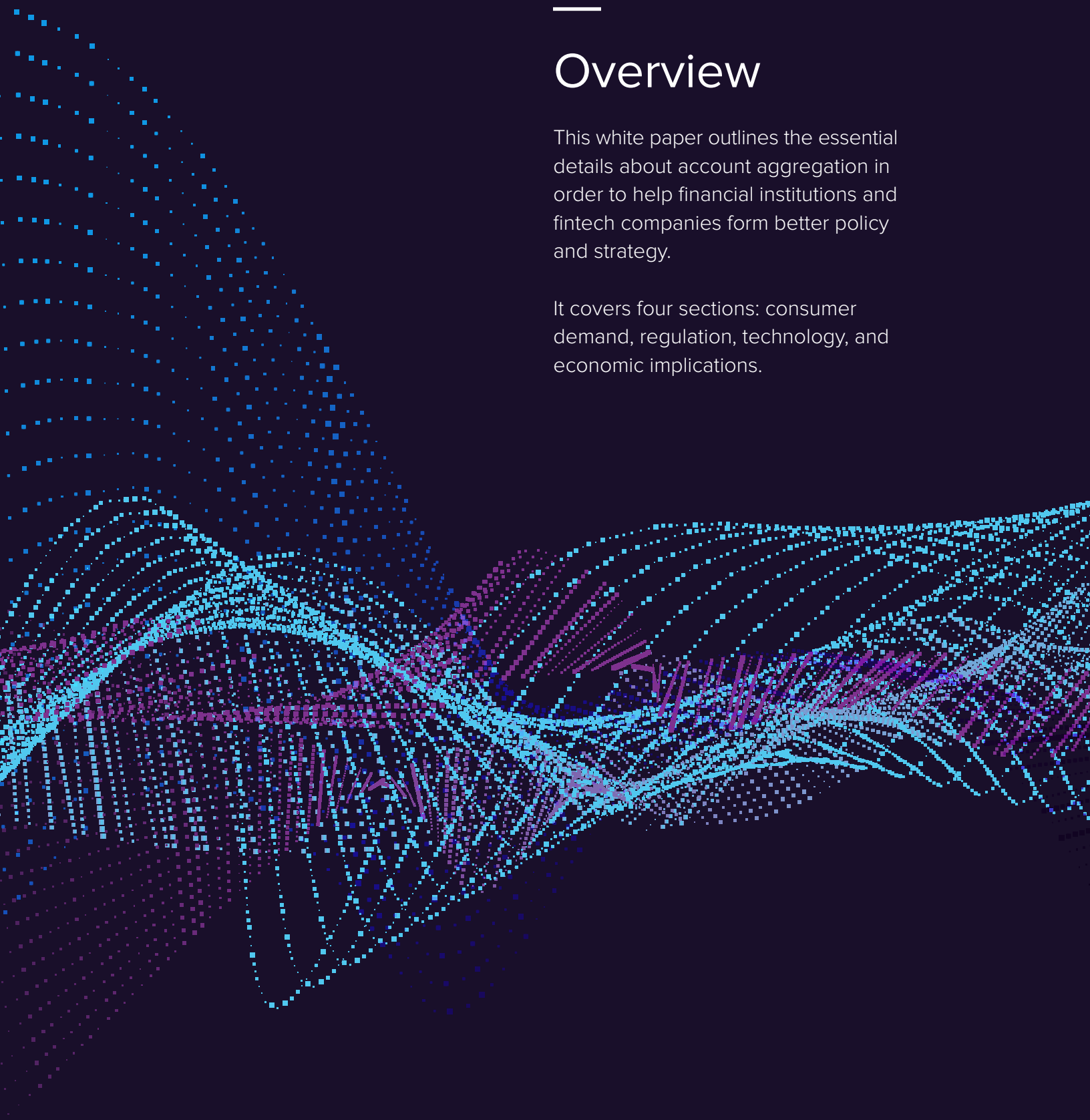
Account Aggregation, Security, and the Future of the 360-Degree Financial View

MX

Overview

This white paper outlines the essential details about account aggregation in order to help financial institutions and fintech companies form better policy and strategy.

It covers four sections: consumer demand, regulation, technology, and economic implications.



SECTION 1:

Consumer Demand

Enabling Consumers to Become Financially Strong via Account Aggregation

Consumers today have complex financial lives. They worry about their checking account, their savings account, their mortgage, their 401(k), their HSA, and on and on. In addition, they often spread their money across multiple institutions, making things even more cumbersome to manage.

To solve this problem, consumers need a 360-degree view of their finances — a single place where they can see balances, visualize spending, and get their accounts in order.

It's the best way to build a lifetime of user loyalty, and it completely depends on solid account aggregation. Account aggregation pipes data into a 360-degree view, empowering financial institutions to become a one-stop hub for their users unlike anything else they can offer.

Consumers demand this feature. The Federal Reserve found that more than half of account holders who use smartphones *regularly turn to their bank's app to check balances,* and a study from Bank of America discovered that 81 percent of account holders *log into mobile banking* to check their balances — far more than any other activity. And according to Celent Research, 75 percent of account holders said that the ability to view all their finances in one place was "highly valuable" — more valuable than remote deposit capture, person-to-person payments, and the ability to pay a merchant in-store or online (e.g., Apple Pay).

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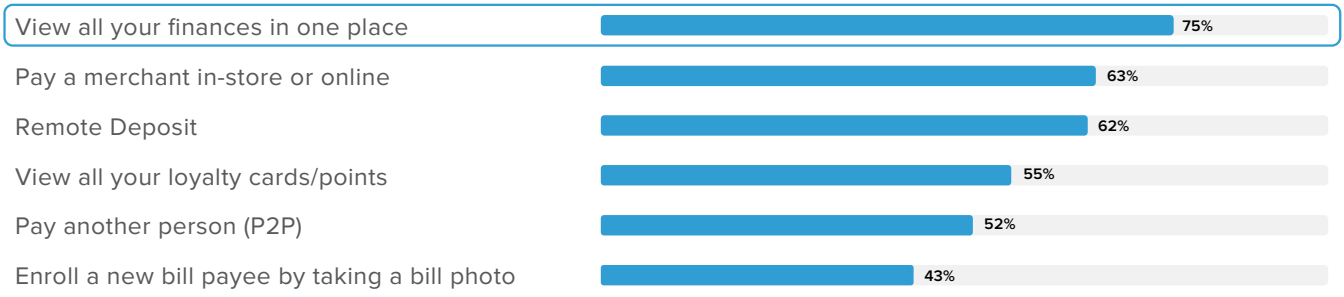
What do account holders want?



Source: Celent Research on U.S. Mobile App Preferenceas, July 2013

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Companies across the financial services industry are realizing just how valuable this 360-degree view is. For example, the investment management company Personal Capital offered a promotion in which they offered $10 to every user who linked an account to their service. Personal Capital knows that if they can become the one-stop hub for everything related to investment accounts, they'll be the first place their customers turn to for new financial products. They'll essentially own the entire user experience when it comes to investment accounts, and they'll get all the revenue that follows — which will pay enormous dividends on their $10 investment.

In light of this, companies in financial services might ask whether they're positioned to become that one-stop financial hub, or whether they'll lose out to third-party companies that can display a complete financial picture. Those who lose out risk becoming irrelevant as account holders log in elsewhere to see all their account balances.

SECTION 2:

Regulation

The CFPB Defends Account Aggregation

In October 2015, a few large financial institutions took action to shut down or limit organizations that aggregate financial data for consumers. They didn't want their information going out to third-parties like Intuit (via Mint.com), and they worried about security risks.

In response, Richard Cordray, Director of the Consumer Financial Protection Bureau (CFPB), rigorously defended account aggregation. "We are gravely concerned by reports that some financial institutions are looking for ways to limit, or even shut off, access to financial data," he said. "We believe consumers should be able to access this information and give their permission for third-party companies to access this information as well."

Cordray expanded on his position, saying that "impeding access to digital financial records not only blocks innovation from new entrants, it also reduces the incentives for financial institutions to innovate." He adds that if regulators get in the way of creating consumer-friendly products it will only make it more difficult for new entrants. "To be clear," he says, "it is unacceptable for financial institutions to block access to consumer information as a means of gaining a competitive advantage in the marketplace."

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The CFPB knows that in today's complicated financial environment, consumers deserve a way to access all their data in one place. They also realize that it's ultimately in the best interest of financial institutions as well. Finally, though the CFPB knows that there are potential risks with account aggregation, they also recognize that account aggregation can be done securely and safely.

European Banking APIs Compete with US Financial Institutions

The UK government is backing open data requirements and standards, amplifying competition against the United States. In a report to the UK's HM Treasury, the *Open Data Institute* outlined open banking and open data sharing standards to be implemented.

Regulators and lawmakers have also threatened to *legislate secure API standards*. In a separate initiative called PSD2, the EU offers a parallel payment service directive. Kenny Roberston, Head of Services Legal at the Royal Bank of Scotland *says*, "PSD2 will require banks to offer third-party developers access to their systems via open APIs. Under its terms, banks are required to foster an open and equal market by allowing approved and licensed third party providers (which will include fintech developers) access to customer accounts where the customer has granted permission."

It's crucial for financial institutions in the United States to keep an eye on these developments in Europe.

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- Kenny Robertson, *Head of Services Legal* at the Royal Bank of Scotland

SECTION 3:

Technology

Making Data Available via Secure Connections

For years, financial aggregation providers like Intuit have built massive collections of screen-scraping techniques to collect consumer financial data from a variety financial institutions providing an online banking experience.

To facilitate the collection of financial data via account aggregation, these providers request users to provide usernames, passwords, answers to security questions, PINs, authentication tokens, and other sensitive authentication data in order to reach out and pull (or "scrape") this data from web user interfaces provided by financial institutions. Many financial institutions have reacted to screen scraping aggregation methods by identifying and shutting down scrapers from pulling this data.

In order to enable and facilitate the secure collection of these financial data elements, a variety of API-driven protocols have been created, such as the Open Financial Exchange (OFX) protocol, the Credit Union Financial Exchange (CUFX) protocol, and MX's in-house MDX protocol. Financial institutions are able to set up hardened front-end web servers to provide both read-only views into backend account and transaction data for authorized aggregators to request consumer data over secure channels. Additionally, using this avenue to aggregate financial data allows financial institutions to represent consumers with tokens to further anonymize consumer information passed over the wire.

MX's Involvement in Aiding Financial Institutions

Over the last several years MX has been in multiple conversations with top financial institutions to provide guidance and insight on how to best make this data available to consumers.

As part of these conversations, many financial institutions have been more heavily evaluating the use of the API-driven protocols listed above — more specifically looking at OFX 2.2 — to make data available for financial consumers.

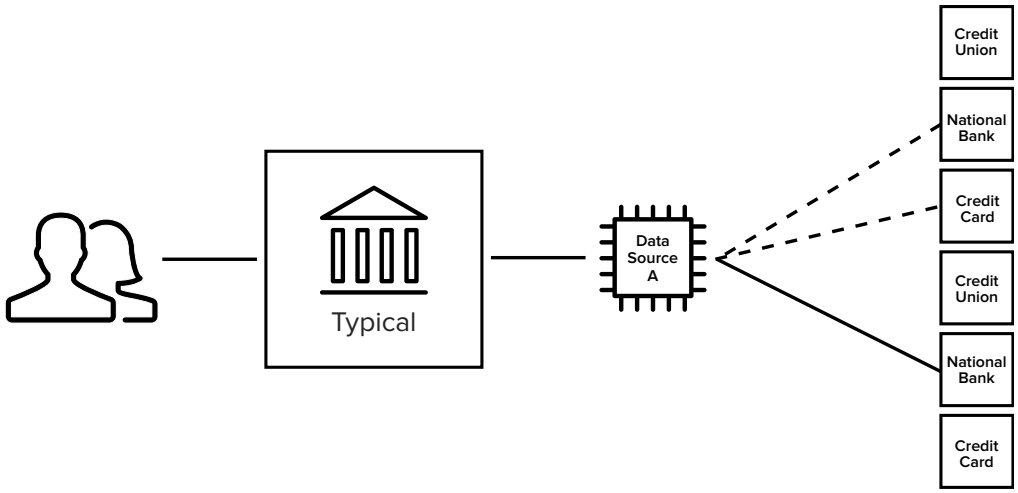
OFX 2.2 includes a few key enhancements, including providing tokenized authentication to facilitate more efficient exchange of data between aggregators and financial institutions and support additional data elements that can be provided by financial institutions to aggregation providers. Using tokenized authentication replaces the existing need to use user-provided credentials to authenticate each time financial data are pulled from a financial institution.

Single-sourced Aggregation

A major shortcoming of typical account aggregation services in the industry is that they only use a single data provider. This means that if the single connection to the data provider breaks, the account holder must wait days, weeks, or even months (depending on the data provider, the population of the connection, and the degree of work required) for an engineer to fix the connection.

Here's what the typical process looks like:

1. Account holder notices that their account isn't updating
2. Account holder calls the financial institution's call center for help
3. Financial institution calls the data provider to notify them of the broken connection
4. Data source provider contacts engineering
5. Engineering puts the request in their project list and gets to it when they can, whether that be days, weeks, or months

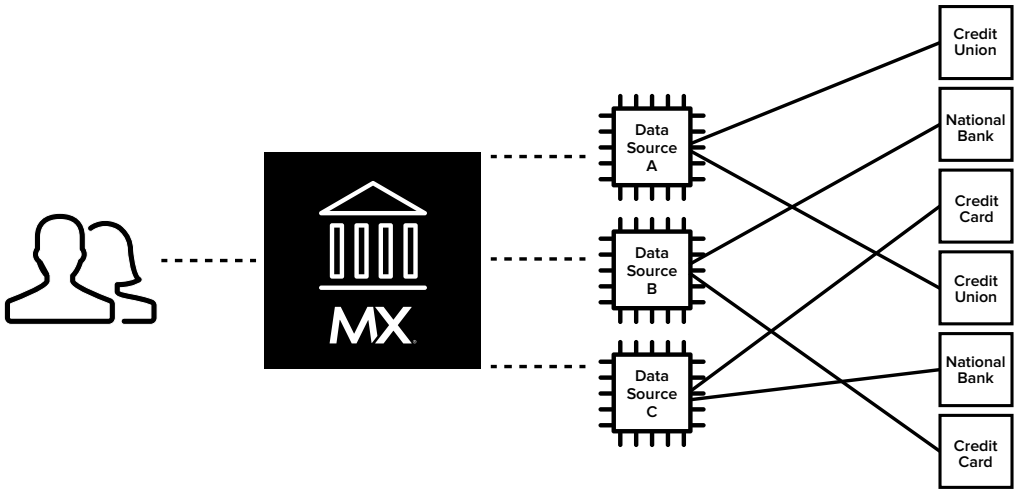


Unfortunately, when a connection remains broken, account holders won't blame the data provider or the institution with the broken connection. They'll blame whoever owns the portal their working in, and whoever owns it will suffer the reputational damage. In addition, since 34% of users say that when they're dissatisfied with a digital experience *they'll switch to a competitor's app*, reputational damage can be devastating.

Multi-sourced Aggregation

Vendors such as MX differ from the competition by providing multi-sourced aggregation. In other words, there are redundant connections with multiple data providers, as illustrated below:

These redundancies mean that alternative connections are available after a connection failure occurs. This way account holders don't have to wait around for an engineer to code a new connection. New connections can



often be made available within minutes after MX is aware.

Here's an example of how the process works best:

1. The support team sees that a connection has become deficient
2. They make a new connection available right then — no need for any coding
3. Engineering is alerted and determines whether to switch over to another connection or make an immediate repair

In short, multi-sourced aggregation helps to minimize the reputational damage that financial institutions may suffer when a new connection cannot be made available for an extended period of time. It's the best way to aggregate because it keeps account holders happy.

SECTION 4:

Economic Implications

The Consumer Benefits of Becoming Financially Strong

When it comes to overall economic strength, account aggregation might initially seem like a small, insignificant topic. However, when every citizen has access to a tool that can pull in all their accounts and transactions in a single view, mass changes in the economy are possible. One by one, citizens find it easier to prepare for medical emergencies, they're less likely to be crippled by debt, and they're better able to contribute to the causes they believe in. This adds up quickly and has a positive effect on the larger economy.

As James Cordray, CFPB Director said, "Access to digital financial records is critical. As with your student records or medical records, your financial records tell an important story about you. With health care, for example, if you are able to see your records, it is easier to participate in your care and treatment. You can review what you were told, ask tough questions, and consider other options. You can be a better advocate for yourself. The same can be said for your financial records. This is all about taking control and becoming a more active participant in your own financial life."

The Benefits to Financial Institutions

Generally speaking, when it comes to using data, financial institutions are behind tech giants like Netflix, Amazon, and Google. This is the case even though financial institutions are sitting on a gold mine of transaction data. By using data more effectively, financial institutions can reduce support costs (since there will be fewer callers worried that messy transaction descriptions are fraudulent charges). Financial institutions can also target end users with more intelligent offers, resulting in a direct return on investment. The tech giants have demonstrated the value of data. It's time that financial institutions follow suit.

Conclusion

Giving Users the 360-Degree Financial View They Demand

Account aggregation is an essential component of financial nstitutions and fintech companies that want to lead the future. It's the only way to turn digital banking into a one-stop financial hub. However, not just any aggregation solution will do. Some solutions could cause reputational damage because they break so frequently and have proven unreliable. Only stable and totally secure solutions can bring the needed results and give account holders the experience they expect.

MX employs multi-sourced aggregation, an attentive in-house support team, and better direct connections to keep aggregation success rates consistently high. With MX, financial services companies will be well on their way to becoming the primary financial institution — the first place account holders turn when they're thinking about getting a new loan. Best of all, they'll reap the revenue for years to come and protect their reputation with a solid aggregation experience.

Contact sales@mx.com for more info.