standard. But that legislation has faced backlash from consumer groups concerned that it would preempt state laws that already have stricter consumer protections.

“We prefer that companies just do one thing: comply with the strongest state laws nationwide,” said Ed Mierzwinski, senior director of federal consumer protection for U.S. Public Interest Research Group. “Federal law should always be a floor of protection.”

To further complicate things, data security falls under the jurisdiction of multiple congressional committees — including banking, judiciary, finance and commerce — posing a challenge for building consensus on data breach reforms.

The multijurisdictional hurdle for data security legislation was illustrated in congressional hearings with Richard Smith, the former chief executive at Equifax. He testified before the banking and commerce committees in both chambers, as well as before the Senate Judiciary Committee.

When issues span multiple Senate committees, it can lead to congressional gridlock, said Aaron Klein, economic studies policy director at the Brookings Institution. “Other times committees can race each other with building information and work more collaboratively and combine their work together because nobody wants to be left behind,” Klein said.

Some members of Congress aren’t willing to give up on a legislative path forward to protect consumer data.

Warner has indicated at several Senate Banking Committee hearings that data breach legislation will be a priority in the next Congress.

“We must pass laws that require data minimization, ensuring companies do not keep sensitive data that they no longer need,” he said.

Sen. Ron Wyden, D-Ore., who is the ranking member of the Senate Finance Committee, introduced another bill to combat data breaches in November. His bill would include steep penalties for firms with lax protocols. The bill would also create a “Do Not Track” system to enable consumers to stop third-party companies from tracking them on the web.

But Klein said Congress won’t feel urgency until a more serious breach occurs. “It would require an incident far greater than any that we’ve experienced to create the external must-pass shock,” Klein said. — Neil Haggerty
THINKING AHEAD

Get some fresh perspective on the challenges and opportunities that'll impact banking in the coming year and beyond
Customers (finally) get some control of their financial data

For decades, banks, credit card networks and credit bureaus have been sharing and selling consumers’ financial data without their knowledge or consent while data aggregators have screen-scraped that information without the full cooperation of financial services providers.

But those days are starting to come to an end.

Some fintechs are testing apps that let customers gain greater control over how third parties use their data — and hope to one day be able to give them the power to revoke access to it entirely. Others are setting up ways to let consumers sell their own information, essentially allowing them to get a monetary incentive in exchange for sharing.

The most common change, however, is that the biggest U.S. banks are starting to share bank account data through application programming interfaces, or APIs, which are essentially straws through which data aggregators can sip certain pieces of bank account data. The APIs give the banks firm control over what data can be accessed — and give consumers the choice of which firms can see it.

For example, when a consumer starts using an app like Robinhood or Stash that needs to ingest bank account data, the data aggregator provides a moment of consent in which the consumer has to agree to let that app access their bank account data and the basic terms of that data-sharing are presented.
"Over the next six to 12 months, you're going to see possibly as much as 70% of deposits here in the U.S. available in open banking API rails," said Lowell Putnam, chief executive of Quovo, a data aggregator that works with banks and fintechs such as Betterment, SoFi, Stash and Wealthfront, and is the first U.S.-based financial data provider to become registered under the U.K.'s Open Banking regime. "That's my prediction based on progress being made at the big banks. It's also a testament to the large number of accounts at a small number of institutions in the U.S."

A few banks already offer added visibility and control. Wells Fargo, for instance, in the fall launched Control Tower, a tool in its mobile app that lets customers see which third-party personal financial management providers are accessing their bank account data and toggle that access on or off.

"As consumers' lives have become increasingly digital, managing finances has become more complex and cluttered," said Ben Soccorsoy, head of digital payments in Wells Fargo's virtual channels division. "We hope to relieve a pain point and give customers more control over their finances."

There are shortcomings of this approach. For one, many consumers tend to overshare data without considering the consequences.

"In the U.S. and abroad, the average consumer hasn't realized the value of what their financial data can unlock when properly shared and the sharing framework hasn't been communicated clearly enough," Putnam said.

Are APIs enough?
Another limitation to the big banks' APIs is that they tend to be read-only and the banks control what types of data can be shared.

"If you define the data control problem as, 'Can I let an app like Robinhood pull data out of my bank account so that I can have an aggregate view of my accounts in that app,' we're getting somewhere," said Dan Kimerling, co-founder and co-managing partner of the venture capital firm Deciens and formerly research and development lead at Silicon Valley Bank.

But this doesn't give consumers full control, he argued. They can't, for instance, draw data from a service like Robinhood into their mobile banking app.

"Aggregation is a kind of half-step," he said. "App developers need aggregation; it's necessary and important, but it doesn't actually solve the problem."

Fintech startups step in
But a few startups are offering consumers additional control over their financial data and in some cases even the ability to sell that data to third parties.

"JPMorgan Chase can decide to build. A community bank software engineers, has to rely on partners," said Kimerling.

The role of community banks
Another missing element of the API approach to open banking is that it may leave small banks out.

Credit unions, community banks and regional banks "may need several years to catch up and probably can't do it on their own without help from third-party technology providers," said Kimerling.

"Another missing element of the API approach to open banking is that it may leave small banks out.

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The role of community banks
Another missing element of the API approach to open banking is that it may leave small banks out.

"If I'm at Wells and I want to go to Citi, what do I do?" asked Dean, who was formerly the chief technology officer of Silicon Valley Bank's API division. "Can I press a button and open a new account? No. Once I do open an account, can I move the money and my transaction history over? No. I can't do any of that. Even the transaction formats will be different."

In Dean's view, there should be data aggregation tools that work across all banks. For instance, a consumer should be able to download their transaction history and have it look the same no matter what bank they use. And they should be able to move account data from one bank to another easily, the way phone companies now allow phone number portability.

Treasury Prime, one of the companies Deciens invests in, creates read-and-write APIs that developers can use "to build applications with function, not just cobbled-together pseudo banking functionality," Kimerling said.

Chris Dean, CEO of Treasury Prime, said the problem with the APIs banks use today is they often don't work. The data provided by banks doesn't always include the level of detail retail apps need and moving account information from one bank to another is difficult, he said.

"If I’m at Wells and I want to go to Citi, what do I do?" asked Dean, who was formerly the chief technology officer of Silicon Valley Bank’s API division. "Can I press a button and open a new account? No. Once I do open an account, can I move the money and my transaction history over? No. I can’t do any of that. Even the transaction formats will be different."

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need several years to catch up and probably can't do it on their own without help from third-party technology providers,” Putnam said.

For community banks to offer APIs to third parties, their core banking vendors would need to cooperate. The largest vendors in this category — Fiserv, FIS and Finastra — say they offer some support.

“We offer our community bank clients a robust set of APIs for accessing and sharing data through third-party applications via our Code Connect API gateway,” an FIS spokesperson said.

Fiserv offers a managed service for open banking; Finastra offers a platform for building apps that work with its software. Such options are controlled by the core vendor. (Fiserv and Finastra did not respond to a request for comment by deadline.)

Where community banks can't get the support they need from their core vendors, they may end up turning to third-party software providers, much as they did when mobile banking became popular.

This isn't necessarily a disadvantage and may help them innovate faster, some industry insiders said.

“A community bank, because they don't have 100,000 software engineers, has to rely on partners,” said Kimerling.

“JPMorgan Chase can decide to build. A community bank has to buy. I don't see that as a problem.”

**Fintech startups step in**

But a few startups are offering consumers additional control over their financial data and in some cases even the ability to sell that data to third parties.

Sprout is setting up a network of merchants willing to pay their customers a small fee for their spending data. Ideally, customers will get about $30 a month.

With consumers' consent, Sprout gathers users' bank account data with the help of the data aggregator Plaid. It then provides merchants access to that data — anonymized unless the consumer says otherwise — so that the merchant can analyze its customers spending behavior.

“As a merchant you could see that your best customers are spending 20% more than the average person, and those customers spend a lot of money at Mexican restaurants,” said Sprout founder George Visan. “So you target them based on their spending habits and you offer coupons or special offers.”

The app is being tested by a couple hundred people in Calgary.

“We're having early success,” Visan said. “Our future plans are to find retail partners in every city. One in each vertical: grocery, retail, technology, health and wellness.”

Digi.me offers an app designed to track all the third parties using a customer's data, including banks, workout app providers and social media sites, and let the user grant or revoke consent or demand the “right to be forgotten” — in other words, make the organization delete all their data (a requirement of the European Union’s General Data Protection Regulation).

There are still places where consumers have no say in the use of their financial data. Credit bureaus still share data without consumers’ consent (and at times fail to properly protect that sensitive data). Credit cards and banks sell consumers’ spending data to advertisers and others behind their backs, though that data is anonymized. Data brokers collect personal information on people through public and private sources and sell it to a variety of buyers.

But, over time, the concepts of consent, transparency and control are expected to reach all corners of the financial world. Banks that don’t pay attention to this could face reputational harm as American consumers become more aware of data privacy issues.

“The main thing banks do is manage risk,” Dean said. “If you’re giving my data away, I won’t be able to trust you. It’s a short-term win to make some money, but long term it’s a bad financial move.”

This is one reason banks have lost trust among consumers, he said.

Giving customers more control over their data could give banks a competitive advantage when open banking comes to fruition in the United States.

“If we really had open banking so you could move an account like you can move a phone number, then there would be real competition and the banks that did this would win,” Dean said.
Think outside the app

Bankers understand they need slick mobile apps to compete in the digital age, but the battleground for new customers will take place elsewhere on a customer’s phone in the years ahead.

In countries where mobile payments have taken off faster than in the United States, big banks have staked out a presence in places outside of traditional banking apps. Customers and prospects spend hours of their time online, chatting with their friends on social media, or perusing online real estate listings. Being an organic part of that online experience requires fresh thinking and in some cases new services that are not strictly banking.

So the most forward banks are already experimenting with strategies to answer questions like these: How can a bank insert itself in a relevant way into an existing ecosystem where people gather for nonbanking activities? And does it make sense for a bank to create its own ecosystem of sorts?

There is perhaps no better example of this dynamic playing out than in China, where banks such as Citigroup — the only U.S. bank with a retail license in that country — provide banking services through WeChat, the popular social media and mobile payments app. Citi offers most of the features of its mobile app through the WeChat platform, giving customers the ability to apply for credit cards, access their account balances, obtain instant loans and more.

Citi considers its partnership with WeChat in China as a bellwether or sorts for the way retail banking may evolve in other markets in future years.

“Customers think about banking while they’re doing other things, like shopping, making travel plans and talking to their friends,” said Gavin Michael, head of technology within Citi’s global banking division. “There is a very natural role for the bank to play in those kinds of digital environments, rather than artificially driving them to a Citi-owned property.”

In Belgium, meanwhile, BNP Paribas has developed a standalone app aimed at acquiring new mortgage customers by not just offering loans, but by helping them search for real estate online.

BNP recently integrated the app with local real estate websites, giving users the ability to search for properties based on neighborhood preferences, such as the availability of local schools or public transportation. Users also can estimate how much they can borrow based on their income, or make an appointment to talk with a BNP banker. Those who are ready to buy a home can obtain a digital mortgage.

Home on the Spot is designed to provide a service to customers — and noncustomers — before they decide to take out a mortgage, according to Michael Anseeuw, head of retail banking at the BNP Paribas Fortis, the French banking giant’s subsidiary in Belgium. “It’s on the one hand differentiating ourselves from competitors online,” Anseeuw said. “On the other hand, it’s also a strong belief that if you want to be relevant as a bank in the future, you have to be earlier in the process to capture your customer.”

BNP has said previously that it might roll out similar services to its subsidiaries in other markets, including Bank of the West in San Francisco.

Home on the Spot launched in Belgium three years ago and since then has been updated with new features. In the future, BNP hopes to give users the ability to hire movers and set up electricity and other utilities after they close on a home. “Finance of tomorrow has to be completely integrated in the life of a customer, and a customer is not looking for a mortgage — a customer is looking for a house,” Anseeuw said.

With the rise of new technology and open banking, companies need to start thinking differently about how to compete for customers in a digital environment, according to Anseeuw. That could mean partnering with big tech companies, and offering services on their platforms, such as how banks have integrated with Apple Pay. Or, in the case of BNP, it could mean creating an entirely new platform of your own.

“We believe that housing is an ecosystem where we have a role to play,” Anseeuw said. “And if we want to play in that ecosystem it means that, as a bank, we have to be relevant in all steps of the process, and not just when a customer looks for his mortgage.”

— Kristin Broughton
You can't count on overdraft fees forever

Over the summer, Democratic Sens. Cory Booker and Sherrod Brown introduced legislation that would take a large bite out of the roughly $15 billion that banks collect annually from overdraft fees.

Their bill would ban such charges on debit card purchases and ATM withdrawals. It would also prohibit banks from charging more than six overdraft fees each year to the same customer.

The proposal may supply a handy campaign talking point for Booker and Brown, both of whom are considering presidential bids and seem eager to take aim at an unpopular industry. But for banks, that political fight is starting to look like a distraction from market forces that are poised to erode overdraft fee revenue in coming years.

Two emerging trends require close attention from bankers.

The first development is the rise of challenger banks such as Varo Money, Social Finance and Chime, which are targeting digitally savvy young adults. As these branchless upstarts seek to undercut the higher-cost business models of incumbent banks, unpredictable overdraft fees are an obvious vulnerability.

Chime, based in San Francisco, is opening more than 150,000 overdraft-fee-free accounts each month. The company’s chief executive, Chris Britt, said in an interview that he anticipates the arrival of more startups with a similar value proposition. He also predicted that traditional banks will be reluctant to adapt their business models accordingly, because doing so can hurt their bottom lines.

JPMorgan Chase collected more than $1.8 billion in revenue from overdraft fees in 2017, according to an analysis of regulatory data by the Center for Responsible Lending. Bank of America and Wells Fargo both raked in more than $1.6 billion. Big banks typically charge around $35 per overdraft.

“They’re not going to rush to get rid of these fees, because they’re so substantial,” Britt said. “It’s very difficult for them to just pull the plug.”

But some big banks have taken notice — JPMorgan now has an overdraft fee-free digital bank account, and Wells Fargo is testing a similar product in certain regions. Smaller banks may eventually have to follow suit, particularly if the venture capital-backed startups achieve consistent profits.

The second trend that poses a threat to overdraft fee income is the industrywide push to adopt real-time payments. While there is no data on the subject available, experts believe that a sizable percentage of overdraft fees are levied in situations where the customer’s account has a positive balance when the card is swiped, but a negative balance when the payment is settled.

Many of those consumers know what their balance is at the cash register, and are essentially gambling that their accounts will still have enough money a day or two later to avoid the fee. If real-time payments achieve widespread adoption, people who live paycheck to paycheck would no longer have to roll the dice.

“The more real time you get, the less you have those timing issues,” said Steve Ledford, a senior vice president at The Clearing House, which launched a real-time payment system in 2017.

Lauren Saunders, associate director of the National Consumer Law Center, said that real-time payments have the potential to help people manage their money better.

Fintech startups and real-time payments are two forces that will erode overdraft revenue.

“It’s really the certainty of when money will come in and when money will come out that can help people,” she said. “There’s also a psychological benefit of knowing that if something is due today, then I can pay it today, and it will get there today.”

It is important to note some caveats about the adoption of real-time payments in the United States.

While the Federal Reserve is pushing for the establishment of a real-time system that connects every U.S. bank and credit union, a lot of technical questions have yet to be resolved, including whether overdrafts should be allowed. And even after a system is up and running, it is not clear whether it will be used all that much in the consumer realm.

Still, bankers would be foolish to assume that in the age of real-time payments, overdraft fees will remain as lucrative as they have been over the last couple of decades.

“I think the transparency it would have could reduce overdraft a lot,” said Corey Stone, a former assistant director at the Consumer Financial Protection Bureau. — Kevin Wack
THINKING AHEAD

Consider what to do when ballooning consumer debt finally pops

It’s never too soon for bankers to start worrying about rising consumer delinquencies.

While households are generally keeping up with their loan payments, they are also taking on more debt than ever, running the risk of becoming overextended.

Total household debt hit an all-time high of $13.5 trillion in the third quarter, and while delinquency rates on credit card and car loans are nowhere near crisis-era levels, they have been trending up of late, according to data from the Federal Reserve Bank of New York.

Factor in slow wage growth, high housing costs and low personal savings rates among working-class families, and it is easy to imagine many households falling behind on their monthly bills if the economy sours, or if they are faced with a sudden financial shock, such as divorce or a major medical expense. Some will even wind up in bankruptcy.

So what can banks do to help customers dealing with unsustainable levels of debt avoid bankruptcy? Often, they will refer a customer to a third-party debt consolidator, which will then lend that customer the money to pay off various loans and consolidate the debt into a single payment.

The problem with that model is that some borrowers will wind up in even deeper debt. The reason: Debt consolidators do not require their clients to close out credit card accounts they have just paid off, so it’s not uncommon for these clients to max out their credit cards again.

LendStreet, an Oakland, Calif., startup, is a different kind of debt consolidator. Founded in 2013 by Jerry Nemorin, a former Wall Street investment banker, LendStreet doesn’t just consolidate a borrower’s debt, it negotiates with creditors to reduce the debt by an average of 30%. So a consumer who has, say, $30,000 in debt spread across six credit cards, will see his outstanding debt reduced to $21,000. Interest rates on its loans range between 14.95% and 17.95%.

LendStreet also requires its clients to cut up most of their credit cards (they can keep one or two for emergencies) so that they aren’t tempted to live above their means.

Nemorin hit upon the idea of creating LendStreet while working on Wall Street and helping a media company restructure its debt. If corporations can reduce their debt by negotiating with creditors, he thought, why can’t consumers?

“This was during the financial crisis, and many consumers were in distress,” Nemorin said. “There was no solution out there that was comprehensive and sophisticated enough to help them work through their problems, much like we were doing on Wall Street for major companies.”

Nemorin quit his job in 2010 to focus full-time on building out his idea and raising venture capital. He launched LendStreet in 2013. In the years since, LendStreet has helped roughly 1,000 consumers restructure $27 million in debt.

Nemorin said that customers need about four years to pay off their debt, but noted that most have seen their credit scores rise by an average of 80 points within a year of signing on with LendStreet and 100 points within 18 months.

The firm has gained the backing of some prominent investors. Prudential Financial was one of LendStreet’s early investors, and in 2018 the insurance and investment giant upped its stake by leading a $117 million venture funding round. Other backers include Radicle Impact, the mission-based venture fund run by billionaire hedge fund manager Tom Steyer and his wife, banker Kat Taylor; and Kapor Capital, the venture arm of the Kapor Center for Social Impact established by Lotus co-founder Mitch Kapor.

LendStreet has caught the attention of the Center for Financial Services Innovation, which works with fledgling fintech companies to help build financial products geared toward unbanked, underbanked and financially distressed consumers. When CFSI launched its innovation lab for promising startups four years ago, LendStreet was in the first cohort. It received eight months of consulting services from CFSI as well as a $250,000 equity investment.

The funding in place, Nemorin is now looking to secure more referrals from bankers, who he believes need to be bracing themselves for an inevitable downturn in the economy. While the LendStreet model means that banks might have to take a discount on what’s owed to them, the upside, Nemorin said, is that consumers will emerge more financially healthy in the long run because they have kept up with their payments and didn’t rack up more debt. He said that roughly 10% of LendStreet loans are paid off early because customers have improved their credit enough to qualify for lower-cost home equity loans.

“What we want to get across to creditors is that we are here to be a partner,” he said. “Our focus is helping banks recover as much as possible, while rebuilding customers so they can come back into the financial system.” — Alan Kline
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Thi...n regulatory arbitrage. The practice, still in its early stages, may be a boon for some — foreign banks and financial technology companies are among those that seem poised to benefit. But skeptics fear that it will ultimately add risk to the financial system and harm consumers.

One post-crisis study by a Federal Reserve Board economist determined that banks get substantially higher supervisory ratings after they switch charters. Based on historical outcomes, a bank’s odds of being rated fundamentally safe and sound increased to almost 100% when they opted for a new overseer, the study indicates.

“If banks can improve their ratings by changing charters, then regulators should be concerned with losing banks that they already supervise and could possibly lower the standards that they apply to these banks,” Fed economist Marcelo Rezende wrote in the 2014 paper.

A couple of decades ago, it was common for government officials to tout the benefits of regulatory competition. Their main argument was that the existence of multiple chartering options allowed for more industry innovation.

But critics saw these rivalries — with states picking off federally chartered banks, and vice versa — as contributing to an erosion of regulatory standards. They argued that this dynamic allowed companies under scrutiny to seek more favorable treatment elsewhere, a practice referred to derogatorily as “regulatory arbitrage.”

In one example of the lengths that regulators went to entice banks, then-Comptroller John D. Hawke Jr. flew to Memphis in 1999 to talk National Bank of Commerce out of switching to a Tennessee charter.

Around the same time, the website for Georgia’s banking department featured a comparison between the examination fees that banks could expect to pay under a state charter and the substantially higher fees that the OCC would charge.

Before the financial crisis, federal and state regulators unabashedly pitched their charters to banks as the better choice. Now regulatory competition is back, despite warnings that such jostling might swing in lax oversight.

The renewed competition is a marker of how far the proverbial pendulum has swung in the decade since the crisis. The practice, still in its early stages, may be a boon for some — foreign banks and financial technology companies are among those that seem poised to benefit. But skeptics fear that it will ultimately add risk to the financial system and harm consumers.

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THINKING AHEAD

cause the agency was seen as less sophisticated than the
Financial was attracted to the Office of Thrift Supervision be-
causes of the financial meltdown, later uncovered documents
able to secure more lenient oversight by switching regulators.
engender a race to the bottom.”

various agencies, saying: “These recommendations eliminate
Secretary Henry Paulson touted a proposal to consolidate
harm than good. In a July 2008 speech, then-Treasury
determined that regulatory competition was doing more
the day is whether it offsets the negative,” he said.

Scalia Law School, argued that competition between
regulatory institute at George Mason University's Antonin
former OCC lawyer who later represented banks in private
have some perverse incentives,” said Thomas Vartanian, a
you national charter, took a state charter for your bank, you
put together videos promoting the fact that if you gave up

The Financial Crisis Inquiry Commission, which studied the
After the crisis, one of the relatively uncontroversial
By the onset of the crisis, the Treasury Department had

“Fintech is an umbrella word into which everyone is
Kelleher said. "And while innovation can be good, it
can also be incredibly destructive.”

Under Trump administration appointees, the OCC also has
begun tangling with state regulators over foreign bank
charters.

In late 2017, the Bank of Tokyo-Mitsubishi UFJ decided that
it would rather operate a national bank in the United States
than a depository chartered in New York state.
The Japanese banking giant’s abrupt switch — made in
concert with the OCC — came at a time when its efforts to
combat money laundering were facing close regulatory
scrutiny in the Empire State. Its move sparked a loud
backlash from New York’s financial services regulator, which
openly accused the company of engaging in regulatory
arbitrage. The agency argued in a lawsuit that the Dodd-

Frank Act required a non-objection from state officials for
the charter conversion to be approved.

That imbroglio served as a backdrop for Comptroller
Joseph Otting’s November trip to Tokyo, where he pitched
foreign bankers that operate in the U.S. on the idea of
abandoning their state charters. He argued that getting
licensed in various states adds complexity and increases
operating costs. He also said that federal supervision results
in regulation that is both more efficient and more thorough.

Otting’s speech drew a retort from John Ryan, president
and CEO of the Conference of State Bank Supervisors, who
noted that foreign banks with multistate operations have a
single point of contact among state regulators. “Thus, our
approach ensures nationwide coordination, regulatory
efficiency and local accountability,” Ryan said.

Curry, who served as comptroller from 2012 to 2017,
declined to comment on specific actions taken by his
successor. But during an interview, he called for adhering to
"the letter and the spirit" of the Dodd-Frank provision that
restricts charter conversions by banks that are facing
supervisory scrutiny. The New York State Department of
Financial Services made a similar argument following the
charter conversion by Bank of Tokyo-Mitsubishi UFJ.

Curry drew a distinction between what he sees as healthy
regulatory competition and the unhealthy kind. "I've seen
both in my lifetime," he said.

The former comptroller argued that competition between
regulators can encourage responsible innovation, but that it
becomes destructive if it focuses on bolstering an agency’s
bottom line.

In a statement to American Banker, Otting said that the
OCC supports the dual banking system of state and federal
regulation and the power of banking companies to choose
the charter that is the best fit for their businesses.

“When making a chartering decision, a company should be
fully aware of the particular advantages and disadvantages
that each charter offers based on their particular facts
and circumstances,” Otting said in an email. “As comptroller
of the currency, I am proud to discuss the merits of
the federal charter and the quality and value of OCC supervision
that helps ensure the federal banking system operates in a
safe and sound manner, treats customers fairly, and complies
with applicable laws and regulations.”

But Otting’s critics warn that he is ignoring the lessons of
the financial crisis. "He apparently is unaware of anything
that happened in the past," Kelleher said. — Kevin Wack
Stress test for climate change

The planet is warming at an alarmingly rapid rate, and unless swift action is taken to curb the emission of greenhouse gases, the economic costs will be severe.

In the United States alone, extreme weather events triggered by climate change are already causing an estimated $240 billion in economic damage a year, and that figure is expected to climb to well above $300 billion over the next decade as the atmosphere continues to warm and hurricanes, droughts and wildfires intensify.

All this matters to banks, because their portfolios are chock full of loans to industries — think agriculture, tourism, real estate and energy — that could be particularly hard hit by warming temperatures.

It’s not hard to imagine, for example, persistent droughts wiping out corn and soybean crops and forcing ski resorts to shorten their seasons. Intensifying hurricanes could cause severe property damage in major coastal cities and knock out offshore oil rigs, while wildfires in the Western U.S. not only threaten timber and wine production, they could worsen air quality, threatening people’s health and productivity. Eventually, rising sea levels could swamp picturesque beach towns, decimating tourism and real estate values.

The risks are real enough that some large global banks — though not enough of them, in the view of some investors — are now doing what’s called “scenario analysis” in an attempt to get a better grip on how warming temperatures might impact their loan and investment portfolios in the short term and long term.

Call it stress-testing for climate change.

France’s Credit Agricole is on the leading edge of this practice. Using methodology developed by two French academics, the bank in 2017 undertook a broad review of its loan and investment books, industry by industry and country by country, to understand the full extent of its carbon exposure under various warming scenarios. It also identified which of its corporate customers might be hurt most by a global transition to more renewable energy, and presented the results to its business and geography heads throughout Europe and Asia.

Jerome Courier, the chief corporate social responsibility officer at Credit Agricole, said that the goal of the exercise was not to mandate that its business heads stop financing activities that use or produce fossil fuels, but rather to "enhance transition" to greener solutions.

“There are a few no-nos” — Credit Agricole will not finance coal-fired power plants or Arctic oil drilling, for example — “but the general idea is not to exclude, but to follow the trends and try to accelerate pace of transition of your customers," Courier said. "And if you feel like your customers don’t care, then maybe you go find new customers.”

Scenario analysis has been identified as a best practice by the Task Force for Climate-related Financial Disclosures, a group formed in 2015 by the Financial Stability Board and chaired by Michael Bloomberg that encourages global companies to voluntarily disclose their climate-related risk to investors, insurers, regulators and other stakeholders.

It also has been embraced by the United Nations Environment Program Finance Initiative, which earlier this year brought 16 global banks together to participate in a program where the banks stress-tested their loan portfolios under various warming scenarios over the next 10, 20 and 30 years. Participants included BNP Paribas, Barclays, Royal Bank of Canada, TD Bank Group and Citigroup.

Sonia Hierzig, the senior projects manager for climate change at ShareAction, a London-based nonprofit that advocates for responsible investing by financial firms, said that major banks are coming under increasing pressure from socially responsible investors to perform scenario analysis.

Investors like Boston Common Asset Management want to know where the trouble spots might be in their portfolios and how much the banks themselves might be contributing to global warming through their own financing activities. (A recent report from the Intergovernmental Panel on Climate Change concluded that even an increase of 1.5 degrees Celsius is highly unlikely to be achieved.)

But the general idea is not to exclude activities that use or produce fossil fuels, but rather to "enhance transition" to greener solutions.

"There are a few no-nos" — Credit Agricole will not finance coal-fired power plants or Arctic oil drilling, for example — “but the general idea is not to exclude, but to follow the trends and try to accelerate pace of transition of your customers," Courier said. "And if you feel like your customers don’t care, then maybe you go find new customers."
global warming through their own financing activities. (A recent report from the Rainforest Action Network found that banks’ financing of “extreme” fossil fuels, such as tar sands and Arctic oil, climbed 11% between 2016 and 2017, to $115 billion.)

At the same time, scenario analysis can help banks identify opportunities in financing large-scale green energy projects, she said.

“If we are to meet climate goals, there is so much money” — as much as $26 trillion by 2030, according to some projections — “that will go into the transition to low-carbon economy,” Hierzig said.

“Banks will need to play a really big role in providing the capital that is needed.”

A recent report from the Intergovernmental Panel on Climate Change concluded that even an increase of 1.5 degrees Celsius (or 2.7 degrees Fahrenheit) above preindustrial levels would cause widespread devastation.

For the planet to avoid that fate, human-caused carbon dioxide emissions would need to fall 45% below 2010 levels over the next decade and net emissions would need to equal zero by 2050. Those targets may or may not be realistic, but getting anywhere close to them will require large-scale changes in everything from building design to transportation to shipping to city planning.

For banks, one big challenge with scenario analysis is developing the right methodology that will allow them, and their investors, to draw meaningful conclusions from the results. Bankers who participated in the pilot program used various methodologies — some proprietary, some publicly available — that even they acknowledge are far from precise.

Another challenge is determining what to analyze in the first place. Lauren Compere, a managing director at Boston Common Asset Management, said that if there’s one criticism of the way banks are going about stress testing it’s that their analysis is not robust enough. In the U.N. pilot program, for example, participating banks only performed scenario analysis on small slices of their loan and investment portfolios.

“I think banks are appropriately prioritizing their highest-risk sectors, but they are cherry-picking and not looking at the impact [of climate change] across their entire loan portfolio. That concerns us,” said Compere, whose firm holds investments in a number of large global banking companies, including JPMorgan Chase and TD Bank.

Nicole Vadori, the head of environment at TD, is urging investors to be patient. The climate and weather models banks are using, she said, can produce a range of results and will take time to be refined to the point where banks are comfortable sharing the information with investors. Collecting accurate information from banks’ scores of clients across an array of industries can also be difficult.

“Data challenges are huge right now,” Vadori said. “For a bank to do a climate analysis is much more onerous than, say, for a gas and oil company doing an assessment. We have different kinds of clients: power and utilities, real estate, gas and oil, mining. Plus we have to look at different parts” of TD’s business, “including insurance, lending and investment. All those have different implications, so a very big investment is going to take lots of time.”

Still, TD appears to be taking scenario analysis seriously, which is more than can be said for many other large banks in North America.

According to a survey conducted by Boston Common Asset Management in 2018, European banks are far ahead of large banks in the U.S. and Canada in implementing climate-related risk assessments. Specifically, 80% of European banks surveyed are, in some way, stress-testing their loan and investment portfolios for a 2-degree-Celsius increase in global temperatures, versus just 44% of banks in North America.

Boston Common’s Compere said that while she is encouraged by steps individual banks are taking to curtail financing of fossil fuel exploration, she has been discouraged by the general reluctance of U.S. banks to do the rigorous analysis needed to guide future decision-making.

“The U.S. banks are not really at the table,” said Compere, noting that some industry leaders she has met with didn’t even know what scenario analysis was. “There’s just not enough leadership on this issue from the bank trade associations or the banks themselves.” — Alan Kline

Nathan DiCamillo contributed to this story.

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**THINKING AHEAD**

**The new Y2K is now**

Quantum computing may seem like a distant concern for bankers more focused on lending margins and economic conditions, but in the not-too-distant future it could fundamentally transform bank security.

The idea of quantum computing goes back decades, but the basic idea is that every computer and every application is built out of "bits" — tiny pieces of information — that can be either "on" or "off" (hence "1" and "0" in computer code). But quantum computing includes the possibility of a bit being both on and off at the same time — essentially, a third state of existence. And the computational possibilities grow exponentially as you add more of these quantum bits, or qubits.

A quantum computer, then, is not an app or a program, but a way of computing information that is fundamentally different than it is for every computer that has ever existed — from the ENIAC to the phone in your pocket. And there are certain advantages that quantum computing has over so-called "classical" computing, and one of them is the ability to factor large numbers.

To understand why that is important, one has to appreciate that the only thing that keeps online information secure and private is encryption — turning private information into indecipherable mush unless you possess a "key." And much of what keeps the key safe is that computers today are really bad at guessing what it is.

Quantum computers could change that dynamic dramatically. Whereas a classical computer might take years to guess an encryption key through a brute force attack (that is, just repeatedly guessing wrong answers until it hits on the right one), a quantum computer could guess correctly with great speed, because it could comprehend the entire universe of possibilities at once. Virtually everything that is inaccessible online could be accessible instantly to whomever possesses a quantum computer.

If that is worrisome, the good news is that quantum computers don't exist — experts suggest that the technology will probably be realized in the next decade, though others say it could be sooner.

But banks — as well as governments, the military and anyone else with a stake in cybersecurity — are increasingly devoting resources to quantum computing. JPMorgan Chase said recently that a significant portion of its technology budget in the coming year is going to be dedicated to quantum computing applications, and Barclays and Morgan Stanley have announced investments in quantum computers as well.

The Bank Policy Institute recently launched a Quantum Risk Calculator for its members to assess their potential vulnerability to a quantum cyberattack.

Andrew Kennedy, BPI's vice president of cybersecurity and risk strategy, said the challenge for banks is to get ahead of the changes that quantum computing will bring rather than falling behind — and in many ways the first step in that preparation is being aware of the problem.

"The thing I compare it to is Y2K," Kennedy said, referring to the preparation to ensure computers could handle the switch from the year 1999 to 2000. "The difference is, we had a date for Y2K. There's no date for quantum computing. But it took 10 years for the air traffic controllers to be fully comfortable that Y2K wasn't going to be a problem. If it takes 10 years, we should be prioritizing it and we are."

Quantum computing isn't entirely a cybersecurity issue, either — the technology also has potential applications for helping banks complete transactions and find promising investments.

But in many ways staying ahead of the game in quantum computing is about being able to continue to provide the same core banking service to your customers — keeping their money safe — that banks have been performing since the Middle Ages.

Only instead of protecting their money with a stronger vault or an armed guard, tomorrow's banks will have to protect themselves against quantum computers.

That could pose an existential threat for smaller banks for which an outlay of millions — or even billions — of dollars is not a realistic option. They could be the easiest targets once quantum computers become more of a reality.

And Phyllis Schneck, a former top cybersecurity official with the Department of Homeland Security, said there is no way for banks to even be sure that those security threats necessarily lie off in the future. Maybe they're lurking in the shadows even now.

"I always assume that, if you have a good idea and you're working on something, someone is already ahead of you," Schneck said.

"So what would it be like to assume that somewhere, someone in the world has one of these versions of a quantum computer that works, and they're benefiting from it right now?"

— John Heltman
quantum computing applications, and Barclays and Morgan Stanley have announced investments in quantum computers as well. The Bank Policy Institute recently launched a Quantum Risk Calculator for its members to assess their potential vulnerability to a quantum cyberattack. Andrew Kennedy, BPI's vice president of cybersecurity and risk strategy, said the challenge for banks is to get ahead of the changes that quantum computing will bring rather than falling behind — and in many ways the first step in that preparation is being aware of the problem.

"The thing I compare it to is Y2K," Kennedy said, referring to the preparation to ensure computers could handle the switch from the year 1999 to 2000. "The difference is, we had a date for Y2K. There's no date for quantum computing. But it took 10 years for the air traffic controllers to be fully comfortable that Y2K wasn't going to be a problem. If it takes 10 years, we should be prioritizing it and we are."

Quantum computing isn't entirely a cybersecurity issue, either — the technology also has potential applications for helping banks complete transactions and find promising investments.

But in many ways staying ahead of the game in quantum computing is about being able to continue to provide the same core banking service to your customers — keeping their money safe — that banks have been performing since the Middle Ages. Only instead of protecting their money with a stronger vault or an armed guard, tomorrow's banks will have to protect themselves against quantum computers. That could pose an existential threat for smaller banks for which an outlay of millions — or even billions — of dollars is not a realistic option. They could be the easiest targets once quantum computers become more of a reality.

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— John Heltman
Don't just talk about digital car loan applications. Actually do it.

Auto financing has hardly changed at all in what seems like forever, but a shift into the digital age is starting to happen.

Several banks, working with fintechs, have automated the loan application process to allow consumers to secure financing for their next new or used car before they even go to a dealership. They can get approval within minutes from a desktop, laptop or mobile app.

It's a potentially game-changing development that could put more car shoppers in the driver's seat when it comes to controlling which bank or credit union finances their purchase. One of the most appealing aspects for car buyers is knowing in advance that they qualify for a loan and what the terms are.

BMO Harris is one of the latest banks to team up with a fintech to do digital auto lending. In early December it announced a partnership with AutoGravity, a 3-year-old fintech that connects car buyers with lenders and dealerships.

From AutoGravity’s site, consumers can shop for their car of choice, find the nearest dealership selling it, and receive prequalified financing from one of AutoGravity’s lender partners, which also include U.S. Bancorp and TD Auto Finance, a unit of TD Bank. JPMorgan Chase and Santander have similar arrangements with another upstart, AutoFi.

The percentage of U.S. consumers applying for auto loans online is still relatively small — roughly 5%, according to a recent survey from FICO. But just as more consumers are using mobile devices to apply for personal loans, credit cards and even mortgages, future car buyers increasingly will want to apply for financing online — before they even go to a dealership.

As it stands now, the vast majority of auto loans originate in the dealership, and it’s the dealer who decides which lender gets the loan.

Todd Nelson, senior vice president of strategic partnerships at LightStream, the online lending unit of SunTrust Banks, said that when a consumer enters a car dealership — even with a preapproval letter from a bank in hand — the dealer’s finance manager holds the keys from that point on.

The finance manager contacts a group of preselected lenders and chooses a loan himself to present to the car buyer. Dealers are just as interested in selling the loan as they are in selling the car.

The finance managers are “really skilled at taking the consumer’s preapproval letter and flipping it into an indirect loan,” Nelson said. “They’re going to flip that letter nine out of 10 times.”

That could happen when a consumer walks into a dealership armed with a preapproved loan arranged through AutoGravity too. But because fintechs have partnerships with multiple lenders, they are presumably finding the consumer the best available deal.

Besides, dealers can be part of the online process as well, said Kyle Kehoe, executive vice president of sales at MeridianLink in Costa Mesa, Calif., which makes loan-automation software. Virtually all of their origination and underwriting processes are already automated, which means they could easily adapt to consumers submitting online applications.

“You’re able to have the customer apply and get a decision and process the whole loan yourself,” Kehoe said.

And that, if nothing else, should force banks to accelerate digital auto lending, either on their own or through fintech partnerships. Consumers have become so accustomed to applying for loans online they’re bewildered that this same ubiquity does not apply to car loans, said Jim Houston, senior director of automotive finance at J.D. Power.

“Consumers want to complete the foundation of the loan application prior to arriving at the dealership,” he said. “They would rather not go into a car finance manager’s office and wonder if they’ll be approved for a loan, and wonder who their lender will be.”

— Andy Peters
The rise of the ‘behavioral bank’

One South African bank is tracking the habits of its 4.4 million customers, letting them opt in to earn points for visiting the gym or getting a flu shot. The resulting data, in turn, influences what the bank charges for insurance and financial services. Other companies may soon follow suit.

When Discovery Bank opens its doors in March, it plans to take an old idea — letting customer behavior dictate the price for its offering — to a whole new level.

Instead of charging for services based on income and repayment practices, the South African bank wants to look at behavior more broadly, tracking the habits of its 4.4 million customers and offering better deals to those who live healthier lives. For example, those that use the company’s Vitality rewards program can earn points for visiting the gym, getting a flu shot or buying healthy groceries.

“The model allows Discovery to understand and price risk more accurately over a client’s life as they engage with the program,” said Barry Hore, Discovery Bank’s chief executive. “Our expertise and experience with Vitality show that the underlying human biases that are typical in health or driving behavior also apply to financial management.”

Discovery, which is owned by South Africa’s largest health insurer (also called Discovery), is a “behavioral bank,” as the institution calls it, and it may presage a future of “self-driving finance,” in which banks and their competitors look to create “more viscerally rewarding experiences that belong ultimately to the customer,” said Jesse McWaters, who leads the study of financial innovation at the World Economic Forum.

It also highlights a problem banks currently face in engaging customers and convincing them to give up more data, which can help institutions make more relevant offers.

“Banks typically segment clients based on income,” Adrian Gore, the CEO of Discovery Group, told a packed auditorium in Johannesburg in November for a presentation of the branchless bank that resembled an Apple product release. “In our world, there are two dimensions: income plus behavior.”

Discovery refers to its model as “5-3-80,” which means that there are five behaviors that link to three risks that account for 80% of the reasons that people don’t meet their financial obligations.

The behaviors are spending less than you earn, saving regularly, insuring against serious events, paying off property and investing for the long term. According to Discovery, the extent to which someone engages in the five behaviors correlates with their risk of struggling with debt they cannot afford, being hit with expenses they did not anticipate or retiring without enough money.

Discovery feeds the data from across its businesses into algorithms that measure behaviors actuarially and enable the company to vary the pricing of products based on risk. The more data that customers consent to share with Discovery, the richer the rewards.

The insurer will fold the bank into the rest of its offerings, which are available to any South African with a smartphone. Soon the same app that tracks how many times a week you work out and whether you’re texting while driving will know whether you are spending less than you earn. For example, if the minimum repayment on your credit card balance does not exceed 5% of your salary, you earn the full allocation of Vitality points.

“We’ve done a lot of mathematical work to make sure the point allocations give us exceptionally good correlations to default,” said Gore, an actuary by training, who calls the company’s rewards “an incredibly powerful chassis for creating behavior changes. It’s a synthesis of different worlds coming together.”
Depending on your status — Vitality features five levels that ascend from blue to diamond — the bank will charge up to 6 basis points above the market rate for a personal loan and pay up to 3 basis points above market on savings. The bank will overlay onto Vitality one of four ascending status levels (gold, platinum, black and purple) that tie directly to income.

A customer who has a relatively low income but engages in financially healthy behaviors could have a gold account but diamond status, whereas someone who has a high income but fails to save as much as they could may have a black account without the highest Vitality status. As Gore puts it, “you can be low income but high status, or be high income and low status.”

Despite being new to banking, Discovery has applied its model to credit risk with success. In September, the company agreed to buy the remaining quarter of a joint venture with South Africa’s First Rand bank that for roughly 15 years has offered a Discovery-branded Visa card. At the end of 2017, the loss ratio on the loan book of roughly 300,000 Discovery Card customers stood at 1.5%, compared with an average of 6% for other top-tier lenders.

In a further display of Discovery’s bona fides in banking, Mark Tucker, the chairman of HSBC, will become Discovery’s nonexecutive chairman in March while continuing to perform his role at the European banking giant.

To encourage customers to add banking to the services they already purchase from Discovery, the company is dangling lucrative incentives. With the right status, its insurance customers can get 25% cash back on healthy groceries at Woolworth’s and Pick-n-Pay, two of South Africa’s largest chains. But that will be bumped up to 75% for customers who also join the bank and sign up for certain products. Additionally, Discovery will double the cash back it offers on workout gear; boost by 40% the savings on purchases of fuel; and provide gym memberships and the latest model iPhone for free.

Besides the groceries, the company’s partners include Clicks, the Walgreens of South Africa; Shell and BP for fuel; and Virgin Active, which runs the country’s largest chain of health clubs.

Discovery has tailored the bank to its territory. In a white paper published in connection with the launch, the company cites data showing that 53% of South Africans borrow money through the use of a credit card, compared with 47% of people globally. The country’s household savings rate of 0.3% ranks well below the United States, where households tend to save about 5% of their disposable income. And 16% of South Africans can replace their income in retirement, compared with 38% of Americans.

**Social finance on steroids**

To be sure, the ability to assess risk through social factors predates Discovery. For years now, an array of companies and the lenders that purchase from (or partner with) them have used data derived from mobile phone use and social media habits to build credit scores and predict the likelihood someone will repay a loan.

But advancements in both technology and the learnings of marketers have broadened the data available to shape rewards and habits. Like Discovery, some auto insurers in the U.S. are using data derived from smartphone apps and devices installed in vehicles to monitor behavior on the road in return for discounts and the potential for reduced rates on premiums.

“We’re a customer-focused data company,” Tom Wilson, CEO of Allstate, which monitors roughly 1.1 million drivers through its Drivewise app, told Fortune in September.

Banks are upping their collection of data as well. Last April, Goldman Sachs purchased Clarity Money, which Goldman absorbed into Marcus, its online consumer bank. Clarity Money uses machine learning to track users’ spending and identify opportunities to save by asking users whether they want to eliminate recurring expenses like subscriptions.

Though the moves come amid the shift by banks and their competitors to automate spending and saving for consumers, it also highlights the advantage of being first to collect a data set. “We focus on returns to capital, but returns to data are important too,” said McWaters. “Fundamentally, it’s about ability to turn customer data into customer engagement. When that data is used to train machine-learning models they improve, creating a virtuous loop of rewards.

**Data technology**

Though the tech companies each “have different business models,” as one bank executive said, the data technology ambitions are the same. For banks like the $159 billion-asset Citizens, delivery on premium，“The underlying human biases that are typical in health or driving behavior also apply to financial management,” says Barry Hore, of Discovery Bank.

of the report, recently told American Banker.

For banks, deepening their data to inform customers and cardholders to engage them, it makes more sense to make it happen for a small group of high-value customers. The competition is barraging bankers from inside and outside their institutions that they can’t afford to lose their best customers.

John Kornfeld, a senior vice president at Moody’s and co-author of the report, recently told American Banker.

For banks, deepening their data to inform customers and cardholders to engage them, it makes more sense to make it happen for a small group of high-value customers.

Johnson knows she’s competing to engage customers against expectations set by companies like Amazon, which has mastered the art of personalization. To be sure, the ability to assess risk through social factors predates Discovery. For years now, an array of companies and the lenders that purchase from (or partner with) them have used data derived from mobile phone use and social media habits to build credit scores and predict the likelihood someone will repay a loan.

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THINKING AHEAD

1.902 customer engagement. When that data is used to train mentally, it's about ability to turn customer data into returns to data are important too,” said McWaters. “Fundamentally, it’s having the data; the delivery mechanism; the words that register with customers; and the ability to test, measure, learn and change what I’m doing to make it more relevant, efficient and effective,” Johnson said.

For banks like the $159 billion-asset Citizens, delivery cuts across mobile and online channels, branches, advisers and call centers. “It’s having the data; the delivery mechanism; the words that register with customers; and the ability to test, measure, learn and change what I’m doing to make it more relevant, efficient and effective,” Johnson said.

Though Citizens starts with the data that it derives from customers, the bank also uses data from beyond the bank as part of its work to up the relevance of its offering. The bank also is investing in machine-learning technology that enables it to personalize the information, which Johnson calls “the hardest piece to get right.”

Johnson knows she’s competing to engage customers against expectations set by companies like Amazon, which has set the bar high with services such as Prime. “We need to make sure we’re beating them from a customer expectations standpoint,” she said.

The competition is barraging bankers from inside and outside the financial industry. The ability of big tech companies to optimize customers’ experiences give them an advantage over financial firms in appealing to consumers, according to a report published in September by Moody’s Investors Service.

The tech companies each “have different business models and different motivations, but their motivations are first and foremost to engage their customers,” Warren Kornfeld, a senior vice president at Moody’s and co-author of the report, recently told American Banker.

Facebook, as part of a push to engage customers more deeply, reportedly has asked major U.S. banks to share information about customers’ account balances and credit card transactions. At the same time, JPMorgan Chase, together with Amazon and Berkshire Hathaway, has turned

"We focus on returns to capital, but returns to data are important too," says Jesse McWaters, who studies financial innovation.

its attention to lowering the cost of health care. In a move that mirrors Discovery, the nation’s biggest bank by assets also has begun to offer users of its app the ability to redeem rewards from as many as 150 merchants that range from Staples to Starbucks.

Nor are Discovery’s competitors standing still. Standard Bank, South Africa’s biggest banks by assets, recently launched a branded cellphone service. And Discovery Bank is among at least a half-dozen new South African banks revving up in the coming year.

The scrambling across industries does not surprise observers like McWaters, who noted that while financial institutions hold an advantage given the wealth of data they hold, “if someone else is able to put together a relevant data set, it creates an opportunity for other players to establish themselves as the hub of people’s financial lives.”

That reality explains in part why Johnson, who joined Citizens in 2013 from Bain & Co., also oversees the bank’s data analytics efforts. “The ability to reach customers across channels is increasingly important if they’re not going to walk in,” she said.

In a further sign of both the cross-pollination and the mashup of know-how the market demands, M&T Bank in November named Christopher Kay, the chief innovation officer at Humana and a former executive at Citi Ventures and Target, as head of consumer and small-business banking as well as head of marketing.

Wherever the competition comes from, McWaters sees opportunity in a lesson drawn from the wave of fintech firms that have emerged in recent years. “One of the interesting learnings is that people don’t dislike banks, they dislike banking,” he said. “We’re going to see more players differentiate themselves in making financial experiences more rewarding or easier.”

The data promises to enable the experimentation. “The secret sauce is delivering it in the end-to-end way, using the relevant data to make it personal,” Johnson said.

— Brian Broudie
A different kind of small-business-focused bank is about to emerge and these newcomers will look very different than current lenders in this sector. They will provide best-in-class services, no longer treating small businesses as poor cousins within large consumer lending divisions. And some will target a single niche, tailoring their services to a specific type of business.

Innovations in fintech, driven by big data and artificial intelligence, are converging to create a new world for small businesses. Now all of their financial services can be interconnected, predictive, intuitive and readily available. And business owners can focus on what they do best — running the business, rather than trying to be their own financial adviser, payroll clerk, loan officer and more.

This is a world where Alex, a local coffee shop owner, will be able to pull up her small-business dashboard on an iPad. She'll look at a graph in the upper right corner showing her predicted cash position at the end of the week. After payroll expenses, she'll see there will be $5,000 left. She'll wonder whether she should make a payment on the term loan she took out two years ago to start her shop, or buy a much-needed espresso machine. Her robo-adviser will tell her: “You can do both. Given your expected sales for the month, you'll be able to use your savings to pay down the loan and put the espresso machine on your credit card, which has available credit of $3,500. When the credit card payment comes due, you will have the cash to pay it off.” With a few swipes, Alex will make the loan payment and buy the equipment.

This intuitive and seamless banking experience has its roots in the fintech disruption that began in earnest around 2010. Small-business owners were still reeling from the Great Recession when credit markets froze. A slow recovery exposed both the cyclical and structural challenges in the small-business lending market. With banks hesitant to step back into the market, particularly for small-dollar loans, others stepped up.

Technology has helped overcome two of the longstanding frictions that have plagued small-business lending. The first is information opacity; it is very hard to see inside a small business’ operations to determine if it is credit-worthy. The second is that all small businesses are different. The auto repair shop is unlike the landscaper. This heterogeneity makes small-business loans riskier and more complicated to do than consumer loans or mortgages.

But new data streams are available through increasingly ubiquitous application programming interfaces, and fintechs, traditional banks and tech companies like Amazon, Square and PayPal are creating new credit algorithms, which are likely to become increasingly predictive. As that happens, small-business lending can become much more profitable.

Digital banks will be able to serve a national footprint at a low cost, and specialized banks, which focus on niche business segments, will become a new competitive factor. These small-business banks of the future will provide an integrated gateway to loans, lines of credit, payments platforms, business intelligence and numerous other products and services. They will create easy-to-use digital experiences that cater to the time-strapped small-business owner and automate functions that used to require paperwork or a trip to the branch. Yet they will not abandon personal relationships. Whether it is by telephone, online or in person, the successful banks will find ways to feed the insatiable need of small-business owners for personal advice.

Specialization, or focusing on small businesses in specific industries, is one way banks will improve their expertise in underwriting and deliver more customized services and advice. As the best solutions emerge, word of mouth, facilitated by online small-business communities, will send customers flocking to the provider.

Who will be the winners? It could be anyone — whether Amazon, new entrepreneurial entrants like Starling Bank in the United Kingdom, or community banks that have deep small-business customer bases and find new ways to serve them in the digital age. Small businesses already expect more from their banks, and that trend will accelerate.

Karen Mills, a senior fellow at the Harvard Business School, formerly headed the U.S. Small Business Administration.
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SEN. CHRIS COONS

“This is not an expression of any opinion as much as it is personally and directly pressuring the Fed.”
Delaware Democrat, after co-signing a letter with Jeff Flake, R-Ariz., asking President Trump to stop his “dangerous” public criticism of the Federal Reserve.

TINA HSIAO

“Don’t let the big bank bog you down.”
WePay’s chief operating officer, on Jamie Dimon’s advice to the newly acquired startup about working with JPMorgan Chase.

BRIAN MOYNIHAN

“We’ll compete, and we’ll win.”
Bank of America’s chairman and CEO, saying he’s not worried about JPMorgan Chase’s expansion into Boston.

JESPER NIELSEN

“It is the most important thing going forward. It sounds easy, but it’s also super hard.”
Danske Bank’s interim CEO, on the scandal-ridden bank’s new policy to encourage employees to report bad news.

PAUL VOLCKER

“We’re in a hell of a mess in every direction.”
Former Federal Reserve chair, complaining about the state of the nation, the economy and politics.

BENOÎT COEURÉ

“Lightning may strike me for saying this in the Tower of Basel — but bitcoin was an extremely clever idea. Sadly, not every clever idea is a good idea. I believe that Agustín Carstens summed up its manifold problems well when he said that bitcoin is ‘a combination of a bubble, a Ponzi scheme and an environmental disaster.’”
European Central Bank executive board member, agreeing with the general manager of the Bank of International Settlements on his assessment of bitcoin.

ANTHONY THOMSON

“Do I trust you, my bank, to have my best interest at heart? The answer is, no, I bloody don’t.”
Founder of Atom, discussing why he expects consumers to move their banking to startups in increasing numbers.

TOM JESSOP

“We’ll look back in history and say this was a very seminal event not only in finance, but history.”
Fidelity’s head of digital assets, on the development of cryptocurrencies and blockchain technology.

REP. MAXINE WATERS

“Let’s keep them confused. I like it that way.”
Democrat on House Financial Services Committee, to outgoing Republican chair, Jeb Hensarling, on their relationship being misread as unfriendly.
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