

Turn your insights into results

From large banks and credit unions to community financial institutions (FIs), the idea of putting analytics to work to improve operations and assist in their digital banking growth is appealing. Recent research elaborates on this. Almost 60 percent of banks believe advanced analytics and big data, along with artificial intelligence and open APIs, will have a significant impact on the industry. However, in the most recent reporting available, fewer than 20 percent of retail FIs feel well prepared for the future.

If your bank or credit union feels unprepared to put analytics to work, it's time to create a plan of action. The first big step toward successfully implementing an analytics program is a strategy that will address current and future needs and how to fulfill those needs. This Q2 guide will help you gather your thoughts for a well-honed strategy.

Use the data in your digital channel—it's full of insights

For many Fls, existing central reporting can meet basic customer relationship management (CRM) and audit needs. Ernst & Young's 2016 Consumer Banking Survey points out that banks have traditionally relied on readily available customer data, such as age and wealth, to predict customer preferences, develop customer propositions, and tailor service models. However, these types of approaches, as the survey assessment describes, are generally recognized as overly simplistic and poor predictors of actual behaviors.

Even Fls utilizing a Marketing Customer Information File (MCIF) approach to data analysis fall short of the insights hoped for. Many Fls, regrettably, have developed a perception of their customers that tends to result in misaligned customer experience elements.

A different type of data is needed to "dial up" the effectiveness of your analytics

Account holder data from your digital channel—along with machine learning and behavioral modeling—will be critical to your relationship and operational analysis. Your account holders' digital data used in conjunction with machine learning and behavioral modeling leads to truly valuable account holder insights, more revenue possibilities, better security, and less operational headaches.

Furthermore, an advanced analytics model helps you learn more about your account holders than ever before. Uncover many insights, from account-level-data (type and number of accounts) and login-level data (enrollment and time in session), to more complex product-level data and predictive modeling (who is most likely to purchase a product).

You may determine whether specific retail customers would benefit from goal-based savings or detect business customers indicating a need for international wire. These signals can point the way to helping your account holders improve their finances with needed products and services, as well as point the way to new products and services to meet unfolding demand.

Consider reading our CTO Adam Blue's white paper *The Data Dilemma: Unlocking Customer Insights with Machine Learning* to learn more about Q2 testing as well as making the most of end user data and behavioral modeling. Adam's insights will help in understanding today's analytics.

Netflix and Amazon have put machine learning and behavioral modeling to work and achieved great business success, and now many traditional organizations and industries are embracing this analytics approach that makes highly accurate predictions about the needs of customers or others.

Fls should expect positive results, too. In Q2's case, testing of our algorithm and behavioral model produced a 3x greater likelihood that a select end-user group would choose to open a new auto loan over a larger, more general group.

Regarding security and other back-office operations, your staff will quickly recognize anomalies in the data that may indicate fraud or another cybercrime, or allow them to quickly reconcile potential account issues like a payment dispute. The possibilities are many.

Analytics is about results

Based on our many years working with banks and credit unions of all sizes in shaping their digital data and analytics needs, Q2 recommends a strategy focused on:

- 1. Growing and retaining customers
- 2. Improving security
- 3. Increasing efficiencies in back-office operations

Grow and retain customers

The need for useful analytics couldn't be more important as branch visits decline and insights are harder to recover. Today, growth opportunities hinge on a sound analytics strategy based on account holders' digital data. Your analytics should indicate the true needs of not only your customers but of prospects, providing insights into which existing products and services they may benefit from—or that should be developed by your institution to address a new or underserved market.

Today, analytics in conjunction with account holders' contextual personal financial management (CPFM) data can lead to better recognition of an account holder's real financial needs, be they refinance, auto and other loans, balance transfers from other institutions, or other products and services. When combined, CPFM and behavioral analytics present a powerful way to grow opportunities and revenue.

The Ernst & Young Consumer Banking Survey in 2016 found 40 percent of those customers responding indicated both decreased dependence on their bank and increased excitement about alternative providers. And, although 75 percent of consumers still consider a traditional bank with branches to be their primary financial services provider, alternative financial options are here to stay and are luring account holders away in key areas like deposits and loans.

Analytics will enable your FI to discern to whom it should deliver segmented, more accurate targeting and messaging. And, allowing more personalized selling of your products and services will produce greater trust and engagement, furthering existing relationships and attracting new ones.

Steps to take today to grow

- Focus on smart analytics to gain customer insights or be at risk of becoming obsolete.
- To remain relevant to your account holders, build relationships through the digital channel by targeting account holders based on their real needs. Analytics can aid messaging, and help educate and engage account holders through mobile devices.
- Think outside the box. Consider offering some
 of the innovative digital financial services (fintech)
 products available today to retain and gain
 customers. You may find your FI has opportunities
 to create new fintech-type products.
- Investigate robust analytic offerings that make it easy to capture what products account holders want.

Prevent security threats from striking

Expect sophisticated ransomware like the WannaCry and Petya threats of 2017 to continue. Other types of fraud and cybercrime also will persist, ranging from wire fraud to identity theft.

How can your FI stop these threats from infiltrating your systems? First, ensure your staff is educated and aware of the threats, and next, put machine learning and behavioral software to work to identify fraudulent activity before it strikes your account holders or institution. You must be able to stop fraudulent transactions before they leave your bank or credit union, and analytics should play a major role in significantly mitigating this risk. With the ability to fully aggregate account holder data in the digital channel, your FI can use machine learning and behavioral modeling to identify potential fraudulent activities in real time.

Use analytics to safeguard your account holders

- Implement a system that can identify anomalies in normal user behavior – stopping fraud before it starts.
- Use a range of data in assessing account holder activity including IP addresses, device location, time stamps, and more. Your analytics must provide the clearest picture of each account holder's activity patterns to isolate suspicious activity.
- Integrate automatic triggers with your analytics to alert account holders of possible risks; security tokens are also crucial to security.

Advanced analytics is highly effective in stopping fraud before it starts



93% fraud detection success rate

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Machine learning of user activity data can help define your "know your customer" process, which in turn can help address compliance concerns.

Simplify back-office operations

Like other FIs, your IT department is probably overwhelmed by its growing set of responsibilities and lack of resources. From keeping systems up and running and ensuring upgrades are made, to adhering to compliance and regulatory pressures and producing reporting for accounting and finance—there's a lot to do.

Meanwhile, the volume and range of digital transactions are overwhelming back-office operations—ACH payments to wires, debit and credit cards to bill pay and person-to-person payments. And merger and acquisition activity among Fls keeps increasing in frequency and directly affecting IT departments. This is even the case for community and mid-size Fls engaged in the digital channel.

A robust analytics strategy must consider all these factors to determine how to assist IT staff in troubleshooting more effectively and helping account holders with thorough, faster resolution of problems. Internally, a sound analytics program should include product solutions to help monitor and report on security, compliance and other needs, and have the capability to handle an influx of data from other sources. This means that scalability and seamlessness will play big roles in the quality of your analytics.

Equally important is putting machine learning to work in ways that can benefit back-office operations. Learning from data, more reliable patterns emerge that better predict potential issues that may affect end users or internal staff. As an example, machine learning of user activity data can help define your "know your customer" process, which in turn can help address compliance concerns.

Help your back-office staff today

- Use accessible and understandable dashboards for better troubleshooting resolution and operational efficiencies.
- Develop analytics with automation capabilities.
 Being able to quickly resolve an issue with a trigger alert or message via push notification will be valued by account holders and build trust in your organization.
- Leverage analytics in dispute administration.
 Analytics that are tied to automated dispute resolution is a great way to improve back-office efficiency.

Prepare for a successful implementation

There are important questions to answer when building your analytics strategy.

Should you hire a consultant to help you develop a strategy and identify the right internal or external resources?

Certainly, a consultant can help, and there are some very good ones available. Before bringing a consultant on board, make sure they understand analytics implementation, and have worked with machine learning and behavioral profiling.

Could your staff do it?

Major projects require four key components for success: People, process, tools, and technology. Evaluate all four to determine if you can go it alone. Can your team build the software? Are processes and people in place to do so? These are key questions to consider in depth, as you plan your implementation.

Would you put the power of a vendor's technology to work for you?

The right technology with knowledgeable service and support can save lots of time and headaches. Keep in mind, though, not all vendors are alike.

Choose a vendor wisely

Around 75% of FI respondents in the 2016 Efma and Infosys Financle study prefer working with a third-party vendor.³ Your FI may be of the same mind. If so, ensure you talk to references, and learn about the outcomes prospective vendors have seen.

Make sure your FI asks the following questions before choosing a vendor:

Will the analytics provider integrate with your platform effectively?

The vendor should have a fully developed application with a recognized API, one that has consistently allowed successful interaction with FI platforms and data. Furthermore, machine-learning capability should be in place to help produce data intelligence about account holders. Ask the vendor's CTO or senior IT personnel about this.

Most importantly, ensure you have a voice in the process.

How accessible will the data be to your staff, and even to account holders if needed?

The vendor should offer easy-to-access and easy-to-understand analytics dashboards for back-office and frontline personnel, as well as for management. The dashboards should convey data results that inform decision making, and allow for actionable follow-through such as preventing a suspect transaction from leaving an institution or allowing staff to initiate a marketing email campaign to identified prospects in need of a new service.

Can the data be easily aggregated for management?

The vendor should allow for quick assembly of analytics reporting to help management make clear decisions. Management not only should receive useful analytics, but their analysis experience should be a positive one with easy-to-understand information.

Prepare well, and analytics brings competitive advantages

There must be tangible outcomes from your analytics program, so make sure the right people are in place to determine a strategy. This should include a combination of those with strategic interest in the data—those with the greatest need for the data and those with the technical backgrounds to understand how to handle execution of your institution's strategy implementation. Perhaps even bring in a knowledgeable digital analytics pro to assist in thinking your strategy through. And if a vendor is chosen to assist with heavy lifting, make sure your FI's voice is heard. After all, your institution wants to make the most of its digital data and analytics.

Q2 hopes you have found this advice useful. With a proven history of innovation, our solutions have been endorsed by ABA and NAFCU, among other distinguished organizations. With hundreds of bank and credit union customers, Q2 believes in a culture of engagement with each of them. Let us know how we can help you.

Impactful analytics. Q2ebanking.

Visit Q2ebanking.com/analytics to learn more.

¹ The Financial Brand, Banking Needs Deeper Customer Insights to Remain Relevant, June 2017.

² The Financial Brand, Retain Bankers Unprepared for the Future, March 2014.

³ Efma and Infosys Finacle, Innovation in Retail Banking 2016.