BAI Banking Strategies
EXECUTIVE REPORT

The power of data: How banks and credit unions can put it to work

JULY 2022

BAI POWERING SMART DECISIONS.

In this issue

3 — **Data holds the key to banking personalization**
Digital banking has given financial institutions more information about their customers. The job now is to use it to create deeper connections.

6 — **Looking beyond the credit score**
Would-be lenders are increasingly relying on alternative sources of data to help them assess whether a thin-file customer is creditworthy.

9 — **Harnessing data to help the underbanked**
Today's technology enables financial services providers to better understand Americans outside the banking mainstream.

12 — **5 must-dos for banks to delight customers**
Using data in new and more efficient ways is the key to targeting the right markets and offering relevant products at the right time.

15 — **Fueling the data analytics engine**
Hidden within the piles of documents at banks and credit unions is a reservoir of insights that intelligent automation can bring to life.

18 — **Gaining an edge with a preemptive data strategy**
More effective use of information at their disposal can help community and regional banks deliver a personalized customer experience.

21 — **The many and varied benefits of digital IDV**
A robust identity verification program can unlock relevant insights for financial institutions and allow them to provide better service.

Data's growing role in building and nurturing relationships

BY TERRY BADGER, CFA
tbadger@bai.org

There's seemingly no end to the data that banks and credit unions collect about their customers. The trick is refining that vast stockpile of raw material into a valuable asset to drive deeper relationships and other business opportunities.

This can be a significant challenge for a variety of persistent reasons. Data silos are a major hurdle for banks seeking to develop personalized experiences across channels. Banks' data is often dirty, and making it usable requires time-consuming efforts. Putting together a long-term data strategy can also be difficult, as can scaling up successful test runs. And in today's ultracompetitive talent market, finding (and keeping) people who have the necessary data-compilation and analytical skills can be challenging as well.

In this month's BAI Executive Report, we examine the growing importance of data for banking institutions and how they can better use the information already in their possession as they vie with each other and against fintech upstarts built on leveraging data effectively.

Our lead story, by contributing writer Dawn Wotapka, examines how banks and credit unions are using data to derive a competitive advantage across the full customer journey. The strong growth of digital self-service in banking is generating copious amounts of data that can be analyzed to yield deep insights on customers' behavior and needs at different stages of their lives.

"To genuinely stand out, banks must think beyond the build-it-and-they-will-come mentality," one industry expert tells Wotapka. Banks have long built and nurtured relationships largely through transactions, but many customers today (particularly younger ones) are seeking an emotional connection. Data can help banks deliver on that.

Broader use of data is also viewed as key to bringing the underbanked into the financial system. Contributing writer Katie Kuehner-Hebert explores the rise of "alternative data," which includes indicators like spending habits and bill payment history, and its growing role in promoting more inclusive access to credit. She speaks with several bankers to learn about how they combine this type of data with traditional data sources to make lending decisions for individuals and small businesses.

While alternative data is lauded for its ability to expand access to the estimated 100 million Americans who live outside the banking mainstream, it also has the potential to reinforce existing barriers to credit when data is poor quality or a bank's algorithms are improperly calibrated. "Having a good data-governance process is important for all types of data used," one banker tells Kuehner-Hebert. "The same practices should be applied to alternative data."

Complementing Kuehner-Hebert's overview article is my conversation with Lisa Fischer from credit-focused fintech Mission Lane, which relies heavily on alternative data when assessing the credit risk of applicants. Fischer says technology advances make it more feasible for banking institutions to compile and analyze full data sets—instead of depending on data sampling—to gain a deeper understanding of would-be borrowers.

Also in this month's Executive Report:

- **Five must-dos for banks to delight customers:** Nick Beil from Tableau at Salesforce compiles a compact but powerful action list for banks and credit unions seeking to develop data-driven strategies for deepening their relationships with customers. He writes that the steep upswing in digital adoption during the pandemic is generating more data for institutions and, at the same time, pushing them to employ this data in new and innovative ways.
- **Fueling the data analytics engine:** Joe Labbe from KnowledgeLake and Bob Browne from Cedar Creek Consulting team up to discuss how financial institutions can use intelligent automation to efficiently extract value from the data troves they possess. In addition to providing many customer-focused benefits, they write, this technology can contribute to a stronger compliance-reporting platform.
- **Gaining an edge with a preemptive data strategy:** Ajay John from Apiture tells us that community and regional banks can deliver a more personalized customer experience by using the information at their disposal more effectively. In his article, he discusses how institutions are advancing beyond the commonly used dashboard approach and embracing data intelligence solutions with greater autonomy and flexibility.
- **The many and varied benefits of digital IDV:** Christina Luttrell from GBG Americas writes that a robust identity verification program can unlock insights for financial institutions and allow them to provide better, safer service and in turn reap higher revenue. She says the combination of technology and human ingenuity is key to making sense of customer data and putting it to work.

We hope you find value in this Executive Report focused on data and analytics. Feel free to email me to let me know what you think.

Terry Badger, CFA, is the managing editor at BAI.

Data holds the key to banking personalization

Digital banking has given financial institutions more information about their customers. The job now is to use it to create deeper connections.

BY DAWN WOTAPKA

Banking relationships used to be personal and local. Now, they're increasingly digital and global.

Habits have shifted, "with customers expecting frictionless and instant access to their banking needs," according to a new report on banking trends from Amazon. "Banking customers have prioritized digital self-service via mobile and web over branch or phone banking."

It may seem surprising that Amazon—a company best known for its disruption of e-commerce—is publishing reports about the state of banking. But Amazon is also a big player in data, which may come to be seen as the biggest force changing the industry since local banks became part of global powerhouses.

STEVE WILSON
BANKDASH.COM

Amazon's conclusions line up with findings from recent BAI research showing that banking customers are increasingly reliant on mobile and online channels. Nearly half of those surveyed say that their bank needs to provide a better mobile experience, and that view rises sharply among the younger millennial and Gen Z demographics.

Data is quickly becoming a key competitive advantage for banks and credit unions. To be sure, banks have long used data in credit-risk and pricing decisions, but they are increasingly using it in all parts of the customer journey and customer life cycle management. An institution's success depends on its ability to understand—and predict—what customers want and need, necessitating the use of data in more areas than ever.

Banks "can sift through transaction data to uncover spending trends, thanks to machine-learning technologies," says Steve Wilson, a finance expert and founder of Bankdash.com, an industry website. "They make use of bank transaction data, credit behavior data and location data, and correlate it with a set of suggestions and advice."

> **"[Machine learning technologies] make use of bank transaction data, credit behavior data and location data, and correlate it with a set of suggestions and advice."**
>
> **STEVE WILSON**
> BANKDASH.COM

MATT TENGWALL
VERINT SYSTEMS INC.

“By studying customer data, banks can view various indicators—like customer engagement with different products or spending habits—to predict important life events and design offers or products for them in the right time frame.”

MATT TENGWALL
VERINT SYSTEMS INC.

According to Matt Tengwall, general manager of Verint Systems Inc., self-service is one of the fastest-growing trends in banking customer experience as mobile banking apps become a must-have for most customers. These days, the information that banks collect from these apps is “used in conjunction with machine-learning programs that allow banks to extract valuable information about their customers,” he said.

Financial services is a life-cycle-based sector, meaning that banks need to understand which products and services will benefit customers at each stage in their lives. Offering college students a free checking account doesn’t generate massive profits, but that student will likely go on to buy a house or two, in addition to accessing other services. Timing becomes key: You want to be top of mind—and stand out from a sea of competitors—when that homebuying time comes.

“Clients typically don’t make major monetary decisions when their banks want them to but when significant moments in life happen,” Tengwall says. “By studying customer data, banks can view various indicators—like customer engagement with different products or spending habits—to predict important life events and design offers or products for them in the right time frame. Essentially, it is all about customizing the customer’s experience and is paramount for financial institutions to implement to keep high brand engagement.”

Leaders are racing to figure out how to get this right, but they’re also competing with nimble fintechs unencumbered by legacy assets.

“To genuinely stand out, banks must think beyond the build-it-and-they-will-come mentality,” Wilson says. “Companies must first learn about their consumers’ wants and requirements, then strategically create new technologies and products with the customer at the forefront of every contact. For example, a bank might use data to determine which consumers prefer to use their mobile banking app over in-person branches, and then make decisions based on that important knowledge, transforming data into an asset.”

In a sense, banks have to find a way to reinvent for a digital world the relationships that community banks offered years ago, and they have to move past transactional thinking.

“While many other industries have been able to establish an emotional connection with customers

Consider the open-banking model. With this model, banks can expand their ecosystems and offer a wider range of services to customers that move toward a full-service banking experience; tie products to life events at the right time; and act on consumer banking trends by using a targeted approach and acting quickly.

DOUNIA SENAWI
DELOITTE

through digital channels, many banks have struggled to follow suit," notes Deloitte principal Dounia Senawi.

The World Retail Banking Report 2022 is equally grim: Among its findings are that 95 percent of executives believe that banks rely on outdated legacy systems and technological capabilities that are "unable to fully optimize their data for customer-centric growth strategies."

According to Amazon's report, banks are using three approaches to establish a reinforcement loop while improving the customer experience:

- **Digital customer engagement and service:** *Banks have redesigned the customer experience around the customer journey. The focus is on self-service, with intuitive in-app workflows that allow customers to initiate and change payments, dispute transactions and adjust account information.*
- **Contextualized or embedded finance:** *Banks are building embedded finance solutions that allow them to partner with other organizations to build finance and banking services into traditional customer journeys.*
- **Hyper-personalized banking:** *Banks are using the data assets that they collect across the customer relationship to better understand customers, including what they might need next and how best to serve them.*

For those with more work to do, there's no need to feel overwhelmed. Deloitte's Senawi offers

relatively simple advice: Consider the open-banking model. With this model, banks can expand their ecosystems and offer a wider range of services to customers that move toward a full-service banking experience; tie products to life events at the right time; and act on consumer banking trends by using a targeted approach and acting quickly. "Don't waste time trying to get the 'perfect idea,'" she advises. "It doesn't exist."

Data may be key to the industry's future, but using it effectively requires leaders to recall the industry's past—when relationships and products felt personal.

"Financial institutions are operating in a complicated, competitive and compliance-driven world," Wilson says, "where rapid and data-driven choices are critical for both effective development and risk mitigation."

Dawn Wotapka is a BAI contributing writer.

Looking beyond the credit score

Would-be lenders are increasingly relying on alternative sources of data to help them assess whether a thin-file customer is creditworthy.

BY KATIE KUEHNER-HEBERT

More and more banks are using alternative data for a host of purposes—granting credit to individuals with no credit history, opening accounts, expanding relationships with small businesses, target marketing, fraud detection and more.

The $27.2 billion-asset First National Bank of Omaha in Nebraska uses mobile phone information, utility payment records and other nontraditional data "that can help establish positive payment behaviors" when underwriting loans, says Marc Butterfield, senior vice president, innovation and disruption. This enables the bank to provide "more inclusive credit decisioning" by uncovering creditworthy customers who don't have access to credit via the traditional scoring methods.

"Machine learning and AI help create nonlinear models to maximize positive credit decisions," Butterfield says. "They don't necessarily clash with

traditional data sources—rather, the alternative data is used to augment and enhance the decision to maximize the desired outcome."

The bank also uses alternative data for customer identification and digital identity verification, as well as for "better informed customer insights for better spending and saving habits," he says.

Butterfield notes that banks need to be careful as they go down this road. Inconsistent use of alternative data and use of poor-quality data sources can lead to suboptimal results and a lack of explainability and transparency about why a person was denied credit.

MARC BUTTERFIELD
FIRST NATIONAL BANK OF OMAHA

"Having a good, sound data-governance process is important for all types of data used," he says. "The same practices should be applied to alternative data."

The $293 million-asset Spring Bank in New York City offers affordable, small-dollar consumer loans of up to $3,500 to people whose credit histories are limited, nonexistent or bad, says Melanie Stern, director of consumer lending.

"We learned over a period of time that the best way to do consumer lending efficiently was to partner with local employers, offering loans to their workers and using their verification of employment and income as a surrogate for a credit score," Stern says. "Currently we have 38 employer partners, and we've never had a problem—default rates are low."

Upon loan approval, borrowers are required to open a savings account and set up loan payments as direct deposits from their employer's payroll, she says. Borrowers can also use the required account to build savings, particularly after they've repaid their loans. Some workers then decide to put all of their direct-deposited pay into either their savings account or a new checking account.

"We pitch this program to employers as a benefit for their workers, using existing research about how financial stress tends to impact job performance and absenteeism," Stern says. "A lot of employers tell us that we've done a big favor for them because they were able to stop giving payroll advances or lending money to their workers. And workers no longer borrow from their retirement savings."

For potential customers who want to open an account but don't have a state-issued driver's license or other photo ID, Spring Bank accepts the New York City-issued IDNYC.

MELANIE STERN
SPRING BANK

"The nice thing for us is that the city does the legwork to determine eligibility, and we're confident in their process," Stern says. "Large banks say you can't do this under KYC (know your customer) rules, but that's not true—our regulators understand this, and they're glad we're doing it."

On the small-business side, Spring Bank doesn't use "a cookie-cutter approach," Stern says. Instead, the bank's loan officers take the time to interact one on one with prospective borrowers, "getting to know who they are and what they are about, as every borrower's situation is different."

Other types of alternative data that banks can leverage to grant credit to small businesses

> **"We learned over a period of time that the best way to do consumer lending efficiently was to partner with local employers, offering loans to their workers and using their verification of employment and income as a surrogate for a credit score."**
>
> **MELANIE STERN**
> SPRING BANK

include their inventory and accounts receivable information, as well as tax filings and employment status, "not to mention looking at macroeconomic factors that could impact their business," says Isio Nelson, head of client engagement in BAI's research division. "There's plenty of public information out there, so it's actually easy to use alternative data for commercial customers."

Alternative data that can be useful for target marketing includes household income, location-based data, hobbies and other personal interests. "There are many different ways to develop hyper-personalized messages that will resonate better with that consumer," Nelson says. On the fraud side, banks are now using many different signals to detect whether a fraudster is applying for credit or interacting with an existing account.

According to a report by Burnmark and CUBE, alternative data enables analysis of digital behavior patterns for a wide range of banking functions. Examples include geolocation data for consumer purchase behavior; drones for virtual site visits to approve and monitor commercial loans; web scraping for lead generation and market analysis; and data from social media sites, super apps and mobile phone use for credit scoring.

"Alternative data will see increased adoption by financial players in this decade," according to the report. "However, it will also create a new set of challenges on the regulatory side as AI-driven, alternative data-based business models will have to adhere to data privacy issues, consumer data protection regulations and market abuse laws that will necessitate raising the bar for the compliance team."

A group of leaders from banking, business, technology and national civil rights organizations are exploring credit-scoring models that leverage alternative data. The group, part of Project REACh (Roundtable for Economic Access and Change), was convened by the U.S. Treasury's Office of the Comptroller of the Currency to reduce specific barriers that prevent "full, equal and fair participation in the nation's economy."

Several financial institutions within the group have started to share data in a pilot program testing the predictability of alternative scoring models in the underwriting of small-dollar loan products and unsecured credit cards, says Andrew Moss, OCC's director for minority outreach.

"Alternative data will see increased adoption by financial players in this decade. However, it will also create a new set of challenges on the regulatory side as AI-driven, alternative data-based business models will have to adhere to data privacy issues, consumer data protection regulations and market abuse laws that will necessitate raising the bar for the compliance team."

BURNMARK AND CUBE DATA REPORT

ANDREW MOSS
OFFICE OF THE COMPTROLLER OF THE CURRENCY

"What we've heard so far from them is that this is something that could be really beneficial with enticing opportunities," Moss says. "The OCC's role as convenor of this group is to provide guardrails so there aren't any issues that could trigger fair-access or fair-lending matters. We do not endorse any particular model—our guidance is always focused on ensuring that any type of modeling is supported by verifiable data and is reliable."

Katie Kuehner-Hebert is a BAI contributing writer.

Harnessing data to help the underbanked

Today's technology enables financial services providers to better understand Americans outside the banking mainstream.

BY TERRY BADGER, CFA

A vast number of Americans fall into the category of the "underbanked"—those who are just starting out on their credit journey or who've had some sort of credit-related struggle. By some estimates, up to 100 million people fit that description. While they may not score high with the traditional credit bureaus, data that measures spending habits and bill payment history may offer insight into their true credit risk.

Banking institutions have access to the kind of data needed to create alternative credit scores, and advances in technology can help harness that data. Where once banks could only sample data, they can now process and analyze entire data sets

to yield a more complete understanding of any individual borrower.

BAI recently spoke to Lisa Fischer, chief growth and lending officer at credit-focused fintech Mission Lane, about how data can be used to provide more financial access to the underbanked.

The interview has been edited for length and clarity.

BAI: Mission Lane is a purpose-driven organization, and I would guess that one of those purposes is trying to get to "yes" for a credit applicant, including those relying on alternative data. But you're also a business, so how do you think about your risks and managing those risks?

Fischer: The goal is absolutely to get to "yes" for all customers. But it's to get to "yes" for a product that meets the needs of the customer and that the customer can afford, because it is in both of our interests for those things to come together. And that's how you best manage your risks outside of fraudulent activity—to really meet the needs of customers with a product they can afford. They'll want to use the product, and it's going to serve a great purpose in getting them to financial freedom. By staying true to that goal, you manage your risks in that way.

LISA FISCHER
MISSION LANE

> "The goal is absolutely to get to 'yes' for all customers. But it's to get to 'yes' for a product that meets the needs of the customer and that the customer can afford, because it is in both of our interests for those things to come together."
>
> **LISA FISCHER**
> MISSION LANE

How do you at Mission Lane think about the data that goes into the traditional credit score, and how do you use it in your work?

It's the foundation for the most depth of information for banking and lending. But it's just one piece. And what we've grown to understand is it's not enough to understand the nuances of a person. It's not enough to have that one line or that three-digit number and the information associated with it to know everything about a customer so that you can understand their needs and deliver the right products to them.

What kinds of data are we talking about that would-be lenders don't have that they should have?

It's less about any individual data element and more about how they work together and how you can understand a population in substantially more detail. You need to look beyond the traditional data sources and look holistically at the customer. How do you create a full picture of the customer? If you try to say, "Oh, it's these three elements," then you're looking much too narrowly. But if I were to mention one tool, it would be broad testing so that you can gain information on how people are going to perform with you on the various types of products you are offering so that you can have the most complete view of who the customer is.

Banking institutions have vast repositories of data about their customers, but we often hear stories about how challenging it is to leverage that data for business purposes. Tell us more about the process of harnessing data and getting past those obstacles that banks are dealing with now.

About 10 or 15 years ago, we actually didn't have the ability to do that because the processing time to get through the information was substantially too long. But with the advances in technology, you now are able to process so much more information in a much shorter period of time. You have the ability to add much more information about a customer so that you can understand them better. Back when I started my career in this area, you had to sample data. There was no possibility of using whole data sets, and you would have to pick and choose what should go into it. Now you have the ability, with machine learning and AI, to look across all of the data and look at it holistically.

While AI and machine learning can help remove barriers to credit access, the technology also has the potential to reinforce those barriers. How do you ensure that bringing in and analyzing more and more varied data will lead to fairer decision-making?

This is something we think about regularly, and the goal is to have the inputs be as broad and as unbiased as possible. Therefore, we do a thing we refer to as "universe testing"—testing across the entire universe to remove any potential biases that go into the model development sample. And then, on the production side, you must have rigorous monitoring controls in your production environment. You have to be looking at what is going on with the different variables and their transformations as you are using them in production, and you have to understand the choices the model is making and how it is affecting various different populations.

"Back when I started my career in this area, you had to sample data. There was no possibility of using whole data sets, and you would have to pick and choose what should go into it. Now you have the ability, with machine learning and AI, to look across all of the data and look at it holistically."

LISA FISCHER
MISSION LANE

The underbanked category includes low-income families, young adults, older people, recent immigrants and more. How do you sort out the categories of the underbanked in terms of the data needed to be able to reach each of these discrete segments? Is there such a thing as personalization in the data as it's analyzed and applied?

I don't know if I would refer to it as personalization, but I would refer to it as individualizing. We don't look at people in categories, because the way you can actually get to a better place with customers is by providing products that will meet their individual needs. In the categories you refer to, there's a wide range of economic statuses and ways of interacting with products. If you stay at the segmentation level, you do not understand those nuances, and therefore you won't be as refined at meeting their needs. It's really about understanding the individuals, not the category.

Terry Badger, CFA, is the managing editor at BAI.

5 must-dos for banks to delight customers

Using data in new and more efficient ways is the key to targeting the right markets and offering relevant products at the right time.

BY NICK BEIL

The word "delightful" is not typically synonymous with banking. But digital tools can allow banks to support and reassure customers with seamless and personalized connections.

Data is the key to ensuring curated and personal holistic experiences. Whether your customers visit branch locations or use mobile apps, it is crucial to understand and anticipate their needs, leaving them feeling supported and empowered. To achieve this, you need to harness data and segment customers in new and innovative ways, target the right markets and offer relevant products at the right time. Striking the right balance among these priorities will drive new opportunities, generate additional revenue streams and increase the value of every customer.

Customers' digital adoption has accelerated since March 2020, and banks need to be efficient while handling an influx of virtual interactions that use old technology filled with vast amounts of dirty data and no way to make sense of it.

Robust, near-real-time data analysis can help leaders determine which customer segments are most likely to buy a certain product and when; where to embed cross-selling activities in the customer journey; and what proactive steps can prevent customer churn.

Here's a game plan.

Accelerate insightful decision-making: Bank leaders understand that gathering customer information from every touch point—websites, mobile apps, branches, call centers and even social media—helps them improve the customer experience and allows them to achieve the ultimate goal: competitive advantage.

Leaders must disseminate data to the entire organization to make strategic decisions. By liberating data from siloed legacy systems, a data-driven bank can leverage all of its data to predict outcomes, see patterns and improve processes and customer service. Robust, near-real-time data analysis can help leaders determine which customer segments are most likely to buy a certain product and when; where to embed cross-selling activities in the customer journey; and what proactive steps can prevent customer churn.

Knowing the potential of data and adopting a data-first strategy are the first steps in becoming a data-driven bank. As this initiative matures, you'll begin to see that the ability to apply data-driven insights to decision-making is not only smart business—it's a competitive advantage.

Truly understand your customer: When banks actively leverage data to discover customers' wants and needs, they also provide value and personalization that builds their credibility as trusted advisers, which leads to increased customer loyalty and new opportunities.

Bank customers want a seamless, integrated, omnichannel and harmonious experience; if they are dissatisfied, they will look for other options. Because mobile and digital banking are increasingly important channels for all customers, banks must be prepared to deliver a variety of relevant, personalized services.

Both financial and nonfinancial data are necessary to build these relevant experiences. Financial data can provide an aggregated view of a customer's financial position, including credit balances, loan status, deposits/withdrawals and investments. Just as important, banks can leverage nonfinancial data to offer access to third-party services and applications via their banking portal, which can improve customer acquisition and retention.

Because mobile and digital banking are increasingly important channels for all customers, banks must be prepared to deliver a variety of relevant, personalized services.

Map the customer journey: Delivering a superior customer experience depends on a deep understanding and mapping of the customer journey. From a visit with the branch loan officer to an app-enabled digital deposit, every interaction must be tracked. Mapping the journey requires actionable insights that are only possible with data analytics.

Viewing these connections through dynamic dashboards and visualizations makes it easier to identify gaps and correct any misalignment between channels. Mapping also validates whether customer experience strategy is aligning with business KPIs. In a challenging marketplace, understanding how customers are engaging with your brand will help determine where profitability can be improved.

How can data insight build a better customer journey? Take the sensitive area of collections. A one-size-fits-all approach to collections can put customer lifetime value at risk. A better alternative is to use data-driven insights to segment customers and develop repayment plans appropriate for the situation—for example, job loss or a mistaken late payment. A personalized approach makes it more likely that customers will meet their obligations and that the bank in turn will earn long-term loyalty.

Take a holistic approach: As we pivot into the next normal, it's even more important to focus on the entire customer journey. Every touch point should offer clear communication, transparency and simplicity.

Knowing how to prevent customer attrition provides another opportunity to grow that customer's business. Having robust customer insights and knowing how to use them is an essential part of being a data-driven bank. But as we've seen,

innovation is a pain point for banks of all sizes, so it's not surprising that many retail banks lack a formal customer experience strategy.

Once your organization is able to deliver on this strategic vision, it will be easier to maximize efficiencies and determine whether the "clicks" or the "bricks" in the customer journey require more attention.

Reimagine the bank branch: Despite the rise of digital channels, more than half of bank customers in the U.S. still prefer to do their banking at a branch. Customers are highly satisfied with the service they receive from their mobile apps, websites and chat experiences, but only branches have achieved an eye-opening 79% first-touch success rate.

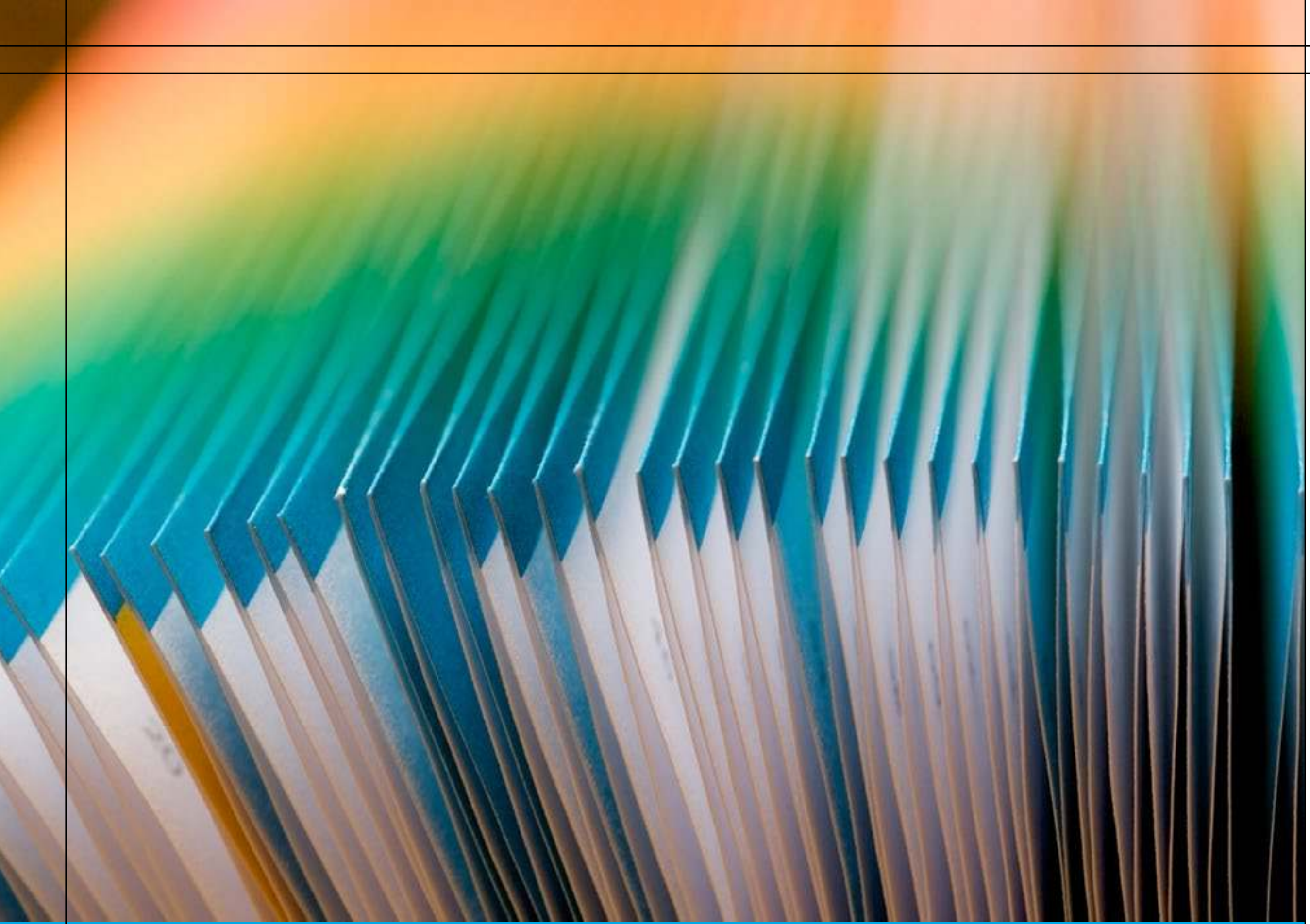
Building on this success, a new type of branch is emerging that is designed to be an integral part of customer experience and consistent across channels. Data, data analytics and visualization play a central role in this new model.

Traditional data analyses typically involve a cycle of pulling data on a predetermined schedule and applying algorithms to produce predictive and prescriptive analytics. But in the era of big data and advanced analytics, the game has changed. Using advanced tools and technologies, banks can build robust, near-real-time analyses across a variety of data types, no matter where the data resides.

By using real-time data and analytics across marketing channels, banks can track branch and regional performance across the entire enterprise. With a holistic view of bank activity, it's faster and easier to delight existing customers with successful cross-selling opportunities that map the right products and present the next digital experiences that customers want.

For banks, using data in new and more efficient ways is critical to the future. They need to unlock data and break it out of silos. They need to analyze that data and use it to make smart decisions that empower employees and improve customer experience. Banks that achieve these goals will not only survive but thrive in this increasingly digital world filled with nimble competitors.

Nick Beil is vice president, product management, Tableau at Salesforce.



Fueling the data analytics engine

Hidden within the piles of documents at banks and credit unions is a reservoir of insights that intelligent automation can bring to life.

BY JOE LABBE AND BOB BROWNE

The entire banking industry is in a state of tectonic flux, the kind of industry reset that probably hasn't been seen since the Great Depression. This change is driven by multiple forces combining to create unprecedented challenges for executive management and boards of directors.

These challenges include:

» *Declining or static net income*

» *Rising interest rates*

» *Increasing regulatory compliance requirements*

» *Aging legacy systems that impede use of emerging technologies*

» *Rising costs for hiring and retaining employees*

» *Branch closings*

» *Changing customer demographics*

A financial institution's ability to navigate these business challenges will be the difference between institutional life or death. Because FIs are largely unable to control earnings issues related to interest rates, they must focus on the issues they can control: labor costs, facilities management, IT and marketing, to name the big ones.

To capitalize on their control of these expenses, FIs must optimize the ROI of each dollar spent in these areas. This requires a commitment to optimizing processes, which in turn requires collecting and analyzing relevant information.

Most FIs collect the minimum amount of information needed to facilitate a given transaction while keeping regulators at bay. They do not operate this way out of choice. Rather, it's a function of the time and effort it traditionally takes to gather, collate and interpret the right information and draw insights.

The principal source of this information gathering is, of course, documents. Financial institutions transact in documents just as much as they do in capital. Documents provide the very basis of

Most FIs collect the minimum amount of information needed to facilitate a given transaction while keeping regulators at bay. They do not operate this way out of choice.

financial transactions and the flow of money, which is why bank regulators put such an emphasis on having them in order.

The problem is that the task of gathering documents, extracting valuable information and putting it to work is a manually intensive effort requiring the attention of a dwindling resource: bank employees. And for organizations with adequate resources, generating insights means dredging for information buried deep within a sea of unstructured documents strewn throughout the enterprise—a task that everyday employees aren't usually suited for.

So how do we turn on the spigot of a sustained and deeper flow of information for data-driven insights? The answer has two parts: planning and technology.

Start by defining objectives: What is the bank trying to achieve, and what does it need to know to be successful? Is the bank hoping to increase transparency in its communications with customers through the channels they prefer? Is it looking to achieve a 360-degree view of the customer and enhance the ability to cross-sell and upsell? Maybe the bank wants to facilitate partnerships and integrations to enable faster expansion of service offerings. Or maybe it just wants to make the next audit less stressful.

Once the bank knows what it wants to achieve, it can determine the kinds of information it needs to collect, create forms to reliably collect data, and establish processes and systems to make that information actionable.

Then put automation to work: FIs will become more data-driven not by gathering more data but by tapping the data trapped in the mountains of documents they already have.

At the heart of every successful data-driven organization is an intelligent automation service layer. This automation layer performs a consistent, reliable set of actions for all documents that flow into the organization's bloodstream:

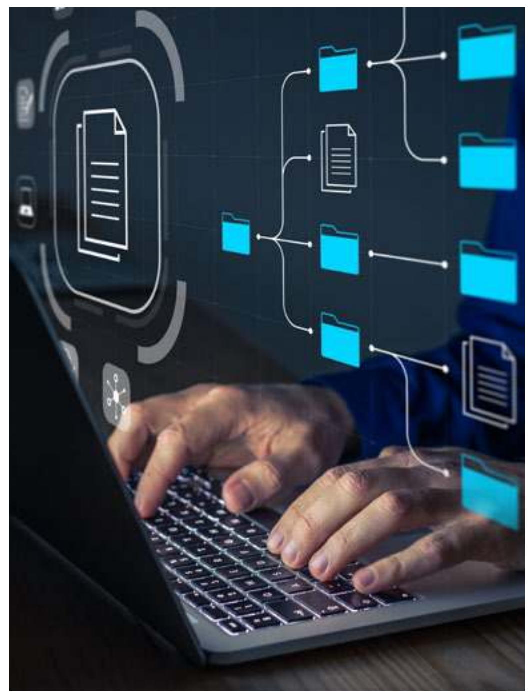
- *Accepting documents from any source and in any form*
- *Classifying documents (discerning which transactions or objectives they relate to)*
- *Extracting the specific data sought*
- *Flowing the document and extracted data to any downstream person, process or system that needs them*

This is the layer that standardizes the way an organization collects, rationalizes and distributes information. This is how FIs liberate the data bottled up in documents—by transforming it into a free flow of relevant information to the people and systems that need it, at the precise time they need it.

For most FIs, merely getting this far would provide a wellspring of benefits in terms of serving customers more effectively, enabling more straight-through processing, relieving employees of most mundane tasks and improving compliance.

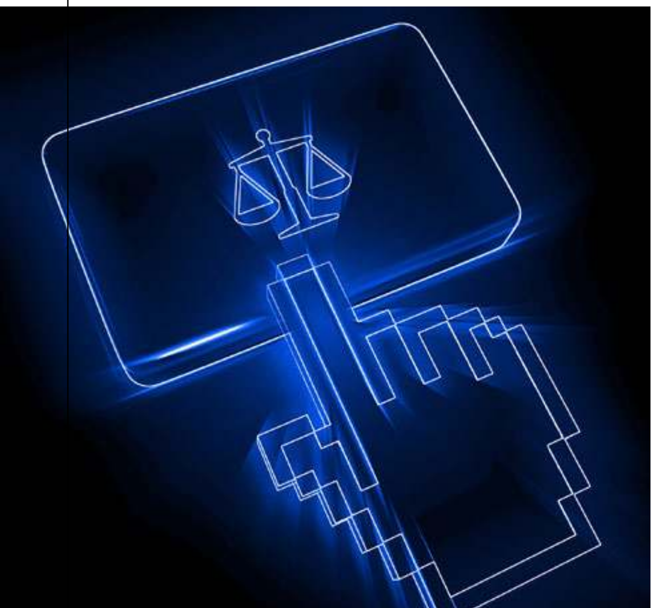
Once the bank knows what it wants to achieve, it can determine the kinds of information it needs to collect, create forms to reliably collect data, and establish processes and systems to make that information actionable.

However, taking it only this far would be a lost opportunity. Now that the information is embedded within the analytical systems of the institution, it is no longer hiding within the confines of an unstructured document. Instead, it's readily available for analysis—and it can be used to track a variety of metrics, including:



- *Average time to close for lending transactions*
- *Cost per origination*
- *New account setup error rates*
- *Transaction turnaround times*
- *Onboarding and abandonment rates*
- *Pull-through rates*

Bear in mind that the move toward becoming data-driven involves more than a one-time investment in technology. A one-time investment will give you lots of data, but little will improve. Instead, the entire organization needs to adopt a data-driven mindset. The institution must also



Becoming a data-centric organization and implementing the intelligent automation services described above will put your institution in a much better position to not only implement policies and procedures that improve compliance but also provide a much stronger reporting platform to prove compliance.

have a commitment to creating models for success, collecting what is needed, performing the analysis and maintaining the discipline to modify the models as goals shift. Don't use data to fight the last war.

Coming back around to compliance, the final revisions to Section 1071 of the Dodd-Frank Act are an increasing focus of attention. Most community banks and credit unions are concerned that new regulatory requirements, especially those that involve document collection and retention, will drive up underwriting costs and force smaller FIs out of the very markets the legislation was designed to help.

Becoming a data-centric organization and implementing the intelligent automation services described above will put your institution in a much better position to not only implement policies and procedures that improve compliance but also provide a much stronger reporting platform to prove compliance.

Over the past decade, FIs have managed to survive despite playing by the old rules. However, the road ahead presents challenges unprecedented in our industry, and the old rules are fast becoming obsolete. The best defense banks have is to become data-driven institutions that are nimble enough to innovate while doing more with less. This can only be accomplished by automating everyday document processes and putting more of your information to work.

Joe Labbe is vice president and managing director at KnowledgeLake. Bob Browne is president and CEO of Cedar Creek Consulting Inc.

Gaining an edge with a preemptive data strategy

More effective use of information at their disposal can help community and regional banks deliver a personalized customer experience.

BY AJAY JOHN

As modern technology applications become increasingly sophisticated, they create heightened expectations from consumers. In fact, 71% of consumers expect companies to provide personalized interactions, and the vast majority get frustrated when they don't, according to a 2021 McKinsey & Company report.

Consumers are also more amenable to data collection if the business gives them something in exchange, typically in the form of collected data being used for better, personalized experiences.

Community and regional financial institutions have often lagged behind other industries in their efforts to collect and use data. But even as they recognize the need to build a data strategy to attract and retain customers, they also face headwinds from big banks with greater development resources and from technology companies hoping to fill the data void.

You may not have the same resources as a large bank, but there are ways to optimize the power of the information you have at your disposal. In today's competitive environment, it's critical to determine how to leverage data to improve the customer experience with insights such as engagement analytics, spending patterns and benchmark comparisons with your competitors.

However robust or limited your data intelligence capacities, developing a strategy is crucial to your growth and your ability to compete in the marketplace. According to McKinsey, companies that excel at personalization generate 40% more revenue than companies that are just average. In short, data investments pay off.

Solutions currently exist that feature dashboards with plenty of data, yet these solutions fall short in terms of making data actionable or easily consumable. Offered by nonbank vendors, these solutions rely on financial institutions or digital-banking providers to source their data. This limits their insights to customer transaction data and demographics.

Digital-banking providers have access to more robust financial data points—such as payments data and information about customer interactions online and via mobile apps—than do data technology firms, enabling them to provide a more complete view of a customer's financial data set.

Digital-banking providers have access to more robust financial data points—such as payments data and information about customer interactions online and via mobile apps—than do data technology firms, enabling them to provide a more complete view of a customer's financial data set.

As the market for data solutions matures, technology is moving beyond today's dashboards and insight analysis to more robust data intelligence solutions with flexible, autonomous features. These features include:

A portal to discover answers to important questions about everything from operations to customer experience, while also providing the guidance and tools needed to act on these insights. For example, you can probe why customers aren't using certain heavily advertised features and use those findings to target specific customers with tailored messaging in the future.

A platform with direct access to key data sets that allows institutions to connect custom data and build their own insights, dashboards and reports. This should not be a technical tool for developers but rather a visual tool that provides nontechnical individuals with a simple drag-and-drop interface. As a result, you can explore unique questions, such as your institution's exposure to a certain industry via your business customers. You can also use a visual report builder, complete with preexisting data sets, to design a report the way you want to see it.

A marketplace that will allow you to extend the depth of data analysis by bringing in data from various sources, including other business or marketing tools, external data providers or simple downstream applications that use the data portal as a source. For example, you could connect the data portal to Autobooks to enrich your transaction data, then leverage post-analysis insights to support marketing efforts.

Access to event feeds that can help you build advanced process automations. Essentially, this results in a feed of events originating from customer actions, changes in key metrics or market events that can be harnessed as a trigger in an automation flow to initiate an action. An example might be large-scale money movement by one of your top customers.

User-facing analytics solutions that can enhance your digital banking platform with personalized interfaces and intelligent, analytics-driven features

to build a more intuitive experience for customers. For example, business customers could be shown key performance metrics relevant to their operations, accompanied by guided goals and cashflow projections.

To jump-start strategy discussions at your institution, first evaluate available internal resources and expertise, and determine the degree of autonomy you wish to have over your data intelligence capabilities.

Typically, only the largest banks choose to create their own data solutions. Although you gain autonomy with this approach, you take on additional tasks to cleanse and warehouse data, not to mention the need to build out dashboards and reporting tools. This proposal is both costly and resource intensive.

Another option is to partner with a third-party data technology provider, although few of today's data technology companies offer insightful dashboards and analysis. While they can analyze transaction data and customer demographics to derive insights, their interfaces typically don't allow a deeper dive into financial data. What's more, these nonbank companies depend on a financial institution or fintech to source the data, which gives you an incomplete picture of your customers.

Financial institutions can benefit from a solution that strikes a balance between these alternatives—partnering with a digital-banking provider that provides innovative back-end data technology as well as a robust set of financial data to feed insights. This approach offers the ability to create your own analysis and dashboards while relegating the data mining and maintenance to a trusted partner.

A good data strategy will help you recognize what your customers want and allow you to act quickly on those insights. When committing to developing a data strategy, you can set yourself apart from your competitors by delivering a personalized customer experience—one that 71% of consumers are apparently expecting.

Ajay John is product manager, data intelligence at Apiture.

The many and varied benefits of digital IDV

A robust identity verification program can unlock relevant insights for financial institutions and allow them to provide better service.

BY CHRISTINA LUTTRELL

Today's consumers expect fast, convenient digital experiences. Financial institutions face unrelenting pressure to deliver an onboarding experience that builds trust at make-or-break moments in the customer relationship.

A robust identity verification program can provide banks and credit unions with secure access to identity data to deliver the digital banking experiences customers demand. An IDV can also provide the means to locate, verify and approve more legitimate customers faster and with little to no friction.

How does data fuel customer IDV, and what are the primary benefits your financial institution can unlock using a multilayered IDV solution?

The trick isn't so much accessing this data; it's about making sense of it all and then acting on it. This is where computing power, proven technologies, human ingenuity, and fraud experience and expertise create differentiating value and allow FIs to serve customers more effectively while lowering fraud risk.

MORE INSIGHTS, MORE REVENUE

A robust IDV solution empowers financial institutions to gather more customer attributes and data insights with less upfront effort from the onboarding customer. When banks and credit unions have access to deep data diversity, along with powerful technology that helps them understand and act on the knowledge they've gained, they can authenticate beyond the primary data points needed for compliance and leverage data for competitive advantage.

A rich array of helpful, practical intelligence is available. The trick isn't so much accessing this data; it's about making sense of it all and then acting on it. This is where computing power, proven technologies, human ingenuity, and fraud experience and expertise create differentiating value and allow FIs to serve customers more effectively while lowering fraud risk.

For example, capturing and fully analyzing aspects of a customer's digital footprint, such as mobile number and IP address, is practically invisible to the end consumer—but it provides the FI with invaluable information about the customer and the legitimacy of the account opening and application.

A more complete picture of a consumer's identity information allows banks to identify more new customers and serve existing customers more effectively, which then drives revenue. A growing digital landscape also gives institutions the chance to serve individuals who may not have access to credit, utility payments or other documents that help build public records. This allows banks to unlock additional streams of revenue.

For example, roughly 140 million Americans fall into the combined millennial and Generation Z demographics, but they can be harder than older generations to locate in public or credit records because they don't have lengthy banking histories. Millennials are now the largest drivers of net new-loan demand, and they are expected to keep that position for at least the next eight years.

The mechanisms used to locate millennials can also apply to subsequent generations. The leading edge of Gen Z is entering the key 25- to 40-year-old demographic, and since approximately 80% of smartphone-carrying Gen Z members already use mobile banking, perfecting this channel will become a necessity.

Yet for many customers today, mobile onboarding is far from optimal. According to IDology's fourth annual consumer survey, 72% of Americans who started to sign up for a new online account and then abandoned the attempt did so on a mobile

Developing a holistic consumer identity in high resolution enables a bank to onboard customers quickly and deliver customized experiences. This means fast-tracking access to products and services for legitimate customers and applying friendly friction as needed for suspect identities.

phone. Financial institutions that are willing to improve the mobile onboarding process have an opportunity to reduce abandonment rates and win more customers.

Clients are not averse to leaving their current bank for a better experience, either. Our research suggests that more than 30 million Americans are considering switching financial services providers in the next 12 months. Additional research consistently concludes that retaining customers is more financially beneficial than gaining new ones. Data that predicts what customers need and helps institutions create better experiences can generate significant returns and is well worth the effort.

While customers want a smooth, seamless and mobile-first onboarding experience, trust underpins every customer interaction. That means there's room for improvement regarding how financial institutions gather and use personal data. Our research finds that 70% of Americans suspect that companies collect data without their permission, and close to 60% don't think companies do enough to safeguard their information.

With these findings in mind, it's also critical to keep friction to a minimum when collecting data via an IDV solution, especially during the onboarding process. "The only thing that the consumer must do is enter minimal data or quickly scan an identity document to get started, and they're done," says Heidi Hunter, IDology's chief product officer. "So, it's a great way to onboard customers, using what feels like a high touch, and requires minimal time and effort."

Developing a holistic consumer identity in high resolution enables a bank to onboard customers quickly and deliver customized experiences. This means fast-tracking access to products and services for legitimate customers and applying friendly friction as needed for suspect identities. Using robust data that fuels IDV makes it possible to keep potentially valuable customers in the pipeline while delivering the speed, simplicity and convenience they expect.

Christina Luttrell is the chief executive officer for GBG Americas, a global leader in multilayered identity verification and fraud prevention.

Past Issues

JUNE 2022
Changing priorities in bank customer service »

MAY 2022
Bank M&A is here to stay »

APRIL 2022
Branch banking continues its radical evolution »

MARCH 2022
Mobile banking is on the move »

FEBRUARY 2022
Payments: Increasing competition in the fast lane »

STAY TUNED FOR

AUGUST 2022
Digital lending

SEPTEMBER 2022
Digital transformation

BAI Banking Strategies
EXECUTIVE REPORT

The power of data: How banks and credit unions can put it to work

JULY 2022