BANKERS AS BUYERS

2021

WILLIAM MILLS AGENCY

Editor's Letter

March 2021

Dear Readers,

With no disrespect or minimalizing the impact of the pandemic, we may very well be experiencing a renaissance moment in financial technology. Let's start with some good news from:

1. Kevin Tweddle, senior executive vice president of community banking solutions at Independent Community Bankers of America (ICBA), declared, "Community banks have maintained strong capital levels and are well positioned to invest in systems that will improve efficiency and enhance digitization for the benefit of their customers."

2. Marc DeCastro, IDC Financial Insights, said, "Most financial services companies weathered the storm and are planning additional technology investments, particularly in the second half of the year. We expect bank technology spending to increase nearly six percent over 2020 levels."

We are handling digital banking a little different this year, instead of a chapter, our premise is that digital transformation has been elevated to an organizational imperative. Even if bankers don't have formal digital transformation initiatives in place, they know that automating manual processes, improving data analysis and leveraging ways to use that analysis to proactively anticipate customer financial service are critical to their efficiency and future.

This year's report also looks at the evolving relationship between financial institutions, financial technology providers and fintechs. Though there are some fintechs that are outright bank competitors, most banks and fintechs see themselves as likely partners.

As always, Bankers as Buyers relies on interviewing a wide variety of people we trust, published reports and contributed articles. This report is greatly enhanced by the contributions of:

154 Advisors – Glen Sarvady

Agora – Arcady Lapiro

Bank Director/FinXTech – Al Dominick

BHMI – Jack Baldwin

Celent – Bob Meara

Cognizant

CSI – Shanda Purcell

Cornerstone Advisors – Sam Kilmer

EFTA – Kurt Helwig

Finovate – Greg Palmer

Fiserv – Kim Ford

Finzly– Booshan Rengachari

Gartner, Inc.

Genesys Technology Group – Joy Pelaez

Glia – Dan Michaeli

Heitmeyer Consulting – Davis Stewart

Jack Henry & Associates – Lee Wetherington

ICBA – Kevin Tweddle

IDC Financial Insights – Marc DeCastro

Jack Henry & Associates – Lee Wetherington and Nicole Harper

Mortgage Cadence – Joe Camerieri

NCR – Doug Brown

PSCU

Safe Systems, Inc. – Brendan McGowan

Sawyers & Jacobs LLC – Jimmy Sawyers

Strategic Resource Management, Inc. (SRM) – Myron Schwarcz

Tearsheet – Zack Miller

The Financial Brand

Wipfli – Terry Ammons

White Clay – Bob Kottler

As always, feel free to share the report URL: https://info.williammills.com/bankers-as-buyers-2021
...and let me know if you'd like to get in touch with any of our contributors.

Best regards,

Scott Mills, APR
Editor

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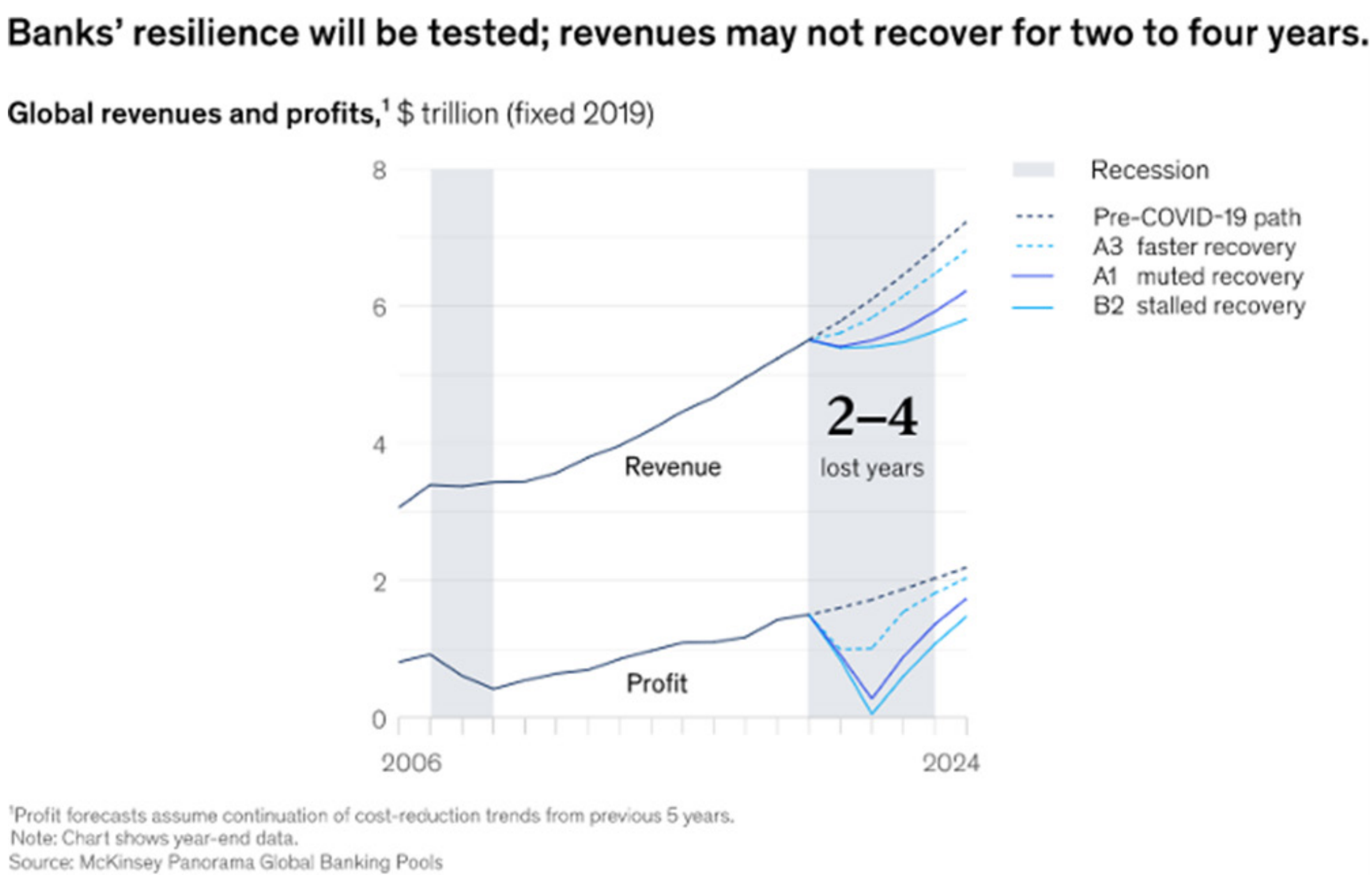
I. Growing Revenue

"Banks will continue to face the challenge of attempting to grow revenue in a continuing low interest rate environment, meaning they can't rely on improvements in net interest rate margin," said Bob Kottler, executive vice president and chief revenue officer for White Clay (Note: Kottler was most recently a senior banking executive at IberiaBank). As the pandemic raged and the economy faltered in 2020, banks restricted their lending, but they have started to offer credit again, with expanded credit card offers and more aggressive marketing of other credit products. He also expects another round of Paycheck Protection Program (PPP) loans, with banks lending to non-customers to expand their loan portfolios.

"If banks don't lend money, they don't make money," Kottler said.

However, some fintech offerings are pointing to new, non-credit revenue streams for financial institutions.

On a global basis, McKinsey & Company doesn't expect bank revenues to recover to pre-pandemic levels for two to four years.



Source: McKinsey & Company

A Specialization

Banks are looking for new ways to differentiate themselves from one another since many offer many of the same products without a significant difference in fees and rates. They also see specialization as a way to set themselves apart from non-bank financial service providers and from neo-banks offering direct banking models.

Some banks are targeting different affinity groups. For example, KeyBank is launching a national digital bank aimed at health care professionals on March 30, National Doctors Day. Other banks are focusing on specific groups such as Blacks, Latinx and LGBTQ, said Glen Sarvady, managing principal of 154 Advisors. Like challenger banks, these specialty banks are reaching out to target groups on a national basis.

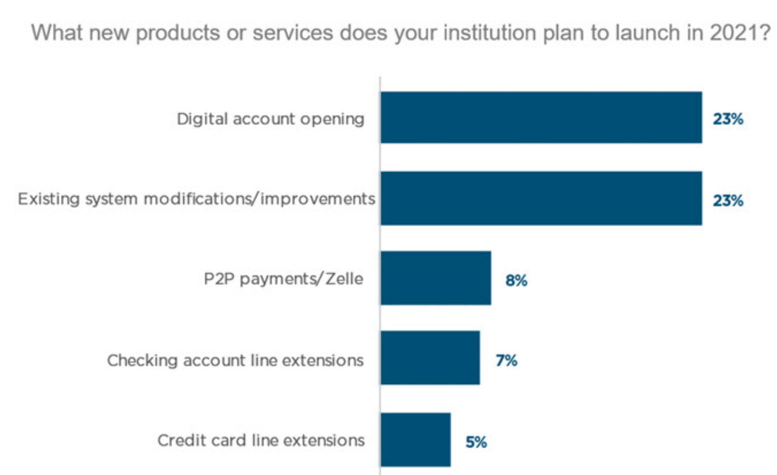
B Marketing Technologies

"Many community banks that offered PPP loans in the last year will be looking to leverage those customer relationships to offer SBA loans in 2021 and in the future," Tweddle said.

The PPP program also re-emphasized the value of personal customer relationships, said Al Dominick, chief executive officer of Bank Director/FinXTech (and numerous events in the industry). "The relationship is more than just a transactional experience."

With all financial institutions forced to move to digital customer relationships, those that build better customer relationships, offering superior customer service, will be the ones that will prosper most in 2021, according to Dominick.

New Product/Service Plans



Source: Cornerstone Advisors survey of 260 community-based financial institution executives, Q4 2020

Banks will continue to expand digital tools for individuals and small businesses, enabling them to better manage finances, cash flow and grow, Kottler predicted. "It's good for banks and customers that they accelerated their digital adoption in 2020. A digital centric mindset is a huge opportunity for the industry."

II. Internal/Back Office Technology

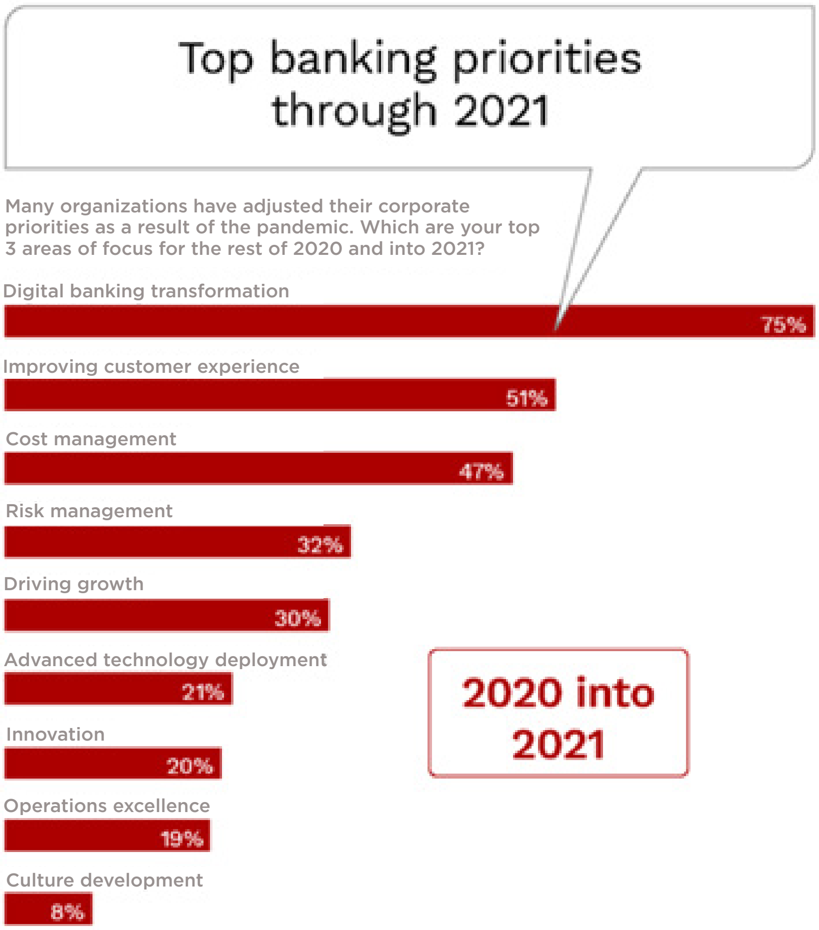
"Banks are going to invest in technologies that are adaptable, flexible and accommodate change," said Myron Schwarcz, executive vice president of Strategic Resource Management, Inc. (SRM). "All three features became more important as a result of the pandemic. Flexibility is the new gold."

More specifically, he expects banks to invest in core and CRM systems to improve interactions with customers.

Banks' New System Selection or Replacement Plans

	Select new or replace in 2021	Selected new or replaced 2018-2020
Consumer digital account opening	44%	34%
Commercial digital account opening	30%	12%
Customer relationship management (CRM)	25%	22%
Consumer digital loan origination system	23%	12%
Commercial digital loan origination system	22%	13%
Person-to-person (P2P) payments	21%	37%
Commercial online banking platform	17%	26%
Commercial mobile banking platform	17%	24%
Call center system	14%	14%
Consumer mobile banking platform	13%	22%
Document imaging/workflow	13%	22%
Consumer online banking platform	12%	22%
Data analysis/business intelligence	12%	10%
Mobile bill payment	10%	21%
Fraud/BSA/AML	10%	20%
Marketing automation	10%	14%
Interactive teller system	10%	11%
Online bill payment	8%	20%
Debit card processing	8%	14%
Credit card processing	8%	9%
Core processing system	8%	11%
Core integration/middleware platform	7%	4%
Payments hub	6%	1%
Enterprise risk management	4%	9%
Card self-service	4%	9%
ATM processing	3%	14%
NONE	16%	12%

Source: Cornerstone Advisors survey of 260 community-based financial institution executives, Q4 2020



Source: Financial Brand

A Cornerstone Advisors survey of 260 community-based financial institutions found that 44 percent planned to select new or replace digital account opening technology in 2021. Other top technology investment selection/replacement plans included commercial digital account opening (30 percent); CRM systems (25 percent); consumer digital loan origination systems (23 percent); and commercial digital loan origination systems (22 percent). Sixteen percent had no plans for new systems for this year.

A survey from The Financial Brand found the top priorities for banks in 2021 include digital banking transformation (75 percent); improving the customer experience (51 percent); and cost management (47 percent).

"Though banks have increased their digital interactions with their customers, too often the interactions are very stiff and formal, unlike the retail and hospitality industries, in which the interactions are more personalized and friendly," said Schwarcz. "A combination of CRM, digital customer service and other backend systems with some AI in the background will help determine how to best render the customer communication or next best action."

"Banks want to modernize their internal technologies, but some legacy systems won't support newer technologies," according to Dominick. "A lot of banks appreciate that modernization needs to be addressed. It's not a new concept. They have to marry their brick-and-mortar with their business model."

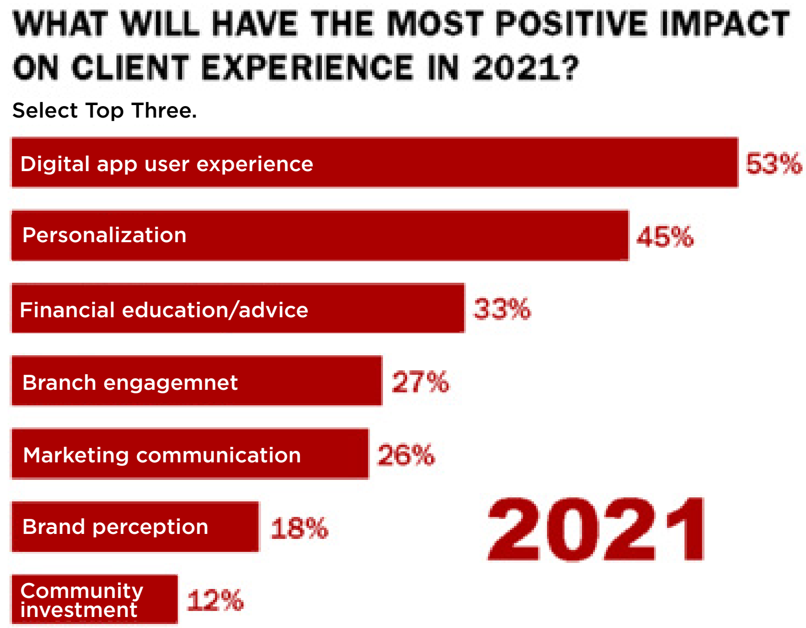
But any new platform needs to be tested early to ensure that it performs as expected, Dominick added. And any new technology needs to balance digital capabilities with differentiation to prevent the bank services from becoming a commodity. Beyond improving efficiency, technology investments in 2021 will focus on enhancing the customer experience.

DeCastro agreed that transforming the customer experience will be a growing bank focus for 2021.

"The studies have shown that ripping and replacing the core is very expensive, time consuming and still leaves the FIs with more challenges to innovation," said Booshan Rengachari, Founder of Finzly, Best of Show winner at Finovate. "Legacy systems were just not built for the modern era, but they are still required for a segment of customers. Moving workload off the legacy systems and innovating parallel to the legacy systems is the key to transform the back-office operations."

According to The Financial Brand's Digital Banking Report, the top three factors resulting in a positive customer experience are digital app user experience (53 percent); personalization (45 percent); and financial education/advice (33 percent).

Bob Meara, senior analyst with Celent's banking practice, said that 2021 bank technology investments will focus on "Anything digital. Digital customer engagement is changing as more customers are self-serving on the digital channels. Banks are also looking at new ways to engage with customers digitally. Bankers are setting up reactive mechanisms such as secure video conferencing and live chat, along with proactive mechanisms like personalized alerts and intelligent virtual agents (IVAs)." Even with the new engagement tools, banks still face challenges in understanding the customer journey, Meara said.



Source: Financial Brand

A. CRM

"Many community banks know they need updated CRM systems to gain a comprehensive view of the customer," said Shanda Purcell, director of business processes for product management for CSI. Those with good (CRM) systems saw the importance of remote connections to it in 2020. Those that didn't have an accessible, comprehensive CRM system saw the need, so Purcell expects an increase in the technology.

"Cost can still be an issue for many," according to Joy Pelaez, executive vice president of consulting services for Genesys Technology Group.

"Everyone wants a new CRM system until they see the price."

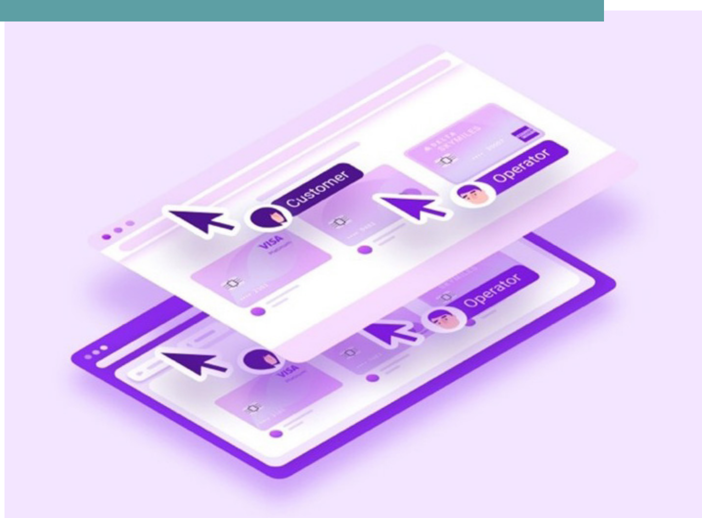
Meara said he expects to see increased bank investments in CRM systems on the front end as well as in other technologies that harmonize the bank channels, making it easier for banks to access comprehensive customer information. CRM systems are increasingly moving to the cloud. Nearly one third (32 percent) of banks in a Celent survey said there were running their CRM systems in the public cloud, with another 8 percent migrating their systems and another 28 percent considering making the move.

B. Digital Customer Service

“Digital adoption accelerated in 2020, so bank customers in 2021 will be looking for a higher level of digital service, with fewer impediments,” said Jimmy Sawyers, chairman and co-founder, Sawyers & Jacobs LLC. “A lot of bankers re-examined their business processes. Customers have become more vocal about what they want, and bankers are listening. They’ve used Door Dash and Instacart and expect the same level of service from their financial services providers. Customers want to bank from their smartphones without unnecessary friction or draconian security measures. Whether it’s food or financial services, customers want the same end result they get in the physical world but delivered digitally and conveniently.”

“Servicing customers digitally, if done correctly, benefits the bank due to lower costs, and the consumer, because it is more efficient,” said Rengachari. “Many of the digital capabilities, like mobile check deposit, have been available for years, but have been underutilized. To encourage more customers to use digital channels, some banks have focused teller training on demonstrating to customers the ease of using mobile deposit and other digital applications.”

Co-browsing enables banks to see and work with customers on the same screen, be it mobile or computer.



Source: Glia

“The whole idea of digital customer engagement is changing,” Rengachari added. Digitally advanced bankers will be expanding their use of secure video conferencing with customers and live chat.

“Digital Customer Service has become the entry point for banks to interact to meet the needs of the customer,” said Dan Michaeli, CEO and co-founder of Glia. “They need to meet the customer where they are.”

For many customers, that means offering self-service capabilities via websites or mobile apps. Some forward-looking banks are offering video banking, web chat and co-browsing within websites, portals and mobile apps. Michaeli admitted the number of banks offering those capabilities is small right now, but he expects it to grow significantly in 2021.

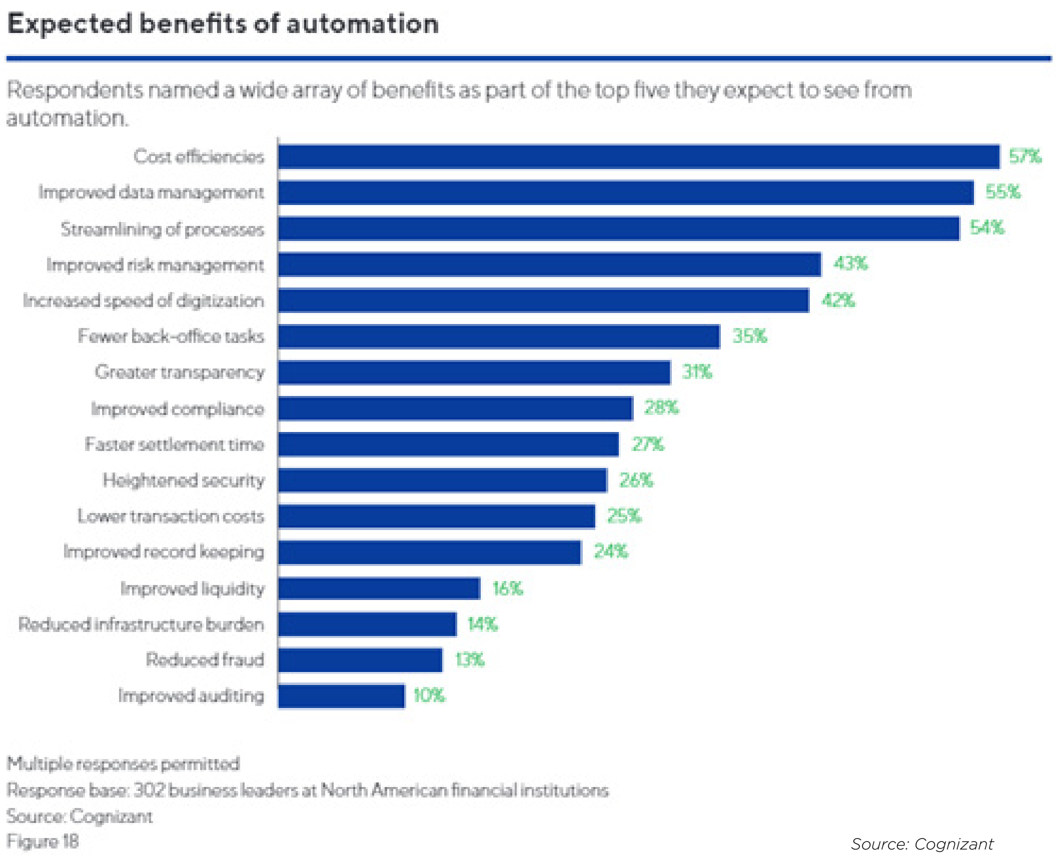
Such capabilities help even if the customer starts the interaction with a phone call because 80 percent of the time a customer calls, he or she is at a screen or has one nearby, Michaeli said. “You need to meet the customer where they are in the journey,” Michaeli added. “This is a tremendous opportunity.”

“COVID-19 drove more digital account openings in 2020, a trend that will continue in 2021,” said Sam Kilmer, senior director at Cornerstone Advisors. “Larger banks had used the technology for some time, but now community banks are using it as well. Some had the technology, but customers didn’t find it user-friendly. Banks are continuing to work on that aspect of the technology, abandoning cumbersome systems for ones that provide a simplified user experience without sacrificing functionality.”

“The only challenge is that some banks rely too much on their core provider,” Kilmer said.

While banks are quickly attempting to ramp up digital sales and marketing, technology alone isn’t the answer, Kilmer cautioned. “It’s not just about tech, but also about the organization, talent and culture.”

C. AI, Robotic Process Automation (RPA)



Source: Cognizant

Banks will double their Robotic Process Automation (RPA) systems in 2021, but even so, less than one-fifth will be using the technology in 2021, according to Kilmer.

A Cognizant survey of banks found that 90 percent believe RPA and cognitive technologies are important to the future of their business. However, only 9 percent indicated that they expect to benefit from automation. Nearly half of respondents indicated automation would improve customer service, even though this is something automation is unlikely to accomplish by itself. Also, only 1 percent said the top benefit of automation is to free full-time employees (FTEs) for more constructive and creative work.

Kottler said that the largest banks will develop RPA systems on their own, while smaller financial institutions will attempt to find partners to leverage an array of benefits from the technology, which can improve efficiencies, offer customers better, quicker service and reduce errors.

Purcell expects community banks to increase connections between RPA technologies and outside programs such as Microsoft Automate. "This will allow them to streamline workflows for data that lies outside of the core."

However, most of the smaller community banks won't adopt RPA for another three to five years, according to Tweddle.

"AI is moving deeper into the industry as more financial institutions seek better efficiencies and digital servicing capabilities," said Doug Brown, president of digital banking for NCR. "The technology was particularly helpful to banks and customers when they needed information on PPP loans, stimulus checks and remote banking capabilities they may have never used before."

In January, NCR announced it was integrating Kasisto's consumer banking virtual assistant (KCB) and its KAI platform into NCR Digital Banking technology.

Automated conversational banking provides consumers with a human-like way to digitally engage with their financial institution and offers immediate access to banking services and financial insights through a virtual assistant.

The technology is already in use with several financial institutions for remote customer communications. By the end of the year, Brown expects the technology to be in branches as well.

"It helps serve customers without the need to talk to a live person. It helps guide customers at a time of anxiety and need," Brown said. The technology was particularly helpful in the early days of the pandemic as the government rolled out its programs and lenders started offering mortgage forbearance programs to customers who had never participated in these programs before. AI-based systems filled the need as human contact center agents couldn't handle the influx of calls, emails and texts.

In late January, NCR agreed to acquire ATM provider Cardtronics for approximately $2.5 billion, including debt. The transaction is expected to be completed in mid-2021.

"This transaction accelerates the NCR-as-a-Service strategy we laid out at Investor Day in December, further shifts NCR's revenue mix to software, services and recurring revenue, and adds value for our customers," Michael D. Hayford, NCR president and CEO, said of the acquisition. "We have had a long-standing relationship with Cardtronics and its outstanding team. Its Allpoint network is highly-complementary to NCR's payments platform, and the combined company will be able to seamlessly connect retail and banking customers. Simply put, we are better together."

D. Data Analysis

Banks will expand their use of data analysis in 2021, but primarily through more extensive use of existing technologies than from adding new systems, according to Kilmer. "This is a massive talent add/shift for our industry. Tying data science outputs to revenue growth is a challenge to overcome. We can't have lenders and branch managers treated as revenue centers while data scientists and digital experts are treated as cost centers. That will favor funding the past, not funding the future."

Purcell added that banks will continue to invest in business intelligence and other technologies that enable them to extract customer data from the core and from outside resources. Good data analysis can identify opportunities for additional products and services to an existing customer. For example, regular payments going to another financial provider, regular tuition payments or similar transactions, could indicate a candidate for a personal loan. Regular payments to a credit card company could indicate a candidate for the bank's own (or co-branded) card or another type of credit product.

But some banks will continue to be stymied in any efforts to expand data analysis because they still have data stored in disparate systems that don't communicate with one another, according to Kottler. "It's important that they pull all of that information together to have a single view of the customer, so that they can understand customer behavior and the bank products and services the customer has and doesn't have."

E. Other Technologies

Brendan McGowan, Chief Technology Officer for Safe Systems, Inc., expects banks to invest in applications and technology infrastructure that will help provide increased, secure accessibility to bank systems. “The pandemic shook the way staff could access resources at the bank. There’s a desire to offer secure identity in the cloud, with multi-factor authentication. On the infrastructure side of things, banks want to enhance how they can connect to corporate applications as securely as possible.”

Dominick and other experts also expect banks to continue to invest in security to protect against potential risks from offering new payment programs as well as other new products and services. McGowan also expects to see a revolution in wide area networking that will see the elimination of private-circuit-based connectivity while offering resilient branch-to-branch communications, more flexible remote user connectivity, and cloud centric internet security, all with a simplified technology infrastructure.

Davis Stewart, executive vice president and managing director of Heitmeyer Consulting, said banks will continue to try to be more Amazon-like in 2021, with investments in digital technologies designed to automate manual processes, improve efficiencies and enable customer self-service.

“Banks will continue to look at lowering the cost of servicing their customers,” Stewart added. Brown expects a double-digit increase in interactive teller machine (ITM) transactions in 2021, which had a 200-300 percent increase in transactions in 2020, largely due to the pandemic. Even though many branch lobbies are likely to reopen later this year, consumers have gotten used to the convenience.

“Interactive teller machines can not only provide all of the interaction of an in-branch teller, they also enable banks to establish a presence in a neighborhood or small town without the expense and time delay involved in building a branch,” Pelaez said. “I know a few core vendors are building integrations to ITMs, which will eventually lead to the full ‘teller’ experience and thus justifying the cost.”

DeCastro expects one quarter of banks to transform their lending collections solutions to help recover more nonperforming loans.

Some banks will start moving their core processing to the cloud to enhance efficiencies, Stewart said. Others see movement to the cloud for banks that think their legacy core processors are failing to meet their needs.

Others note that core services in the cloud are only efficient and effective if the underlying technology is good and more easily enables new services.

III. Banks Evolving Relationships with Fintechs

"Banks used to see fintechs as competitors, and while there are still a few who are, like SoFi, the more common relationship is some type of partnership," Sarvady said. "There is certainly room to collaborate."

"There is increasing room for fintech relationships," Stewart said. "Banks see the fintechs as vendors, not as partners, because they are selling services to banks. And most fintechs see the banks as customers."

There is additional room for banks and fintechs to partner, according to Greg Palmer, vice president of The Finovate Group, pointing to increasing opportunities in payments, small business products and services and Banking as a Service.

"The two need to work together to guard against the risk of bringing products to market with security flaws," according to Terry Ammons, partner with Wipfli. "Banks have to ensure that in their race to offer an increasing amount of digital products and services that they don't take on unexpected risks for themselves or their customers. So both fintechs and banks need to conduct due diligence, not just focus on new features for customers."

According to Schwarcz, banks will continue investing in fintechs as they did last year. Fintechs have the advantage that they aren't encumbered by legacy systems, so they can develop technologies in a less encumbered manner than banks can on their own. "Working with fintechs enables banks to develop technologies that they couldn't build themselves."

Schwarcz added that he expects FIS and Fiserv to look for opportunities to acquire fintechs in order to further their offerings and expand their comprehensive banking solutions.

A. Strengths, Weaknesses, Opportunities and Threats (SWOT)

In 2019, ICBA partnered with The Venture Center in Little Rock, Arkansas, to launch the ICBA ThinkTECH Accelerator, a community bank-focused fintech accelerator program. This accelerator provides an outlet for community banks to directly engage and partner with early stage fintech companies. The ICBA started booking meetings between members and fintech companies for the third year of the program in early January.

"The vast majority of fintechs want to partner with banks; that's what led to our accelerator program," Tweddle said. "Banks need ways to offer new services beyond their core processors," Tweddle said. ICBA queries members on needs then seeks fintech companies that meet those needs for the accelerator program.

"It's something that has been working very well," Tweddle said. "It's a way for community banks to offer new solutions without spending a lot of time with the technical side of it." The 2021 ICBA ThinkTECH Accelerator cohort includes:

- **Agent.IQ in San Francisco, Calif., digital customer engagement**
- **Artis in Atlanta, Ga., embedded lending at the point of sale**
- **Beauceron Security in New Brunswick, Canada, cybersecurity training**
- **Finosec in Alpharetta, Ga., cyber preparedness and governance**
- **Harness in Tampa, Fla., card-linked fundraising**
- **Hurdlr in Washington, D.C., 1099 economy tools**
- **Shastic in Berkeley, Calif., automated loan origination**
- **UPSWOT in Charlotte, N.C., app data aggregation for small businesses insights**
- **Zogo Finance in Durham, N.C., financial wellness education**
- **ZSuite Technologies in Burlington, Mass., digital escrow tools**

Tweddle pointed to the PPP program as an example of how the accelerator fintechs and community banks are working together for mutual benefit. The government was still writing many of the underlying rules when it launched the PPP program.

Telsar Software, one of the original accelerator participants, worked with several community banks to process the PPP origination and forgiveness paperwork. Botdoc, another original accelerator participant, handled secure file transfer for participating community banks. Thanks to fintech partners like this, many community banks were more responsive to their small business customers than some larger financial institutions were, Tweddle said.

Other fintech companies are developing solutions to help small business owners with their finances as well. For example, a mobile financial platform designed for small business owners, also forecasts cash flow, monitors business vitals, enabling them to stay on top of their finances that typical accounting software cannot, said Palmer. "If the business has a PPP loan, the software automatically monitors transactions in real-time to keep track of where the company stands on its path to forgiveness. These fintech solutions are distributed through banks for their small business clients."

ICBA ThinkTECH is in partnership with The Venture Center

"Community financial institutions must have the ability to integrate with fintechs at will in order to strategically differentiate themselves from competitors and disruptors in meaningful timeframes," said Lee Wetherington, senior director of strategy for Jack Henry & Associates, Inc.

"To compete successfully on trust and personal service in digital contexts, community banks and credit unions must go beyond the self-service status quo and continuously curate distinctive digital experiences in partnership with third parties of choice. This kind of strategic agility requires an open, API-first posture in which the financial institution has absolute discretion over when and with whom it partners. Banks and credit unions must become platforms unto themselves."

However, Wetherington cautioned, community institutions must be selective in these decisions in order to protect their data and ownership of relationships, and to avoid automating the humanity out engagement with their customers and members.

Deposit account opening, mobile wallet and fraud/risk will be the top focus areas in 2021, according to Kilmer, who foresees communication challenges in fostering fintech relationships.

"Many banks cannot articulate the problems or use cases they are intending to solve with fintech, throwing more resources at it isn't necessarily the solution either," Kilmer explained. "2021 will be about robust digital marketing that enables selling in the context of personal service," Wetherington said, "triggered both by moments of need and by personalized insights proactively surfaced from real-time analysis of payment flows and changes in account balances.

"Banks must be able to connect with customers in real time and in context," Wetherington added. For example, if an account crosses a pre-defined threshold, the bank should not only alert the customer in real time, but make that alert actionable with an option to connect with a human agent who can identify additional needs, make recommendations, and enable next-best products and services all in the context of a single conversational thread.

Wetherington expects banks to double down on digital transformation investments in 2021 so that they can be proactive rather than reactive in responding to customer needs. "And finally convert digital banking from a self-service cost-center to a full-service revenue engine," he said.

B Banking as a Service

Banking as a service (BaaS) enables a non-bank company to embed banking services from a chartered financial institution into the company's app, platform or user interface. "BaaS became larger and more powerful in 2020, and presents an opportunity for smaller banks in 2021," said Zack Miller, founder and editor-in-chief of Tearsheet. Miller cites Seattle Bank as an example of one of a handful of financial institutions that have announced plans to partner with Google on a banking initiative slated for 2021 launch.

"This gives banks the opportunity to reach customers they've never reached before," Miller said.

In November, Caesar Sengupta, general manager of payments at Google, told CNBC in a video interview, "Along with our bank partners, we were looking to make banking more relevant for the mobile-first generation. It will help our partners make banking more approachable to that generation, and not only make it more relevant, but make it more fun."

"Integrating BaaS into the core is a massive job, and developing other approaches from scratch is time-consuming," Kilmer said. Yet companies such as Moov, Unit and Synctera are emerging to enable banks to provide a range of services such as ACH processing, transaction processing and payments in a more modular way.

BaaS will continue to evolve as new players enter the market and they and existing providers reposition their services, said Arcady Lapiro, CEO and founder of Agora. "Banking as a service offers a faster way to go to market. New players are entering the market and other players are repositioning themselves in the market."

Lapiro sees BaaS as a win-win-win for banks, fintech companies and for customers. For fintechs, it makes sense to benefit from the existing bank infrastructure. For banks, it offers a way to go to market quickly with new or differentiated products and services. The customer benefits from access to the new products and services.

Wetherington is more circumspect about BaaS. "For community financial institutions," he said, "BaaS presents a serious challenge. In the short- to mid-term, BaaS will concentrate more market share into the hands of mega banks partnering with BigTechs."

"In response to the structural unbundling and abstraction of banking by way of BaaS, community institutions must use their open APIs to rebundle banking into uniquely differentiated digital experiences, experiences that are distinguished by live, local, personal service that will be absent in most embedded-banking offerings."

Embedded payments are the most progressive BaaS offering, according to Wetherington and Stewart. A handful of banks and credit unions are partnering with Google Pay, a newly revamped PFM app that Google controls. In December, fintech Stripe announced a BaaS partnership with Goldman Sachs, Citi, Barclays and Evolve Bank & Trust to offer bank accounts to the merchants and vendors on small-business platforms powered by Stripe.

Stripe Treasury will enable the end users of Stripe's clients to receive Federal Deposit Insurance Corp. (FDIC)-insured debit cards and bank accounts through the new banking partnerships.

Canadian e-commerce platform Shopify is among the first Stripe clients that will begin offering the accounts early in 2021 through Shopify Balance.

More large banks will look to offer similar BaaS services, but most community banks will instead concentrate on full-service digital banking, Wetherington said. "Community institutions must offer an open, API-enabled relationship platform that bundles differentiated services to help protect themselves from attrition to embedded banking offerings enabled by BaaS. Instead of competing with megabanks to embed their services in settings they don't control, community banks and credit unions should instead use open banking to embed fintechs in their own digital offerings on their own terms."

Kilmer said that banks with customer relationships with tech companies such as Silicon Valley Bank, City National Bank and MVB Financial are likely to have some BaaS offerings.

Based on current BaaS adoption, Wetherington says that as much 40% of payments and 20% of lending will be originated in embedded-banking contexts within the next decade.

Lapiro predicted that banking as a service will eventually evolve into fintech as a service.

IV. BANKING During the PANDEMIC (and lessons for the future)

The COVID-19 pandemic forced banks and customers to shift to digital interactions, including transactions and customer communications, more than ever before. During the spring, many branch lobbies closed entirely, and others went to appointment-only lobby services. Some lobbies reopened temporarily during the summer, then closed again as the pandemic worsened.

However, McGowan saw banks go to great lengths to care for their customers and keep their staff employed when forced to close lobbies. Most tried to go to a remote model, but many couldn't find enough laptops or monitors for all their staff. And those that could locate equipment didn't always have sufficient resources or security, challenging some community banks; though others, including some very staid ones, quickly changed the way they conducted business.

"There was a huge increase in online account opening," Pelaez said. "Everything was done with a digital signature."

"One of the primary concerns was security," McGowan said. "If an employee was using his or her own device, you don't know if it has all of the right security tools in place or what other applications might be on it."

The banks that weathered the pandemic best were those that had come along further with transformational technologies like AI, mobility and the cloud, DeCastro said.

The pandemic also taught banks that they don't need to be so slow to make changes in how they conduct business, Dominick said. "When they moved staff to working from home, they thought it would be for a couple of weeks, not for 10-12 months."

The pandemic drove banks to automate the intake of loan applications, as at-risk and thriving businesses (e.g., golf and some other sports equipment) alike sought credit, Dominick said. By the end of 2020 banks were extending and refining automation capabilities to offer expanded consumer credit as well, a trend Dominick expects to accelerate in the second half of 2021.

"The pandemic led to faster fintech adoption," said Palmer. "Many banks and customers were forced to go outside of their comfort zone. Now there was a push to use it. As people started using it, they found that they liked it. It was a massive shift in customer behavior."

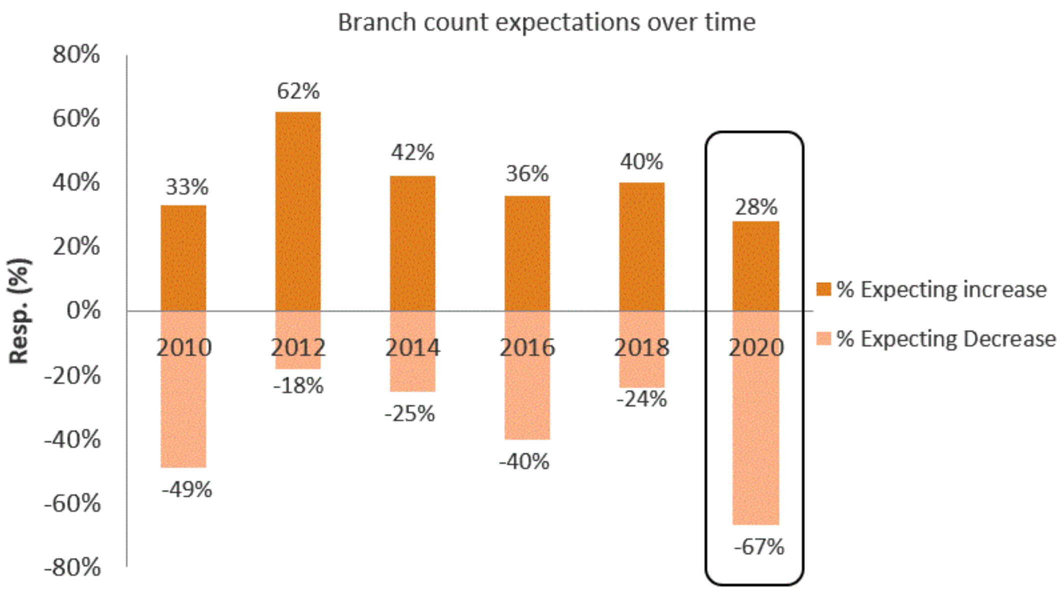
Palmer added that banks did a better job educating customers about how to use and the ease of digital payments and other digital banking services during the pandemic than they had previously.

While some customers will go back to their previous ways of banking as a more normal environment returns, the shift to digital will be permanent for many, according to Palmer. "It will be easier to continue to use it [digital]."

Though community banks and national banks alike moved to increased digital relationships during the pandemic and will continue to have an expanded digital presence going forward, banking experts agree that extensive branch closings are unlikely for most banks, though U.S. Bank announced in October that it would close 400 branches by early 2021.

"Having that physical location won't go out of style," Dominick said. Indeed, 28 percent of banks that Celent surveyed planned to increase the number of operating branches over the next five years, though with 67 percent expecting a decrease, the trend is certainly down.

Figure 1: What a Difference a Pandemic Makes



Source: Celent survey of North American financial institutions, 2010–2018, n=160, October 2020, n=32. Q: Compared to your current branch count, how many branches do you expect your institution will operate five years from now? Note: October survey time frame was two years instead of five years.

Source: Celent

Branch channel activity largely rebounded post-lockdown and is expected to return to near pre-COVID-19 levels in 2021, Meara said. However, many surveyed institutions expect to trim their networks significantly over the next two years alongside technology, human capital, and structural changes as customers continue their move toward digital engagement.

"Flexibility became increasingly critical in the wake of the COVID-19 pandemic, speeding efforts to leverage cloud," Meara added. "Cloud implementations are now increasingly common. With experience, banks are uncovering unexpected sources of value and discovering new drawbacks that they'll need to address. One thing is clear: cloud is here to stay. As the trend of cloud native and cloud-ready bank systems (those designed in and for the cloud) accelerates, financial institutions must be prepared with thorough, accurate considerations for public cloud migration."

As a result of the pandemic, many banks have adjusted technology strategies, according to a Celent survey:

- **51 percent have changed the way that technology-related decisions are made in their institution.**
- **54 percent report that open banking initiatives and partnerships are now a more important part of their product innovation strategy.**
- **68 percent expect to increase their spending in automation for loan applications and processing in 2021.**

IDC predicts that by 2022, 40 percent of in-branch transactions will be initiated as pre-staged transactions or appointments for specialists that start on digital platforms and are fulfilled on bank-owned technology and locations. See full report at https://www.idc.com/getdoc.jsp?containerId=US45821120

“Banks are starting to understand the operational risk of physical reliance, whereas before, beyond disaster recovery, there was more of a bias against the operational risk of electronic services,” Kilmer said. “Physical delivery was largely taken for granted as the default means of serving customers. Many digital vendors were swamped with massive backlogs because many banks had let their digital delivery capabilities be absent at worst or long-in-tooth at best.”

McGowan added that though vaccines were starting to work their way through the population in early 2021, a return to 2019 working conditions is unlikely any time soon. Now that employees and managers have a taste of working from home and many have succeeded at it, many don’t want to return to the branch on a full-time basis. So banks will continue to issue corporate laptops or will employ remote access tools such as Splashtop and Go to My PC so they could use their own devices as dumb terminals, with any work taking place on bank-owned, known, secured devices.

The pandemic also accelerated movement of applications to the cloud, which McGowan expects to continue in 2021.

There was also additional emphasis on integrated tools for lenders to take applications, process loans and close loans due to rising home sales in 2020, and the need to stay socially distanced, said Joe Camerieri, Mortgage Cadence executive vice president.

In the previous decade much of the mortgage technology focus had been on the origination and initial loan processing, according to Camerieri, but the focus is shifting to complete processing, including extracting data from lender and third-party documents, and closing the loan.

Technology becomes more critical for a lender’s success in a booming market. Home sales grew during the pandemic due to a combination of low interest rates and a stay-at-home culture. The National Association of Realtors estimated full year sales to be about 5.7 million homes, the highest level in 14 years.

“The percentage of homes bought sight unseen grew by 300 percent,” Camerieri said. “There’s been a huge opportunity to offer livestreams of properties. A lot of challenger banks are starting to jump into the market space.”

However, Camerieri expects the market to cool off quite a bit within 24 months.

V. Government Outlook

The pandemic paused much in the way of legislation in 2020, said Kim Ford, senior vice president of government relations for Fiserv. Moratoria on evictions and forbearance on mortgage payments continued into the early part of 2021.

As a result, fintechs were permitted a wide berth in developing and launching new products, according to Kurt Helwig, president and CEO of EFTA. "I don't know if they will have that same freedom under the new administration."

"Consumer-facing fees (i.e., overdraft charges) will likely be in legislators' crosshairs," Helwig added.

Ford expects the government and new CFPB leadership to focus on legislation to bridge from the moratoria/forbearance agreements of the pandemic to normalized payment plans. She added that she expects the CFPB to increase enforcement actions, acting much as it had during the Obama administration.

Ford also expects regulators to consider a possible change in direction on allowing special purpose bank charters to be granted to non-bank financial technology companies.

"The next four years are going to be interesting," Helwig said. "We're going to be on the defensive."

VI. *Payments Outlook*

Ford expects card not present (CNP) transactions to continue to increase. "Those who moved to CNP transactions may not be going back to physical payments," Ford said. A PSCU study found that member CNP transactions grew 42 percent for debit transactions and 21 percent for credit transactions in 2020 compared to the previous year.

There will be a continued push to electronic, faster payments, Ford and Helwig added, pointing to the delays experienced by people who received paper stimulus checks rather than electronic deposits.

Source: PSCU

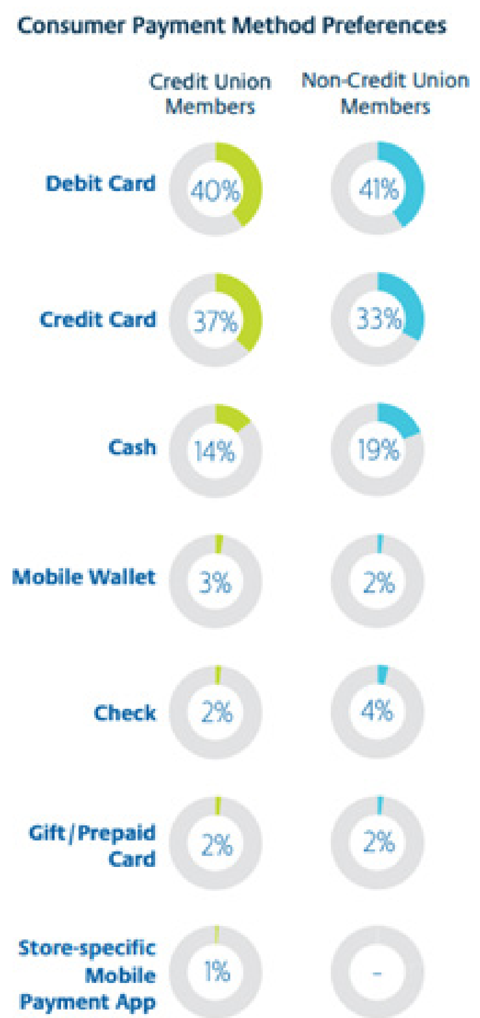
The Clearing House's RTP network provides domestic real-time payments, with immediate payment confirmation, instantaneous settlement and availability. According to the Clearing House, the RTP network's real-time payment capabilities reach 57 percent of U.S. demand deposit accounts, with more financial institutions joining the network each week. Moreover, FIs that hold 70 percent of U.S. DDAs have technical access to the RTP network, often through payment providers, such as SHAZAM and others. The RTP network offers a flat pricing structure for all depository institutions regardless of size, does not include volume discounts or have minimum volume requirements, and, unlike ACH, does not charge an operator fee to receive payments.

The Federal Reserve is developing its own faster payments service, FedNow, but it is still a couple of years away from debuting. Through FedNow, businesses and individuals will be able to send and receive instant payments in near real time, around the clock, 365 days a year. Recipients will have full access to funds within seconds.

"The Fed is working to provide the right set of vendors and systems connections to the major networks," Tweddle said. "Community banks are trying to figure out if they will go with the Clearing House or hold out for FedNow."

"There has been an explosion in banking activity with the growth of Zelle, Venmo and others," Schwarcz said, pointing in particular to the growth in payment transfers.

Schwarcz also expects banks to extend their marketing to consumers to be the digital wallet card on file with merchants, particularly those with recurring transactions, such as Uber and Lyft. Consumers don't think as much about those recurring transactions as they do about larger purchases, when they might be more attentive to the card that they are using, according to Schwarcz. However, he doesn't expect consumers to change their digital wallet card on file without getting some type of incentive from the card provider.



Source: PSCU

"Embedded payments and connected payments are the future. When you file an insurance claim, receiving the payment within hours powered by the real-time network can be expected. Getting the wages paid on the same day will become the new normal. Financial institutions need to be ready to support the next generation payment systems." said Rengachari, CEO of Finzly and FedNow pilot participant, US Faster Payment Taskforce.

Helwig also expects continued growth in the use of electronic payments, as well as a growing number of electronic payment options. "The government wants to make sure people aren't left behind. They don't want to see the un- and under-banked left out. The government increasingly sees itself as the provider of last resort."

"There are still technical issues to overcome to provide real time payments," according to Jack Baldwin, CEO of BHMI. "Essentially, the issue concerns how the back end of a payments network can keep up with a real-time front end. The goal of a real-time payment network is to transfer funds from a payer's account to a payee's account in seconds."

"It's a fairly straightforward technical process to create an interface that accepts payment instructions directly or indirectly from a payer along with the messaging needed to deposit appropriate funds into a payee's account or other value instrument like a debit card," Baldwin added. "In effect, payments posting occurs within minutes or even seconds."

"The basic problem is that, generally, back office systems cannot match the real-time capabilities of fast payments front ends," Baldwin said. "For example, a typical back-office system creates batches of funds transfer transactions and processes them at specified periods of time – sometimes every few days, sometimes daily, sometimes multiple times per day, but never in near real time. This means these back-office systems will never be able to provide the real-time processing and reporting needed for complete faster payments processing. So typical back office operations like reconciliation and settlement can only produce results that are available at the end of one or more periods of a processing day."

As autos become more connected, they will increasingly be the payment method of choice, according to Gartner, Inc. The research firm predicts that by 2023, transaction payments made through a vehicle will total $1 billion, up from less than $100 million in 2020.

VII. Neobanks/Challenger Banks – threat or inspiration?

JPMorgan Chase CEO Jamie Dimon told financial analysts in January, “Absolutely, we should be scared s---less about [challenges from PayPal, Square and similar competitors].”

Other bank experts say that Chime and other direct delivery model financial organizations will continue to challenge traditional banks. Ron Shevlin of Cornerstone Advisors, reported in early February that Chime reached the 12 million customer mark.

“Though established banks have trust levels built over many years that challenger banks don’t have, the established trust only goes so far in retaining a customer’s business and means little to younger customers that don’t have long-established financial relationships,” said Miller.

For example, Stash, a N.Y.-based challenger acquired 5 million new users in 2020, emphasizing ease-of-use of digital tools, and showing all of a customer’s investments in a single space. That level of transparency is designed to establish trust. Some larger banks don’t offer the same combination of ease-of-use and transparency.

Stash also offers a stock-back card, which rewards customers with fractional pieces of stock when they use it. According to Miller, in June of 2020, the amount of money users were setting aside for investments increased by over 40 percent.

Palmer expects some more challenger banks to emerge, but a majority of them are unlikely to succeed long term. These banks are particularly popular with the younger generation and with anyone frustrated with their own (traditional bank). He also expects customers to choose different banks for different services, a “build your own bank” concept.

The challenger bank also offers educational material within the app to help the user make better financial decisions that are specific to their own needs.

The challenger banks aren’t saddled with the branch and some other costs of the traditional bank. But some traditional banks are answering that challenge by spinning off their own direct banks, especially ones targeting millennials who rarely use a traditional branch, Camerieri said.

Lapiro said additional challenger banks will emerge. Some will be micro-focused on a certain segment of the population, while others will attempt to market to much wider audiences.

“The challenger banks don’t need to go through a digital transformation – they’re already there,” Kilmer said.

New challenger banks are bound to spring up, though many of them may not make significant inroads into taking away significant business from traditional banks, there are some that should concern established financial institutions, said experts, agreeing with Dimon.

Contributed Articles

The Future of Customer Authentication is Mobile Device Biometrics

By Chris Doner, founder and CEO ACCESS SOFTEK, INC

Today's customers are often digital-first, or at least "digital-primary," which has conditioned their behavior in the physical world. The expectation is a digital-like experience, low-friction, requiring little-to-no manual input. So why aren't most financial institutions trying to meet their customers where they are?

Leading digital services providers outside of the financial services industry have already begun moving away from passwords and security questions in favor of biometrics. Customers are now looking to their financial providers to do the same, creating a big opportunity for financial institutions.

Biometrics, specifically mobile device biometrics (MDB), is no longer a nice-to-have, but a must for financial institutions looking to deliver on customer satisfaction, cut operational cost, and future-proof security across all call center, in-branch, and digital channels.

According to a recent Access Softek survey, nearly half of respondents said they would like the ability to biometrically authenticate with their FI. The same survey notes 47% of respondents expressed a perceived improved appreciation of their FI if it offered mobile device biometric authentication in the contact center. Furthermore, 30% of respondents would go as far as to consider leaving their current FI for one that offered mobile device biometric authentication.

Understanding Mobile Device Biometric Authentication

Mobile device biometric authentication uses facial, iris and fingerprint scans to verify customers. It is simple and virtually instantaneous, by passing the friction caused by Knowledge-based Authentication (KBA). More importantly, it is the only authentication method that is available, familiar, and useable across all consumer service environments.

Financial services are not in a silo. While FIs face a more stringent regulatory environment than consumer tech, consumers still expect the customer experience they have come to rely on in their FI of choice. The good news is mobile device biometrics can deliver upon this demand in a compliant way. However, FIs must relinquish their affinity toward KBA.

Most U.S. consumers express openness to accept and trust mobile device biometrics for authentication. According to VISA, 86% of surveyed consumers are interested in using mobile device biometrics to verify their identity. Mobile device biometrics are already in use multiple times daily by consumers via the smartphone, encompassing activities that range from sensitive payments to verification across digital services.

Realizing Increased Cost and Time Savings

On average, KBA in the contact center takes between one-to-two minutes to authenticate a caller. Since the average call is about five minutes in length, KBA accounts for almost 40 percent of the total call time. Mobile device biometrics reduce authentication time from 55 to 5 seconds, returning approximately 91% of the average lost productivity caused by KBA.

KBA utilizes passwords and personal data, which is information that can be compromised or shared across the internet. This compromised information gives fraudsters the opportunity to use the data to steal accounts. Even without direct possession of a password, answers to authentication questions are easily guessed, giving fraudsters another way to access the account.

Providing a Unified Authentication Experience

At present, verification methods are disparate. Without unified authentication, each channel may separately ask the customer to provide out-of-wallet responses, or a state issued ID, or to re-enter their password, or even create a new password altogether, ultimately taking up time and adding stress for the customer. Separate authentication methods create complication and hassle for the customer and the institution.

Mobile device biometrics can authenticate customers across all channels. Banking channels like online banking, mobile banking, in-branch, wire services or any additional customer-facing or support area requiring verification stands to benefit from a unified mobile device biometric solution.

Adopting a 21st Century Solution

The COVID-19 pandemic has accelerated customer reliance on digital. While the digital channel is expected to remain the most utilized channel, it is important to keep the value of human-led channels in mind. These channels have, and continue to, prove critical to relationship building and customer experience. However, as digital continues to dominate, financial institutions are challenged to bring the experience fostered by human led channels into the digital environment. A critical step to do so is to move away from the KBA across all service and support channels. It is not only inconvenient for customers, it is detrimental to the customer experience, costly, and insecure. It is time for financial institutions to move away from traditional KBA and adopt mobile device biometric authentication. While KBA requires a customer to have the right answers, mobile device biometrics requires the customer to be simply themselves.

Chris Doner is founder and CEO of Access Softek, a digital banking platform solutions provider.

The Need for Speed

COVID amplifies the market need for Real-Time Payments – and their swift rollout

By Dr. Jack Baldwin, chairman & CEO

It is no secret that the United States is late to the instant payments party. While there are longstanding reasons, what matters now is that the market needs and expectations for real-time payments continues to grow, brought into stark focus by the COVID-19 pandemic. The accelerated shift to digital and remote payments, as well as the need for immediate access to emergency funds disbursements, present ideal use cases for this functionality.

While real-time payments have existed in the US in the form of RTP, the new set of payments rails launched by The Clearing House (TCH) in late 2017, adoption has been incremental to date. RTP is currently being used primarily for business payments and centered on the nation's largest banks that jointly own TCH.

Additionally, the Federal Reserve has now entered the field with last year's announcement of its upcoming FedNow network. This was cheered by most community banks and credit unions, who, despite assurances from TCH, have expressed reservations with relying on a system owned and operated by their largest competitors. However, the Fed's projected timeline of a 2023 or 2024 FedNow launch reflects a lengthy wait for functionality that has become increasingly relevant.

Are Real-time Payments a Necessity?

Ultimately, every bank and credit union management team will need to determine whether offering real-time payments capabilities makes sense for their institution. Implementation will not be an easy lift, requiring changes to several foundational operations. In our view, however, it is a necessary move for smaller institutions to remain competitive with their much larger rivals. This will also allow them to serve their customers and members more effectively in an evolving payments landscape.

Along with the immediacy that their names convey, another key feature of both the RTP and FedNow models is irrevocability. Unlike ACH transactions (or to a lesser extent, credit/debit card charges), once a payment is made it cannot be recalled. This makes them better suited for certain uses, e.g., for established relationships between known counterparties. Instant payments also tend to be cheaper for merchants than debit/credit transactions, a natural appeal to merchants facing a greater inflow of digital sales. On one level this might be viewed by some FIs as cannibalizing existing revenue streams. However, with transaction volumes rising, it remains a revenue growth opportunity overall. More importantly, it will allow banks and credit unions to provide of a full suite of payments options – a capability that nonbanks will happily devise ways to fulfill.

How FIs are Leveraging RTP

So far, early use of RTP has been dominated by B2B transactions. Going forward, easier to implement processes offering quicker and less costly ways to fulfill existing needs are likely to be next in line. TCH is already working with Zelle to enable P2P payments for the simple and instant transfer of funds between individuals.

B2C disbursements are also likely to have appeal for situations where certainty of immediate funds transfer is essential, while also enabling the payer to retain the funds until the last minute. Examples include payroll distribution (including gig economy workers often in need of daily remittance), insurance payouts, expense reimbursements, and disaster relief. The addition of "request to pay" messaging to solicit instant payments (for items like bills, daily work, etc.) will create further value in many instances. Finally, "Venmolike" C2B retail transactions based on irrevocable instant payments will attract merchants looking for contactless options at a lower price point than credit cards.

The list of FIs signed on for RTP to date is heavily weighted toward those with TCH ownership stakes. Since these are also the nation's largest banks, in theory over half of U.S. deposit accounts are already covered by the network. Actual usage is a different story, however. Even these large banks have been deliberate in their rollouts, focusing first on business accounts and B2B opportunities. The expectation is that most of these FIs will continue to deploy gradually, fine-tuning the processes as the market evolves.

For most consumer-facing uses to resonate and gain traction, ubiquity is a prerequisite. That is where the roughly 10,000 credit unions and regional/community banks serving the other half of U.S. consumers can effectively enter the picture. However, it is also where things get complicated.

Real-time Challenges to Consider

Unlike the case with ACH's typical daily payment settlement, supporting real-time payments requires 24x7x365 staffing – a dramatic shift from traditional "banker's hours." This includes monitoring reserves on hand and having someone on duty authorized to replenish them so that the FI does not fall into an overdraft position based on after-hours outflows. Given that funds settlement is immediate and irrevocable, fraud must be monitored in real-time as well. FIs may look to outsource this task, but that will carry an added cost. There is also the question of whether to extend customer service hours to address related issues.

Based on recent Fed announcements, FedNow is being designed to deliver on its initial promise – an instant payments platform allowing users to transfer irrevocable funds within seconds. Despite exhortations made in numerous public comment letters to move faster, it appears on track to launch in the original 2023/24 timeframe.

The operational aspects credit unions and banks must consider before rolling out FedNow largely mirror the considerations for RTP. However, the decision is more than an either/or choice between RTP and FedNow. There is also the option of standing pat, despite the accompanying risks of competitive disadvantage, particularly for business customers. As Nacha continues to add same-day settlement windows to the ACH network, some smaller banks and credit unions may determine that such "faster payments," while short of real-time, are fast enough for now.

Two other major and somewhat related issues are interoperability and the adoption curve. As of now, RTP and FedNow are not designed to be compatible. This means the account holders of FIs implementing one service will be unable to transact in real-time with customers of FIs using the other. The laws of market efficiency dictate that this hurdle will be overcome (much as the parallel ACH rails run by TCH and the Fed have been interoperable for decades), but pending further negotiations, it remains a significant risk.

Adopting for Real-time – Looking Forward

This disconnect also remains one of the biggest barriers to mass adoption. Both the Federal Reserve and TCH have stated that they see their role as providers of the underlying payment rails. It will be other players – whether banks or fintech firms – that will develop innovative solutions atop these platforms. Investment in such solutions is less attractive if they stand to reach only a fraction of U.S. bank accounts. Perhaps one of these third parties will step up and design a product allowing users to transact across the two rails. In the case of FedNow, it is also critical that these third parties have early access to the system so that their solutions can be ready for the launch. If not, this would ultimately further postpone the rollout of the ancillary services that will actually drive volume.

Credit unions and community banks positioning themselves as service leaders or innovators may approach real-time payments as a competitive advantage. They will promote this as a feature that either distinguishes them in their local markets or at minimum, enables parity with large bank rivals. However, more conservative FIs may choose a watch and wait attitude. This group will likely only embrace real-time payments when customers/members demand the service. In either case, it is almost certainly a matter of "when" rather than "if." At a minimum, FI leaders should closely monitor the progress of both RTP and FedNow and be prepared with plans to act when appropriate for their institutions.

Dr. Jack Baldwin is Chairman and CEO of BHMI, a leading provider of product-based software solutions focused on the back office processing of electronic payment transactions and creator of the Concourse Financial Software Suite®.

A History Lesson in Prevention of Digital Bottlenecks and Its Key to Digital Excellence

By Jill Homan, president (DeepTarget — engage. cross-sell. measure.)

Steve Reich, principal (Granite Creek Capital Partners)

Spanish philosopher Santayana and later Churchill warned against the perils of failing to remember past struggles and thus repeating them. Core platforms have long been a bottleneck. We need to keep digital platforms from becoming the next bottlenecks.

Bankers have suffered the indignities of core integrations for years. They are expensive, time- consuming, and worst of all, unpredictable. There always seem to be unanticipated delays and expenses, even when a vendor has integrated to a given core multiple times. The core can easily become a barrier to implementing new technologies needed to remain competitive.

Digital banking platforms gave the industry a path out of the core dead-end. These platforms serve as a shiny new channel for consumers without having to change back-end systems. Banks are able to offer new payment methods, self-service tools, and customer communications rapidly and in a consumer-friendly mobile or desktop environment. New capabilities abounded.

Perhaps predictably, digital banking success lead to core-type maladies. Digital vendors have been inundated with integration requests from their bankers. Lead times began to grow as development teams became swamped. Vendors had to choose between new functionality for their own systems and integrations their customers needed. It can take a year to add an integration to their digital offering – it is beginning to feel like the core bottleneck all over again.

Fortunately, there are two solutions on the horizon, one old and one new. Digital vendors learned from core open systems efforts and have started adding highly capable modern integration frameworks, redefining openness and magnifying the value of APIs. A new generation of Fintech "add-on" products is making use of those APIs to add powerful new tools into existing digital offerings.

DeepTarget has benefitted from this open systems initiative by creating new revenue opportunities within existing digital platforms. Banks have benefitted by having an emerging reality where they do not have to select a "one size fits all" solution but rather an interwoven solution that's "best fit for unique needs." As is often the case, it wasn't the larger firms that emerged as the most progressive and vocal when it came to this type of enablement. For example, before the pandemic, we saw firms like Alogent and Access Softek advocate the loudest for connected ecosystems and best-fit solutions. However, in 2020 we saw many more examples as banks demand greater flexibility and quicker response times amid digital acceleration. Responding to this demand, we have been able to rapidly integrate with Q2's platform via the Q2 SDK. Likewise, Jack Henry has been supportive of our efforts to integrate with both their Netteller and Banno platforms. They, too, have introduced a modern architecture and SDK to support rapid integration.

There is a new generation of Fintechs, that are exploiting the openness of digital platforms to deliver major upgrades without conversion to a new system. And that is a great thing, since digital conversions have become nearly as painful as core conversions!

Companies like Larky offer geo-location-based marketing. Others like, Coconut Software, make it easy to book a physical or Zoom visit to your banker. Still others, such as Monotto, offer automated savings plans for Millennials. The list is endless – as it should be – to support the unique requirements of small financial institutions as well as Tier 1 banks.

Companies like DeepTarget who have invested significantly with a very specific focus – like our engagement-to-results consumer experiences – have developed quite differentiated solutions. We've integrated with dozens of digital systems to increase sales via digital marketing. Our Digital Experience Platform (DXP) gives consumers an exciting new experience and gives bankers powerful AI-based marketing capabilities and results insights. To enhance the customer experience, DeepTarget created 3D StoryTeller. 3D StoryTeller delivers an innovative, 3D user experience, enabling financial institutions to offer their customers a truly unique and personalized experience. Social media platforms such as Instagram, Facebook, and even Snapchat have demonstrated that great visual stories that entice, engage, and entertain their audience capture consumer attention. The popularity of such platforms and the visual capabilities have shown consumers that they can have both a great visual experience and quickly skip to content that interests them.

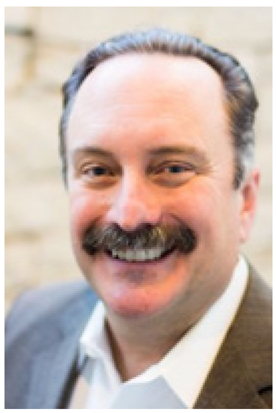
DeepTarget's 3D StoryTeller enables bank and credit union customers to have a similar experience with their financial institutions, but with added intelligence to provide relevance. Meaningful messages are prioritized, inventoried and delivered uniquely to each financial institution customer/member in an immersive 3D format that compels customer and member engagement.

But a great delivery method still needs great content. DeepTarget customers are using machine learning to select the right offer for the right customer. Leading-edge machine learning techniques partnered with historical, proprietary data to help community financial institutions complete more transactions, open more accounts and enhance the quality of the customer and member experience. Machine learning, a subset of artificial intelligence (AI) involving computer algorithms that improve automatically through experience, has been widely adopted in the financial services industry and has proven successful in helping financial institutions better tailor products and services to consumers. In fact, FinTech News recently highlighted that machine learning offers the financial services industry with "exceptional benefits like more efficient processes, better financial analysis and customer engagement."

Machine learning also boosts efficiency. With the algorithms doing the hard work of identifying the right customer for a product, banks can concentrate on tailoring the message being delivered.

DeepTarget's DXP is a great example of this new trend in digital banking—adding new digital capabilities without the pain of switching vendors. Our customers can add dazzling new customer experiences and cutting-edge marketing capabilities in a matter of weeks.

What does it mean for bankers? You can upgrade your systems quickly, inexpensively, and dramatically with minimal disruption to your team or tech. Embrace and applaud the open systems focus of your core and digital vendors while continuing to look for Fintech partners that fill gaps in your digital platform and integrate with your environment. Learn from history and by all means, don't settle.

Jill Homan, president, DeepTarget and Steve Reich, principal, Granite Creek Ventures

You Need a Chief Automation Officer – Here's Why

By Dheeraj "Raj" Singal, vice president of technology

FINBOA
Financial Back Office Automation

Process automation is a top priority for all financial institutions and typical banking processes require working with multiple systems and an understanding of the end-to-end process and regulatory compliance requirements. New products and services become available at warp speed in the digital age to help improve banking efficiency and the customer experience. These tools, technologies and know-how create a knowledge gap that business managers at banks struggle to bridge without a chief automation officer (CAO). In the absence of a CAO guiding a financial institution's automation strategy, it may be impossible to incorporate new solutions or make the most effective use of existing systems, potentially leading to slower adoption.

If your financial institution's business managers find themselves asking if they have the correct tools for the job or if current process automation is generating results, then your institution could benefit from a CAO.

With budgets strapped, expanding the leadership team can seem impossible. Like hiring a consultant, a CAO can advise an institution's direction in a contracted capacity. To provide optimal value, a CAO needs access to operational execution across the entire financial institution. With this visibility, a CAO can easily spot and recommend the necessary actions to overcome and solve current inefficiencies. Additionally, having someone come into the bank or credit union with a fresh set of eyes to take inventory of your institutions' environment can help identify optimal application points for robotic process automation (RPA) tools without preconceived notions.

When financial institutions consider their technology strategy, the focus is on core solutions, IT, security and capacity. Lack of focus on process automation is a missed opportunity for timely and competitive differentiation. Although, by recruiting a CAO's help, financial institutions can ensure the appropriate use of their current tools and identify and implement complementary automation solutions, producing the highest impact. There is no doubt – every single financial institution could use a CAO.

CAOs can provide insight into how digital process automation can be leveraged across all bank or credit union operations.

It is easy to fall into a simple line of thinking regarding process automation – who wouldn't invest in making their financial institution run smoother? However, this idea only further illustrates the main challenge that process automation solutions and tools are not often strategically selected, resulting in confusion that leads many projects to fail.

Without an individual spearheading the automation process, financial institutions can see a lack of near-term strategic direction that results in less value added to current services. Also, as this industry inches along incrementally, financial institutions are searching for some fresh, big ideas that can come out and better the bank or credit union.

Still, it is vital that the CAO be a part of the C-suite and not a vice president of automation because breaking down fragmentation within the financial institution requires a high visibility level. As a C-suite executive, a CAO can pinpoint where the financial institution is losing money and better face the price pressure put on banks and credit unions from fintech and other third parties, which erode at the foundation of banking. With these entities at play in the financial services space, a bank or credit union must do something to get in the game competitively, or they risk losing, slowly but surely. By cutting costs and automating tasks in your institutions' way, you can advocate for growth and take steps to maintain confidence and attract new customers.

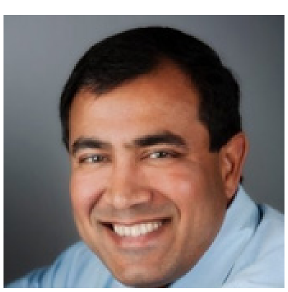
Furthermore, customers are often impatient and expect your institution to keep pace with their on-demand, digital and device-centric lifestyles. For example, account holders do not want to wait months to do a home equity loan that competitors could complete in five minutes. If a process requires months to complete, the need to automate the process is high. Financial institutions must prioritize automation through the implementation and process improvement – tasks that would be the primary focus of a CAO.

But why not a CIO or CTO?

There is a significant difference between CIOs, CTOs, and CAOs. Frankly, CIOs do not think of process automations. It is not in their scope of responsibility. They are usually preoccupied with other items, such as keeping the lights on and dealing with business decisions regarding employee and customer well-being. CTOs focus on bringing in new technology or maintaining the institution's infrastructure by working with primary third-party partners. Simply put, these two critical roles cannot consider the broken operations of the bank or credit union or how to fix them. Process automation responsibility falls on the line of business leaders managing the processes who need support from a CAO to bridge knowledge gaps.

The Bottom Line

CAOs provide a vital service to financial institutions by capitalizing on the value of digital and process automation tools to continue to create a great customer experience and assisting the line of business managers with technology, process automation and compliance management strategy. Chief automation officers are the key to having digital process automation solutions that work for business managers. By prioritizing CAOs, banks and credit unions streamline implementation and maximize results throughout the institution.



Dheeraj "Raj" Singal, vice president of technology, FINBOA

Safe Harbor Credit Union: How One Institution Brought in 143% More in Loans in 2020

By Greg Schultz, director of product management KASASA®

In preparation for 2020, Safe Harbor Credit Union set a number of reasonable, achievable goals for its lending portfolio. Unfortunately, as the COVID-19 pandemic hit, the credit union saw its business disrupted like many others. As foot traffic into the branch came to a fraction of its pre-pandemic numbers and deposits increased dramatically, Safe Harbor recognized a need for a strategic pivot in its 2020 plans.

Safe Harbor sought to deepen relationships with existing members as well as grow its member base. Additionally, the credit union wanted to differentiate its loan offerings and increase profitability of loan portfolios. To combat the coronavirus "slump" facing Safe Harbor, the credit union tapped Kasasa for help.

Kasasa partnered with Safe Harbor in 2019, and the credit union has since seen strong results from Kasasa's reward checking accounts. The credit union expanded this partnership, putting trust in the Kasasa Loan program to reinvigorate its lending. The Safe Harbor leadership team liked the idea of a loan that could transform the lives of its members and redeploy the influx of deposits. But, due to economic changes in the pandemic, this strategic shift could not come with additional marketing spend or a relaxation of credit standards. The credit union was clear that half-baked measures would not be enough. Finally, with executive buy-in, Safe Harbor went "all in" on the Kasasa Loan making it the credit union's default loan offering.

As a result, Safe Harbor and Kasasa got to work on revitalizing the credit union's lending offerings. Loan officers worked closely with Kasasa's Retail Experience Development team so that they were able to explain the features of the Kasasa Loan as an enhancement to a conventional loan. This allowed loan officers to completely reframe borrower's expectations of how to manage their debt. All Kasasa Loans offer Take-Backs®, a feature especially attractive to members during the financial hardships of the pandemic. Borrowers are able to pay extra and accrue that extra as a balance. This helps borrowers pay off their loans faster, but if a future need arises, they are able to use their Take-Back with no penalties or changes to the terms of the loan.

With the loan officers at Safe Harbor well-versed in asking questions and evaluating each member's financial situation holistically, the credit union was able to increase debt wallet-share. Once loan officers helped members understand how the Kasasa Loan worked, they would ask the member if they had any other debt they wished worked the same way. By asking this simple question, Safe Harbor set off a significant increase in the number of loans per member. Furthermore, word-of-mouth marketing sky-rocketed when loan officers followed up with members by asking if they knew anyone else who could benefit from this loan.

Despite an industry wide slump due to COVID-19, Safe Harbor experienced its best loan growth in years. Members began borrowing more money per loan, not out of recklessness, but because the Kasasa Loan offered them peace of mind as they navigate the new economic difficulties. Borrowers became three times more likely to open multiple loans in a single month. The credit union had $2.2 million more interest generating balances booked in Q3 of 2020 and 143% higher overall loan balances originated compared to Q3 2019.

The growth in Safe Harbor's loan portfolio in 2020 obliterated their own numbers from 2019 and 2018, as well as the 5.25% average loan growth from all Kasasa's current clients for 2020. Compared to 2019, Safe Harbor saw 71% higher loan balances per relationship (due to multiple loans per borrower), 54% more loans per borrower and 7% higher average balance per loan.

"We were very excited about offering a product that nobody in our market could offer," said Stephanie Overholt, Vice President of Lending at Safe Harbor Credit Union. "We loved being able to offer members the power to continue borrowing and building their safety net at the same time. Our executive team loves the Kasasa Loan, our lending team loves it, and our members love it."

Though lending growth has slowed in the industry overall, Safe Harbor was able to avoid the trend and saw impressive results from June to October 2020. Growing its relationship with Kasasa, Safe Harbor was able to not only survive, but thrive during the economic uncertainty of the pandemic and support its members through an unprecedented year. Giving members the ability to change how they view and manage their debt without increasing marketing investment or loosening credit standards created the ultimate win-win for Safe Harbor and members alike.

Greg Schultz is the Director of Product Management at Kasasa®, a financial technology and marketing provider based in Austin, Texas, committed to driving results for over 900 community financial institutions by attracting, engaging, and retaining consumers. Kasasa does this through branded retail products, world class marketing, and expert consulting. For more information, please visit www.kasasa.com, or visit them on Twitter or LinkedIn.

Investing in Financial Wellbeing

By Mickey Goldwasser,
vice president of marketing and chief of Staff

Historically, conversations regarding personal finances, or financial wellness, were kept to a minimum in American society. The taboo attitude toward the topic of financial wellness, while still alive today, has become less prevalent as the topic has become more mainstream. Part of this societal change can be attributed to the advent of technology designed to help the consumer feel more empowered in the management of their personal finances.

According to a study by the Federal Reserve prior to the COVID-19 pandemic, approximately 40% of Americans were not prepared to cover a $400 emergency expense. As one can imagine, the impact of the pandemic has caused this number to rise. Moreover, the same study continues by stating less than 40% of consumers believe they are on track with their retirement savings, and 25% have no retirement savings at all.

In late 2019, Schwab reported that 59% of Americans were living paycheck to paycheck. The economic impact of the COVID-19 pandemic has likely caused this number to rise as well – with many losing jobs due to layoffs, experiencing reduced hours or business closures. As 2021 begins, there is arguably a greater need for financial wellness resources.

This paradigm underscores a challenge for today's financial institution leaders. How can financial institutions support each customer or member in their financial wellness journey? The answer is through technology. Technology that proactively supports the customer's or member's financial needs is vital for both the short-and-long term success of the individual, and life of the financial institution.

Getting Started

Those who are interested in financial wellness are usually looking to better track their month-over-month expenses, progress forward toward savings goals, and want a better understanding of the way money moves. By their very nature, financial institutions are well equipped to manage many of these areas. Financial institutions are built on the foundation of understanding the consumer's need and serving as the liaison between their need and an eventual financial goal. Financial institutions are also the most informed entity when it comes to consumers' finances given they have access to data relative to how consumers manage their finances.

According to The Ascent, only 3% of Americans are spending time on household financial management over the course of an average day. The average time spent on managing finances on a daily basis is less than two minutes. This could be due to the fact that financial management is a stressor for many, or it could simply be because most people do not have the time they need to devote toward financial management. It has even been referenced that many would rather go to the dentist than address finances. Regardless of the reason, consumers cannot reach their financial goals if they are not willing or able to put forth the effort, unless they have someone – or something – to do it for them.

Understanding the Data

What if a financial institution could provide its account holders with proactive and actionable alerts, that save them money? Well, it can.

Financial institutions have access to a wealth of data pertaining to an account holder's spending and savings habits; but the data is not always utilized in the best manner to enable greater financial wellness.

When artificial intelligence (AI) and machine learning technology are integrated and deployed in a FI, they utilize this data to provide the consumer with financial wellness recommendations, helping them track income and expenses, reach goals, and feel empowered in their financial management abilities.

Take payments for example. AI and machine learning technology work together to anticipate financial needs, proactively monitor bills and payments, offer intelligent insights into when bills should be paid, recommend new products and prompt customers when it is time to speak with a representative.

These technologies are designed to help users work toward financial goals without having to spend the extra time or effort. This can take the form of making sure that the consumer's short-term finances are stable, and by teaching them how to use their cashflow to build savings for emergencies, major investments, college savings or retirement.

Moving Forward

Developing a "do it for me" approach enables customers or members to rely on automation to help them think ahead. According to a PWC report, 54% of respondents cited financial challenges as the leading stressor in their life. The use of AI and machine learning can help alleviate this stressor, enabling them to focus their attention to more big picture goals.

With AI and machine learning, account holders no longer need to consider which payment method is most effective or worry about bills. Instead, they gain the ability to deepen their trust in their financial institution to simplify their lives and plan for the future.

Financial wellness is a priority for many , especially now. Financial institutions have an important opportunity to deepen their relationships with their customers or members and to help them save for their futures and better manage the needs of today. Providing financial wellness should continue to be top-of-mind for all financial institutions and, through automation and the right relationship, financial institutions can play a key role in helping their customers or members achieve financial stability as well as their short and long-term goals.

Mickey Goldwasser is VP of Marketing and Chief of Staff at Payrailz, a digital payments company offering secure, smarter more engaging and predictive payment solutions to banks and credit unions. For more information, please visit payrailz.com.

Top Ten Trends Impacting Bank Technology for 2021

By Jimmy Sawyers, Chairman & Co-Founder SAWYERS & JACOBS

> *Most men seem to live according to sense rather than reason.*
> *- Thomas Aquinas*

Not one to consult on lending perhaps, but I find Saint Thomas Aquinas's quote from over 700 years ago to be applicable to our current state of banking and technology. Sense (feeling) trumps reason (logic) in many tech investments. We continue to see a survival of the fittest in our industry as the digital transformation evolved rapidly and resulted in a few extinctions for those companies that could not deliver what they promised. However, new and old found the need to pivot and adjust to market conditions never encountered before.

Fintechs and traditional banks learned from one another that perhaps neither side was all right or all wrong. As is often the case, the answer lies somewhere in between. The previous year simultaneously exposed greatness and crushed the pretenders in tech and financial services. Survivors are poised to make 2021 a year to remember (in a good way).

Bankers experienced events we never imagined and that were never part of any bank's pandemic plan, proving that the nimble and quick fare better in such times. Tough lessons were learned, but they are lessons we will carry forward to make more productive, digitally empowered, and ultimately, better banks.

With a sincere hope that 2021 is the year we fear less and dare more, I offer the following predictions:

Prediction #1 Digital Services Acceleration Blasts Banks' Business Process Constipation

The right technology without the proper business process is doomed to fail.

Many bankers are in the process of replacing their online account opening solutions, partly because of increased demand from consumers and partly because some current solutions perform so poorly with clunky interfaces and high abandonment rates. Layer on outdated compliance maxims and inexplicable business processes and this new technology and incredible digital service is weighed down and cannot function effectively.

It should come as no surprise that mobile deposit transactions soared during the pandemic. Those banks that had their people, processes, and technology aligned were able to leverage this digital service and increase deposits, improve the customer experience, and position themselves as leaders in the digital space. Banks that let compliance and fraud concerns stifle progress in this area did irreparable damage to their brands.

For example, a large regional bank implemented a control that if the mobile deposit amount was greater than the account balance, the deposit would be automatically held for two business days. Keep in mind that one could walk in this same bank and make a deposit for ten times that amount and get immediate credit at the teller window. Plus, the bank obtained good funds quickly on the item because of same-day settlement with the bank on which the check was drawn. And, by applying some commonsense data analytics, the bank would know that the customer has deposited this same amount from the same checking account and same bank for many years. Instead, a good customer was denied the promised utility of new technology. Not exactly the way to promote digital services.

Such ill-advised business processes will kill a great digital service. Such is the case at many banks. It's time to review business processes and not leave these decisions to the compliance department or those who don't grasp the importance of the customer experience.

People who used DoorDash or Instacart in 2020 for the first time will expect the same level of service and delivery from their banks. Most banks hold the "digital vaccine" but don't have the people and processes in place to administer it.

Challenge Question – Are your bank's business processes as advanced as your technology?

Prediction #2 The Mobile Workforce Demands Access and Innovation

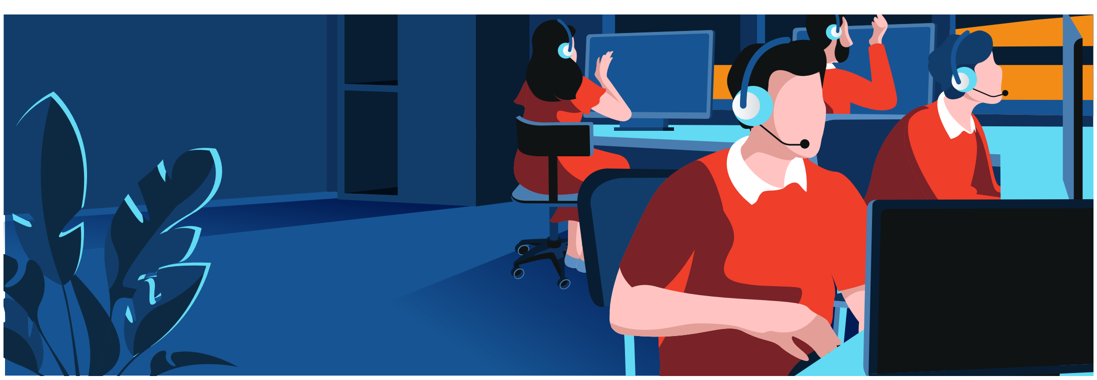
Productivity could not be quarantined in a pandemic, so banks' IT staffs were tasked with rolling out laptops en masse at a time when it was difficult to get delivery due to supply chain breakdowns. Most performed admirably in tough circumstances and transformed their tech environment to support workers who needed to serve customers and get their jobs done from home.

Those long-denied the necessary tech tools to perform at a high level due to unfounded security fears of laptops, wireless, and remote access to network resources became empowered almost overnight to work anytime, anywhere. The mobile workforce is here to stay, and now that this tech genie is out of the bottle, productive bankers are not going back post-pandemic. Laptops are replacing desktops and wireless networking is becoming the norm.

Bankers will no longer allow their IT staff to deny reasonable requests for the tech tools that are needed to be productive from home and on the road. This is a healthy change for bank performance. This trend has also made bankers want more self-sufficiency and control of their own networks.

In 2021, expect bankers to continue this transformation and hire more tech talent to support mobile workers. "Boots on the ground" mean jobs in the community. If community bankers want young people to stay in their towns post-graduation, then they should do something about it and offer high-tech jobs and career paths. Every bank needs a network admin or help desk specialist on-site. Our industry needs to do a better job of making banking appear more attractive as a high-tech career, which it very well can be.

Challenge Question – How will you better support your bank's mobile workforce to attract and retain the best talent?



Prediction #3 Video Kills the Unnecessary Meeting

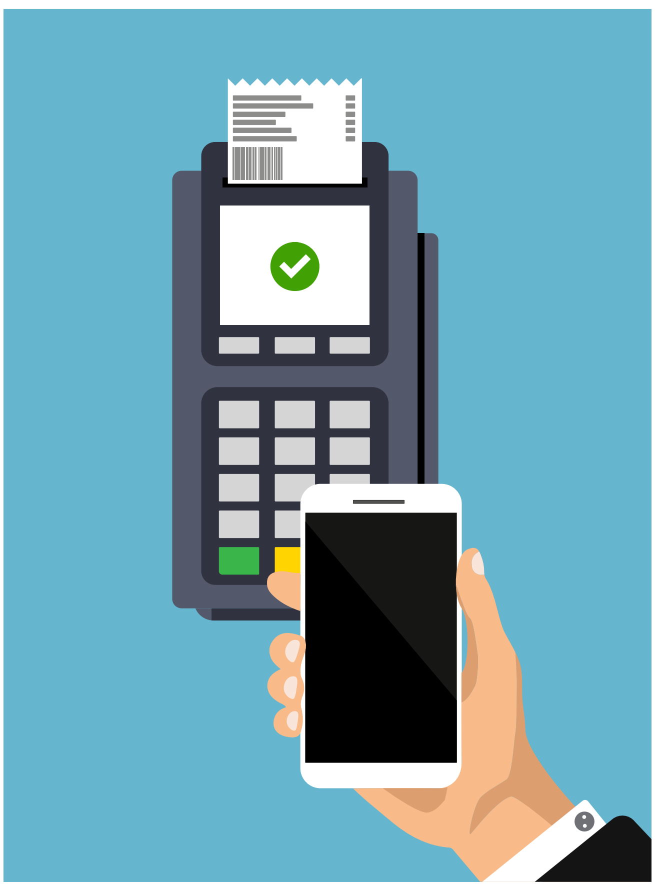
Ever wonder if some people in your organization exist only to call meetings that are neither necessary nor productive? Long available but seldom used, videoconferencing solutions exploded in 2020 and will continue to be popular and necessary in 2021. We have all learned about the nuances that make such meetings more dynamic and productive...quality audio, adequate bandwidth, intuitive interfaces, and clear rules of engagement. We have also learned the shortcomings...the video fatigue, the fact that many now choose to simply turn their cameras off and make it an audio meeting, that pesky mute button that has frequently made us look like fish gasping for air, and all the other weaknesses of this medium that make it no substitute for in-person interaction. Yet, it is invaluable for the new world in which we live, and it's here to stay.

Videoconferencing solutions and use will continue to evolve in 2021, and a hybrid model will take hold that uses this channel more effectively. Expect some in-person meetings and events to be deemed irrelevant or unnecessary as a result.

The prophet, Donald Duck, had it right all along...in the future, there is no need for pants (on video calls).

Challenge Question – How will your bank use video strategically yet judiciously to increase employee productivity?

Prediction #4 Contactless Payments Demand Skyrockets



For those of us who have long been germaphobes, disgusted by having to stick our fingers where others' dirty fingers have contaminated surfaces, contactless payments are a welcome innovation, pandemic or not.

Upping the contactless ante, Amazon One connects a stored credit card with a palm print and allows customers to pay at checkout using the palm of their hand. This innovation was introduced in two Amazon Go stores in Seattle in late September 2020.

As bankers fight to preserve the payments franchise in 2021, they will focus on what matters, making the checking account, mobile, and the debit card the trifecta of digital services success. Contactless payments will play a key role in that success.

As mentioned last year, tap-to-pay was poised to be a popular advancement pre-pandemic, so it is especially welcome now. A Mastercard global consumer study published in late April 2020 found that 50% of U.S. consumers worry about the cleanliness of signature touchpads, with 72% preferring to forgo signatures altogether. This desire for contactless payments is driving consumers to move their contactless cards to top-of-wallet. Bankers that are first to market with tap-to-pay cards will increase the probability that the top-of-wallet card bears their bank's logo.

Challenge Question – Which contactless services will your bank offer and how will these services be delivered?

Prediction #5 Cybersecurity Theater Is Exposed and Corrected

Too many cybersecurity measures in banks are more theater than substance…more drama and grandstanding than real and practical.

Excessive phishing testing without 24/7 monitoring of a network for intrusions is akin to harassing and scaring one's grandma with fake burglaries instead of buying her an alarm system. Expect bankers to truly assess such measures in 2021 and get more sophisticated in thwarting cybercrime.

Risk management will include scenario analysis of the most likely cybersecurity incidents. Would your bank pay the ransom if struck by a ransomware attack? How is your bank's network protected against intrusions into your debit card administrative platform, online banking systems, or wire transfer operations? Smart bankers will engage qualified firms to test such systems and they will implement Cybersecurity Incident Tabletop Testing as well as other practical exercises to face the realities of cybersecurity preparedness in 2021.

Bank CEOs must take control of cybersecurity strategy from those who want to lock the bank down like it's a nuclear facility instead of a service business managing a risk-reward proposition. High-performing banks will strike the right balance and manage cybersecurity risk accordingly.

Challenge Question – Who provides your bank's cybersecurity preparedness advice and has that person ever worked for or run a for-profit business?

Prediction #6 Fintech Banks Get an Education in Regulatory Compliance and Profitability

This pandemic should ha ve been fertile ground for fintechs, those who have been schooling us for years on how to serve customers remotely and digitally. However, very few rose to the occasion and soared. Many sold or failed. Hard lessons were learned by both fintechs and traditional banks. The fintechs that succeeded did so by offering the right solution at the right time with strong management and execution.

The three fastest growing fintechs in terms of revenue in 2020 were Ant Financial, Stripe, and PayPal (3-2-1), all digital payments plays that have enjoyed incredible success. Growing customer numbers has proven easier than growing revenue for most.

This past year saw Varo Money become the first fintech granted a full-service national bank charter from the OCC. To experience Varo's onboarding process, I opened a low balance account at the fintech over one year ago. This summer I got a letter that Varo was closing my account if I didn't make a deposit within 30 days. I didn't make a deposit and they did close my account. I got the "Varo heave-ho" and it was probably justified from a business standpoint, but the abruptness of the forced exit didn't leave me feeling much love from Varo. Expect more customers to get the boot as fintech banks are learning the fundamentals of banking.

Like Varo, many fintech banks have found that having thousands or even millions of customers, most with low-balance or no-balance accounts, is not a sustainable business model. Fintechs have core processors too, and they must pay those core processors just as traditional banks do (e.g., typically on a per account basis). Paying for unprofitable accounts is not exactly disruptive or innovative. Next time a fintech bank claims to have millions of customers, ask what the average account balance is.

Now these banks will be subject to the same laws, regulations, and guidelines as traditional banks. They will undergo the same examinations and be subject to the same consumer compliance requirements. Some might not be prepared for the overhead.

At the same time, do many traditional banks over-comply and build layers upon layers of unnecessary paperwork and controls? Many do. One of my banks requires me to sign paper forms in blue ink. Why? Because they say they had a "bad compliance exam" one time and the examiner made this recommendation. This bank inconveniences the customer in the name of compliance, and e-sign be damned.

Traditional banks can learn a lot from fintech successes and failures.

Challenge Question – What can your bank learn from fintechs about streamlining the compliance function?

Prediction #7 Regulators Get Inked

A trend of concern is editorializing by examiners who are unwilling to put such off-the-cuff opinions in writing. Such casual recommendations often lead to bankers increasing overhead unnecessarily while not reducing risk as intended.

Verbal recommendations from examiners are not formal recommendations at all. Bankers must require examiners to put such recommendations in writing so bank resources are not wasted on implementing expensive controls based on one examiner's opinion rather than a law, regulation, or guideline. It's what you ink---not what you think.

Challenge Question – Does your bank implement unwritten, informal verbal recommendations, from individual examiners, that might be costly, wrong, or without merit, or do you require such recommendations be in writing and part of the formal examination report?

Prediction #8 Efficiency Rules as Bank Overhead and Tech Spending is Managed More Stringently

To be more competitive in 2021, bankers must eliminate inefficiencies at all levels of the organization. Expect increased scrutiny of age-old business processes. As I often joke, what got me in trouble throughout my school years, I now do for a living. I ask WHY a lot. Too many bankers don't ask WHY enough. That will change as margins are squeezed, tech costs rise, and leaner competitors force traditional banks to re-examine their operations.

Remember this…just because the same company owns two applications does not mean those applications are integrated. An acquired application may never be fully integrated with existing solutions.

To make cost analysis even more difficult for bankers, bundled pricing is the new pig in a poke for many tech providers. As bankers become more aware of per unit pricing increases, some tech providers, including core processors, have flipped the book and introduced a new pricing model, an all-you-can-eat buffet of applications, some of which are not in demand and better belong on the "Island of Misfit [Tech] Toys."

Some Managed Service Providers (MSPs) lose their luster as bankers realize the ROI and performance promised never panned out and that many MSPs have not lived up to their disaster recovery or security claims. Some actually served as conduits for malware injections and ransomware attacks on banks. These stark realities have caused some bankers to break down applications into their individual categories to see who the best provider for each is. Email? Bankers are beating a path to the cloud with Microsoft 365 (formerly Office 365). Backup? Solutions from the likes of Barracuda have disrupted MSP offerings. Videoconferencing? Straight to Zoom, Citrix GoToMeeting, or Microsoft Teams for savings and better performance. Secure file transfer? Have a funeral for clunky secure email applications, long hated by lenders and bank customers alike, and go straight to Citrix ShareFile.

Tech decisions made five or even fifteen years ago might have been exactly right given the circumstances of the time. Recent advances in tech and bankers' desire for increased efficiency makes 2021 a good time to re-assess current providers and the often sticky, one-sided arrangements that exist.

Challenge Question – Will the 30% Efficiency Ratio be the benchmark in the near future, and if so, how will you achieve it?

Prediction #9 Trusted Advisors Rise in Value

Got a circle of trust in terms of doctors, lawyers, accountants? Of course! We all do. Do you go with the cheapest or the best? The most convenient or the most trusted? Unfortunately, some bankers still award critical projects and solicit advice from the lowest bidder then complain about quality when they reap what they sow.

Even in the digital world, let's not discount the importance of trust. This is why I believe that traditional banks that leverage technology properly will be the winners, even in the face of digital-only competition.

Trust will remain the most important factor when customers choose their financial institutions, in the digital or physical worlds, and trust will also remain paramount as financial institutions choose those providers on which they will be dependent to deliver world-class financial services. This "TrustTech" will drive technology companies and their financial institution clients to a new level of performance as good businesses with stable and ethical management will thrive in 2021 and beyond.

Challenge Question – Does your bank engage the best and most trusted or the cheapest and most busted?

Prediction #10 PPP Loans Drive Digital Lending

Most community bankers demonstrated their value by hustling and working extremely long hours in the face of a pandemic so they could take care of their customers and process PPP loans. In many cases, this was a largely manual process with a lot of phone calls, emails, and PDFs. What was accomplished in a short period of time was nothing short of amazing. Bankers should take a bow.

While the job got done, many bankers were left with the thought, “There must be a better way.” For the fintechs and digital lending applications that were sincere in helping banks, we will continue to see success. For those who saw this as an opportunity to poach traditional bank customers by forming the digital equivalent of a roach motel (one can check in but never check out), their run will come to an end.

Regardless, bankers who faced and met this challenge will assemble and make some monumental and lasting changes to the lending process for 2021 and beyond. Expect a digital makeover that will help more traditional banks meet and beat the fintechs.

Challenge Question – How did the PPP loan experience motivate your bank to adopt new methods of digital lending?

Summary

Elvis Presley, the King of Rock and Roll, said it best, “Truth is like the sun. You can shut it out for a time, but it ain’t going away.” A new age of truth and reason has emerged. Bankers have helped their customers survive the pandemic, and in turn, have made better banks as a result. Expectations have risen. Proof is demanded. Performance will be rewarded.

Welcome to 2021…the end of old rhetoric and the new beginning of a long-awaited recovery and a fresh optimism seldom seen in our history. Bankers will administer the digital vaccine that brings health and prosperity to banks, their tech providers, and their customers.

Jimmy Sawyers is Co-Founder and Chairman of Sawyers & Jacobs LLC, and is one of the most independent and informed voices in the industry. Leaders in Innovation-Risk Management-Cyber-security-Technology through the firm’s four brands. RedTorch Consulting: Lighting the Path to High Performance - Strategic consulting designed to align people, processes, and technology for world-class innovation, management, and operations. RedTail Risk Management: Watch Risk Like a Hawk - A suite of risk management services designed to help bankers identify threats and mitigate risk through practical applications, comply with laws and regulations, and maintain a high-level of customer service, security, and profitability. RedWolf Cybersecurity: Protect the Pack - A full range of Cybersecurity services for those serious about securing the enterprise and repelling the attackers who threaten the bank and its customers. RedCape Tech Support: Your Hero in Tech - Concierge-level tech support delivered in a strong, intelligent, and friendly manner with premium quality, superior service, and special attention. For more information, visit www.sawyersjacobs.com, call 901.853.1000, or email jsawyers@sawyersjacobs.com.

Personalize or Perish: SKU-level Data's Role in the Future of Banking

By Corey Gross, co-founder and CEO Sensibill™

Imagine a world where financial institutions could make customers' lives easier and help them save money—where a financial institution could enable customers to track their transactions, including monitoring for price drops and credit card discrepancies, automatically order needed products, provide expense analytics, manage subscriptions, and more.

Now, imagine that the same institution could also optimize everyday spending, making customers' hard-earned money go further. That's a bank or credit union deserving of loyalty.

To make this vision a reality, it all starts with better understanding customers both in-person and digitally. Customer information and data that was once collected over the teller counter in the branch must now be collected digitally—and it can, but not without personalization. Institutions are being challenged to provide the same personal experience via their digital channels as they have in-branch; in fact, their future depends on it.

In a survey conducted by FIS, 45% of customers indicated that the pandemic has changed the way they interact with their financial institutions. This shift is also supported by a recent study from AppsFlyer and Google which revealed that fintech apps experienced a 72% usage increase in the first quarter alone. Banking may never be the same, and many institutions have already taken the necessary steps to help their customers understand their digital banking capabilities in a more personal way.

Financial institutions need deeper data than what's currently available to them (surface-level information like demographics, channel usage, and transaction history) to offer personalized products and services. While the data they have is a good start, it fails to fully capture who the customer is and the scope of their financial needs. That's where leveraging deeper, more contextual data points, like SKU-level data from receipts, enables richer, more precise customer segmentation.

Better segmentation can also help a financial institution identify and serve the traditionally overlooked or underserved markets, such as micro-businesses, gig workers, small businesses, or household managers. Having this increased level of visibility enables institutions to proactively offer tips and tools to better manage their finances and prepare for the future. Consumers demand greater transparency from their institution in exchange for more personalized advice and engagement according to Forrester, and it's time financial institutions use this data to make more of a difference in their customers' everyday financial lives.

Alternate data points can drive engagement, uncover revenue-generating opportunities, and breed loyalty with both consumers and businesses. Plus, such detail can create stronger partnership ecosystems – an increasingly critical banking model that can help shape the future of banking. Let's explore ways in which personalization can offer FIs greater opportunities to serve their customers and nurture more loyal, engaged customer relationships.

Reinforce relevance by optimizing spend & encouraging savings

Today's market has become increasingly crowded; financial institutions are not only competing with one other but non-bank providers like Amazon, Shopify and Wave as well as big tech and GAFA (Google, Apple, Facebook, Amazon). The heightened competition has challenged institutions to find ways to amplify their impact on consumers' everyday financial lives, helping them save money and proactively manage expenses. But how, exactly, can institutions do that?

Enter SKU-level data. Imagine if shopping lists could be created for customers based on previous purchases, all by analyzing expiration dates and remaining quantities of goods. Taking it a step further, the institution could even identify the best prices for needed items within a 20-mile radius, helping customers find discounts and price reductions without requiring customers to exert any extra time or effort.

For example, say a customer is about to run out of dog food. Pointing him or her to a sale for the specific brand, flavor, and size bag they prefer provides value and eases a common burden. The bank or credit union does the heavy lifting, while the customer scores deals. When a customer wins so does the financial institution; banks and credit unions are typically more profitable when their consumers are doing well financially.

Small savings can accumulate into something significant. With the appropriate insight, an institution could unearth small details like a family of four spending $200 at Walmart on purchases that later drop in price by $40. Retailers like Walmart will honor retroactive price matching, putting money back into customers' pockets. That extra $40 here or $25 there can add up to significant savings that customers can put towards larger life purchases or relegate to an emergency fund. That's a banking relationship that drives loyalty, and one that is likely to stay in the family.

Financial institutions have the responsibility to teach their customers how to successfully manage their money and create healthy financial habits. Financial wellness education and initiatives are critical for consumers, especially since it's estimated that only 41% of Americans would be able to cover an unexpected $1,000 expense pre-pandemic. Now, apply that statistic in the context of today's environment where many are living paycheck-to-paycheck or relying heavily on government relief programs to cover everyday expenses. Personal financial management (PFM) tools have become a lifeline, but there's still much more work to be done to help consumers better and more proactively manage their financial lives.

Prioritize partnerships – they're the future

Not only can harnessing deeper data points help save consumers money, but it can also strengthen loyalty programs and create strong partner ecosystems.

For example, a financial institution might offer a co-branded card with an airline company and then discover that those customers also tend to ride with Uber and drink Starbucks coffee. Another example pertains to membership and loyalty programs; our research shows that peak months for loyalty points and rewards redemption are June/July, November/December, where Food and Dining as well as Retail are the top categories for loyalty redemption. Knowing this, financial institutions can partner with companies and services to offer loyalty-based incentives around major holidays, or create targeted rewards options for specific purchase types. Transaction behaviors like those above can tell financial institutions a lot about their customers and how they spend, not only through a pandemic but beyond. If more customers are spending money at membership-based stores or using loyalty cards to make purchases, this presents a unique opportunity for financial institutions to partner with relevant companies to offer rewards, points, and other customer-centric incentives.

Uncovering these loyalties can present correlations and partnership opportunities that may have otherwise gone unnoticed, and this model can optimize marketing investments and create richer experiences. Not to mention, accessing and harnessing deeper data points can help better inform marketing and digital strategies down the road that are inclusive of partnerships both existing and new.

These types of partnerships create a virtuous cycle where everyone benefits: consumers and small business cardholders; financial institutions and its cards; and the institution's merchant partners.

Cardholders experience effortless receipt management with bonus rewards and warranty controls.

Having a card that incentivizes them to spend money on their favorite brands often becomes top of wallet for customers and, as a result, financial institutions benefit from powerful data, stickier customer relationships, and increased engagement. The participating merchants gain access to this data as well, which allows them to develop a tighter, more personalized rewards program and deeper relationships with the financial institutions and its customers.

These data insights can fuel tailored offerings, rewards, targeted marketing, and more, ultimately leading to customer acquisition and stronger long-term retention in addition to generating more awareness and business for the partner and financial institution.

The big opportunity with small businesses

Small businesses and gig workers have been hit especially hard over the past several months, and they need help from their trusted institutions now more than ever. With the right data, institutions can identify the gig workers and small businesses hiding in retail accounts (the number might surprise you).

It's common knowledge that small businesses generally struggle with cash flow, so knowing these customers are likely running their business in retail accounts can create an opportunity to proactively offer relevant business banking services and funding options. And, if a small business owner or gig worker is using a bank's card, that institution can more effectively identify purchase patterns and predict behaviors. Having those key insights would enable their institution to more intuitively offer banking solutions and services that contribute to the business owner's or gig worker's path towards financial wellness because the solutions would be personalized to their needs.

Consider businesses like restaurants, which are meticulously balancing economies of scale right now, focusing on ways to cut costs and keep their doors open. Being able to better digest SKU-level data and relevant purchase details, such as how much restaurant suppliers are charging for paper products or how many takeaway box purchases were completed in the past three months, can make a notable difference. Or, for the freelancers working from home, this data can be used to separate personal and business expenses, making it easier come tax season next year.

There's also room for institutions to better support their local businesses and communities. Let's say that a local restaurant is offering a steak special on Friday nights; the restaurant owner's financial institution can promote this special via their digital channels, encouraging customers to come in and try the prime rib. Details can be shared with the business afterward, including customer sentiment and response, and how many diners showed up, allowing the bank and business to determine how to best work together moving forward. The end result? The business receives local support, customers enjoy a nice steak dinner, and the institution continues to serve its community.

This type of rich personalization doesn't go unnoticed by the underserved segments of institutions' customers like small businesses, freelancers, or gig workers. Knowing that their institution is proactively looking out for their financial wellbeing, and equipping them with the tools they need to be financially resilient, is a significant value-add for these banking customers.

The time to act is now – don't get left behind

This proactive and hyper-personalized level of banking is not as common as it should be today—but it can be. With how far digital has come in just the last few months, it's time to determine how to replicate the personalization that once existed over the teller counter into digital channels. Leveraging alternate data points, like insights found within receipts, will enable institutions to help their customers extend everyday spend while delivering the solutions and transparency needed to manage their money more effectively and go further down the path towards financial wellness. These details also enable a partnership model that will become increasingly critical in the coming years. The future of banking is fast approaching—are you ready?

Corey Gross, co-founder and CEO, Sensibill

Is Your Financial Institution Prepared for the Pandemic -Prompted Shifts in 2021?

By Ben Mrva, executive vice president

STRATEGIC RESOURCE MANAGEMENT

This past year has brought about some game-changing events for the financial services industry, and we will continue to see the impact of these moving forward. For banks and credit unions, digital investments will continue to be a top priority; the branch's role will continue to evolve; as will payments preferences among customers and members.

While the financial service industry will continue to realize the effects of these changes, some trends should not be ignored as financial institutions continue to set (and reset) their priorities for 2021 and beyond. Below, Strategic Resource Management (SRM) offers three observations and follow-up recommendations.

1: Digital Investments Continue to Thrive

It is no secret digital investments paid off in a big way for those banks and credit unions with the foresight to have laid the groundwork before the pandemic. However, the task is far from complete. More and more institutions are finding that digital banking extends well beyond selecting online and mobile solution providers.

Customers and members now expect access to their finances 24/7, making features like single sign-on and biometric authentication key. Services such as predictive analytics to anticipate likely needs will play a growing role in the digital banking ecosystem, with open banking and API integration playing important roles in embedding such features into apps.

Additionally, there is a growing roster of financial institutions of all sizes joining Google's co-branded digital initiative, Google Pay-linked checking accounts, as well as using the co-branded Apple card. Following suit, more financial institutions will form fintech partnerships to leverage and neutralize big tech's incursion into the marketplace – something that will ultimately help banks and credit unions better scale and compete in the market.

2: The Evolving Branch

As consumers continue recalibrating their banking habits away from branches and towards digital channels, banks and credit unions will continue to factor these pandemic-related preferences in their budgets and strategic planning. Some institutions have already figured out how to operate more efficiently with less reliance on their physical footprints. For example, many have adopted "by appointment only" models for their brick-and-mortar locations, channeling most traditional transactional activities to the drive-through window and remote apps.

These trends do not imply that the branch will vanish entirely, however. Many are transforming their branches to be more of a service, sales, and advice center. Envision a "doctor's office" model for the branch of the future. Whether or not by appointment, consumers will visit less frequently but with more complex cases that require advanced consultation.

3: Contactless Payments - The Way of the Future

A year ago, "contactless" was an obscure term typically associated with the new generation of debit and credit cards. Despite the convenience of the "tap and go" approach, it wasn't until the pandemic hit that adoption of contactless payment methods began to rise significantly.

After March of 2020, heightened hygienic concerns drove a change in consumer payment behavior - consider how cash has now fallen out of favor, the new scrutiny about passing a plastic card between customer and clerk, or interacting with an unclean touch-screen handled by countless others. By the time the pandemic subsides, contactless payments will have become a habit for consumers, making this form of payment not likely to go by the wayside.

In addition to contactless payment adoption, card issuers will need to continue to cater to the Card Not Present (CNP) market or lose ground in share-of-wallet. As with contactless cards, consumers' concern for their health is driving a marked increase in CNP transactions. CNP levels are unlikely to drop as the convenience of home delivery and online shopping continue to be the default choice for many consumers.

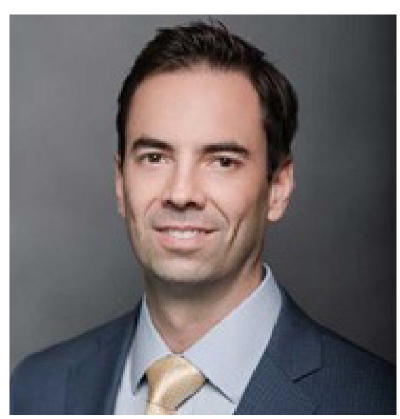
Adjusting to the Ongoing Economic Fluctuations

A return to the economy of late 2019 is unlikely for some time. Given this and what our experts have seen advising banks and credit unions across the country through the ongoing economic fluctuations, here are a few balance sheet strategies we would suggest:

- **Monitor trends in deposit activity. Many accounts are currently seeing strong in-flows, but this could reverse and requires ongoing attention;**
- **Assess client refinancing deals against their balance sheet capacity;**
- **Consider the influences of government stimulus funds on lending opportunities and the associated risks; and**
- **Pursue opportunities to reduce costs without impacting customer/member experience - focused negotiations with third-party vendors often provide a valuable source of such savings or increased non-interest revenue.**

While the industry has undoubtedly experienced large-scale changes this past year, it has shown an ability to adapt to new economic realities by investing in technology to strengthen efficiency and profitability. The financial institutions that will adapt best have preparations in place for future market fluctuations to enable them to survive and thrive against the changes to come.

Ben Mrva is an executive vice president and the head of financial institution sales and marketing for SRM (Strategic Resource Management), an independent firm that helps financial institutions identify cost savings and new revenue potential in their contractual relationships.



Ben Mrva, executive vice president at Strategic Resource Management, Inc.

Resell What?

Making Innovative Ideas a Reality Begins with the Right Embedded Financial Services Partner

By Chris Shepro-Stein, co-founder and chief of staff XFORMATIVE

A lot of businesses are stepping outside of their proficiency to try and bring big, innovative finance and payments ideas to life. However, most lack the capabilities to manage all front and back office operations successfully on their own. The problem is when legacy finance products offer "wildest dreams" promises of their functionality to solve such business needs but lack the flexible and nimble infrastructure necessary to scale and make it happen. This leaves businesses attempting to build or resell services when they should embed them.

Per a recent Forbes article, 2021 is the year embedded finance structures will break out, as more technology companies explore ways to augment their offerings with richer, stickier and more lucrative user-value propositions through the incorporation of financial services. But why embed versus resell? Reselling a product, on the surface, can seem like a great idea. It can help accelerate go to market time, but it also comes with limitations: Is your business opening its doors to build the resellers' assets and tether to its functionality, breadth and product roadmap?

An embedded financial services partner can act more like a utility and serve many functions that the business deems necessary, without being pigeon-holed. This is a huge benefit to product innovators, especially, who must have a pulse on market trends and ensure innovations align with their technology roadmap. The need for speed forces product decisions, designs and deployments to keep pace, but this can be hard when their strategy relies too heavily on another company as a result of reselling versus embedding financial services.

Here's the dichotomy: fast moving, sophisticated enterprises are rarely interested in ingesting an entire platform, not when they already have existing core features either built in house or through a partner. Such investments have largely been a waste of time and money, especially when a company only wants to make turnkey adjustments. That's the key difference between resellers where businesses must ingest their entire platform versus embedded financial services partners that take a modular approach to business. As customer expectations continue to evolve, having a partner that can configure to almost any use case will help these businesses keep pace with customer demands. In Lightyear Capital's Embedded Finance Revenue Forecast report, they predicted revenue gains from the embedded finance market would see a ten-fold increase from $22.5 billion in 2020, to $230 billion in 2025.

Then there is the pandemic, which has forced many businesses to fix things that have been broken for years, re-evaluate their offerings and determine where they can invest, cut costs and still have the greatest impact. They now realize choosing to embed the right financial services through a proven, pressure-tested partner is much better than reselling another company's product. In fact, fintechs can alleviate the pain of trying to bend their product vision to keep in line with their resellers product roadmap and limitations to embrace faster innovations and retain product control.

The timeline for this topic is further condensed as the economic environment calls for a sense of urgency. For instance, creating an emergency or crisis fund for employees impacted by the pandemic, natural disasters, or furloughs are timely and high priority needs, businesses able to pivot to meet changing circumstances will be rewarded. Being able to bring innovative ideas to life in a timely fashion requires technology that is modular to ensure expedited integrations and deployments as well as cloud-native to endure serverless scalability.

In fact, the most flexible and configurable fintech platforms have been born in the cloud. McKinsey & Company's 2019 Global Payments Report reinforces that applications and data typically stored on cloud-native platforms tend to allow for better flexibility, scalability, compliance and resilience. But keep in mind, there is a difference between true cloud-native architecture versus platforms that have migrated certain functionality to the cloud. Migrating previously monolithic systems to the cloud may enhance areas of performance or security, but it will not create the inherent flexibility that a cloud-native, serverless system offers.

Additionally, both traditional and neobanks are embracing their roles in enhancing embedded finance services to businesses and consumers, realizing the union leads to bottom line wins through enhanced adoption. These services enrich banks' profitability, customer stickiness and improve performance.

Though under tumultuous circumstances, it's refreshing to see that innovation and collaboration seem to be headed in the right direction. As the "next" normal demands businesses to read and react even faster than before to meet unforeseen challenges, they can surely count on the right technology partners to make those big, innovative ideas a reality.

Chris Shepro-Stein, co-founder and chief of staff of Xformative Payment Systems, a cloud-native issuer processor platform, architected with a unique suite of modular APIs that can be configured to almost any use case. Learn more at www.xformative.com

"Alexa: Pay My Power Bill" – Embeddable Banking the Next Frontier for Banking

By **Bhavin Turakhia, Founder & CEO** zeta

In the last three to four years, the rise of fintechs and neo banks has disrupted the way the banking industry functions. Challenger banks have proven that consumers want 24/7 access to online banking, and fintechs that offer specialized services have demonstrated that they can deliver niche products outside of a traditional bank. Although banks and credit unions are adapting to the sea of changes, new players have made significant headway and captured a significant chunk of the market. Banks no longer have monopoly over customer relationships.

Rapid digitization has seen a surge in demand for banking services to be available anywhere at any time. On the other hand, fintechs are struggling to scale up and turn the initial user base into a profitable business. While they have access to customers, they do not have the appropriate licenses to launch financial products like prepaid, checking, savings, credit and virtual accounts to power different use cases ranging from lending to gift cards to loyalty to refunds and expense management.

Enter, embeddable banking!

Through embeddable banking, banks and fintechs can collaborate to offer innovative financial products. Embeddable banking is the process of integrating financial services within a third party's software, eliminating the need for multiple platforms to complete a transaction. Common examples are payments services embedded within the Uber app to facilitate paying for services and linking a debit card to PayPal to enable card payments at any merchant that accepts PayPal.

Embeddable banking acts as a marketplace to aid fintechs to integrate banking and payment services into their software and interface. Additionally, embeddable banking enables banks of all sizes to add on digital banking products without the hassle of a core conversion that requires a massive expense and months to years of implementation to work seamlessly. Embeddable banking works as an add-on to current services that can be deployed in a short amount of time with minimal costs and oversight.

Why Embeddable Banking?

In essence, embeddable banking is the shift of banking from a product to a service. Consumers can choose their products on a pay-per-usage or subscription model, taking advantage of the flexible approach for banking services.

What is the benefit to banks? The reality is that fee and interest income is not enough for banks, especially in today's incredibly low-rate market. By expanding the avenues that consumers can interact with a bank, the institution is reaching to customers with banking services that can generate additional revenue and create more sticky relationships.

Through the utilization of APIs, businesses can have their own software perform financial operations. In addition to expediting a business' internal operations, embeddable banking increases customer satisfaction. Embeddable banking eliminates friction during the payment process, ultimately creating a seamless experience for consumers.

To facilitate the embedded banking services, a company can provide APIs and software development kits (SDK) that enable fintechs to embed financial products and services of one or more banks into their apps and experiences. It also enables financial institutions to provide APIs and SDKs to fintechs, neobanks, distributors and partners. This enables the bank or credit union to embed their partners' prepaid, credit, debit including all asset and liability products thus also helping the institution to increase their consumer base and profitability.

Embeddable banking also creates a marketplace for aggregating financial services products in widely used products. However, banking products will have to be fragmented into stand-alone services that can be added to an aggregator so that it is easier for consumers to adopt them. At the same time, they need to be aggregated at customer relationship level to render maximum value to the customers. This is where broad tech platforms, such as Amazon, Apple or Google may further enter the banking arena.

Seamless integration and improved user interface aside, embeddable banking eliminates the hassle of repetitive financial processes for customers. Embeddable banking makes it easier to adapt to the tsunami of changes banks face today without losing out on customer trust or satisfaction. It offers a one-stop solution for banks and fintechs to easily connect with each other and launch meaningful and innovative financial products.

Embeddable Banking for Customer-Centric Experience

Alongside high tech and adaptable offerings, embeddable banking also assists in providing customers a more hyper-personalized line of services. Banking used to be approached with a "one size fits all," mentality. However, a 16-year-old managing their part-time paycheck and expenses differs tremendously from a small business owner. As a result, banks and neobanks have learned that their services must be adaptable.

Banks are also utilizing their data rich environment to see what types of services would work best for each individual customer. Through the data, banks and neobanks can identify preferences for how individuals bank. For instance, if they prefer the digital channels vs. brick and mortar, what kinds of products they utilize like p2p, credit cards, checks, etc.

In addition, data and embeddable banking allows banks the opportunity to cross-sell services. For instance, if they see a customer is overdrafting or has a low balance often, they may see it would be an opportunity to sell them on a credit card or build a savings program. Same thing goes for if they notice they have looked into personal loans or mortgage loans, a bank has the opportunity to know which current offerings that would be relevant to them.

It is imperative for FIs to get on the path of embeddable banking to remain competitive and provide customer-centric banking.

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