

# How to use your Data for a Trusted Customer 360.

A Guide for Banks & Credit Unions



# Data issues kill business growth.

Many Financial Institutions (FIs) are faced with common data challenges like data silos, legacy systems, IT capacity constraints, limited strategic direction, and lack of 360° visibility. Inability to react to actionable insights negatively impacts business growth and scalability.

If any of these business challenges sound familiar, then it's time to modernize your data stack.



Limited access to Customer 360 view across all business lines



Poor digital experiences for customers & employees due to lack of real-time data & automation



Can't adopt modern digital products & partnerships due to lack of integration capabilities



Meeting regulatory & compliance requirements is time-consuming & inefficient



Painful & costly execution of mergers & acquisitions



# 4 data paradigm shifts that changed everything.

Data warehouses have been around for a long time, so why are they such a big deal now?

- 01 The shift from on-prem to cloud → Reduced up-front costs
- 02 Low data processing speeds to high processing speeds → Ability for an average company to perform intense modeling & analytics
- 03 Few business applications to many business applications → More data & more need for integration
- 04 Human interaction to digital interaction → Customer expectations require automation

# The evolution of data.

## 5MB on an airplane to petabytes in the cloud.

See pictured: IBM employees loading 5MB onto a plane in 1956. To put that in context, 55 years later, the weakest iPhone had a 16GB drive, about 3,200x as big! And, it weighs only .25 pounds. The IBM hard drive pictured could have stored exactly one iPhone photo.

More data is being captured than ever before. [But simply having your data accessible is not enough.](#) You need to be gaining insights from it and using those insights effectively.

With cloud storage and processing technology improvements, elevating raw data to actionable data is now more accessible (and critical) than ever.








“Having access to unique data insights—fast and at scale—is undeniably a competitive advantage.”

Phillip Paz • Vice President of Technology • Zennify



Industry Models Pave the Fast Track to Success  
with Financial Services Data

[READ PAZ'S ARTICLE →](#)



# 7 ways to modernize your data

- 01 Move to cloud-native applications
- 02 Centralize disparate banking data sources
- 03 Store data for analytical & transactional processing
- 04 Transform data to create a Golden Record
- 05 Define data governance to ensure effective & efficient information
- 06 Leverage data for the business
- 07 Create a single-point-of-access data hub with API-led integration



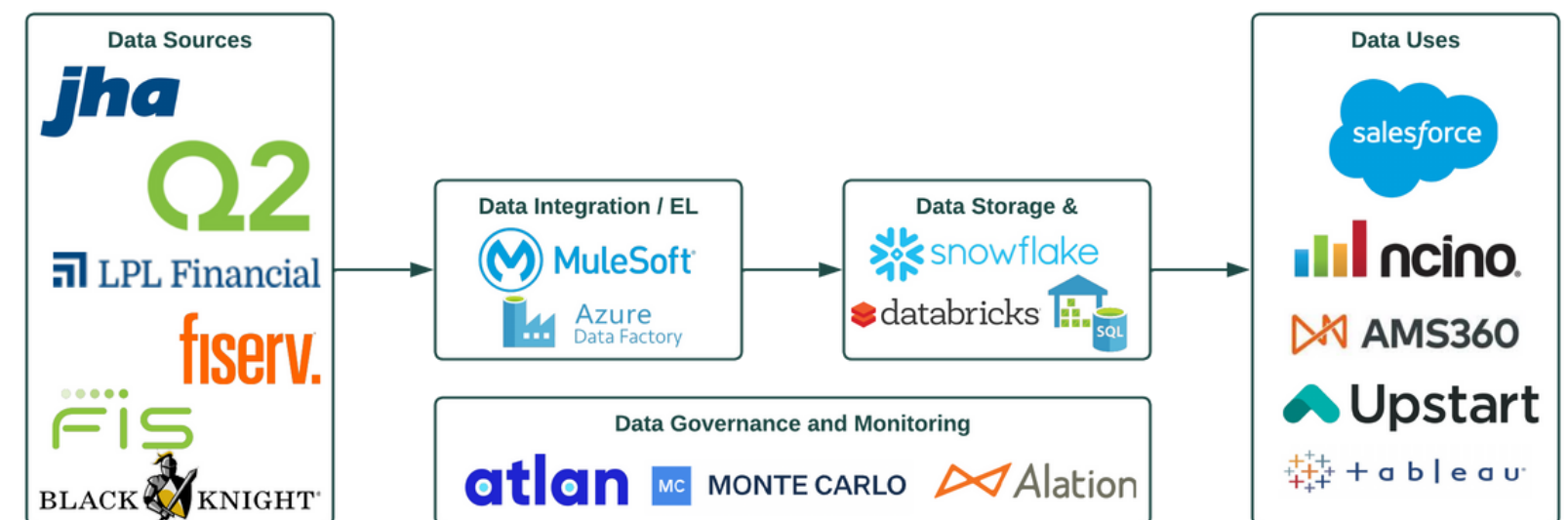
# 01 Move to cloud-native applications

A key component of modernizing technology is moving to cloud-native as much as possible, and when not possible, enabling on-prem data to be accessed securely from cloud applications.

## Benefits of moving to the cloud:

- Lower barriers to set-up & deploy
- Easier to scale up as needed
- More operationally-focused than IT-focused
- Pay as you go model

## Example enterprise data strategy for cloud enablement:





## 02 Centralize disparate banking data sources

According to the Okta Businesses at Work 2022 trends report, organizations deploy an average of 89 apps when they fully implement Okta. Each one of these apps can be a data source, whether it's coming into the storage direct or via another system.

### Common banking sources include:

- Banking core
- Loan origination system (LOS)
- Customer relationship manager (CRM)
- Insurance agency management system (AMS)
- Wealth CRM
- Online banking
- Treasury systems (lockbox, payroll, remote deposit, ACH)

So what happens with all this data? The goal is to bring it over to a centralized place, which for most companies today is a cloud data warehouse.

To get it into the warehouse, the modern approach is to extract the data from the various sources and load them into the warehouse. This is referred to as Extract and Load (EL).



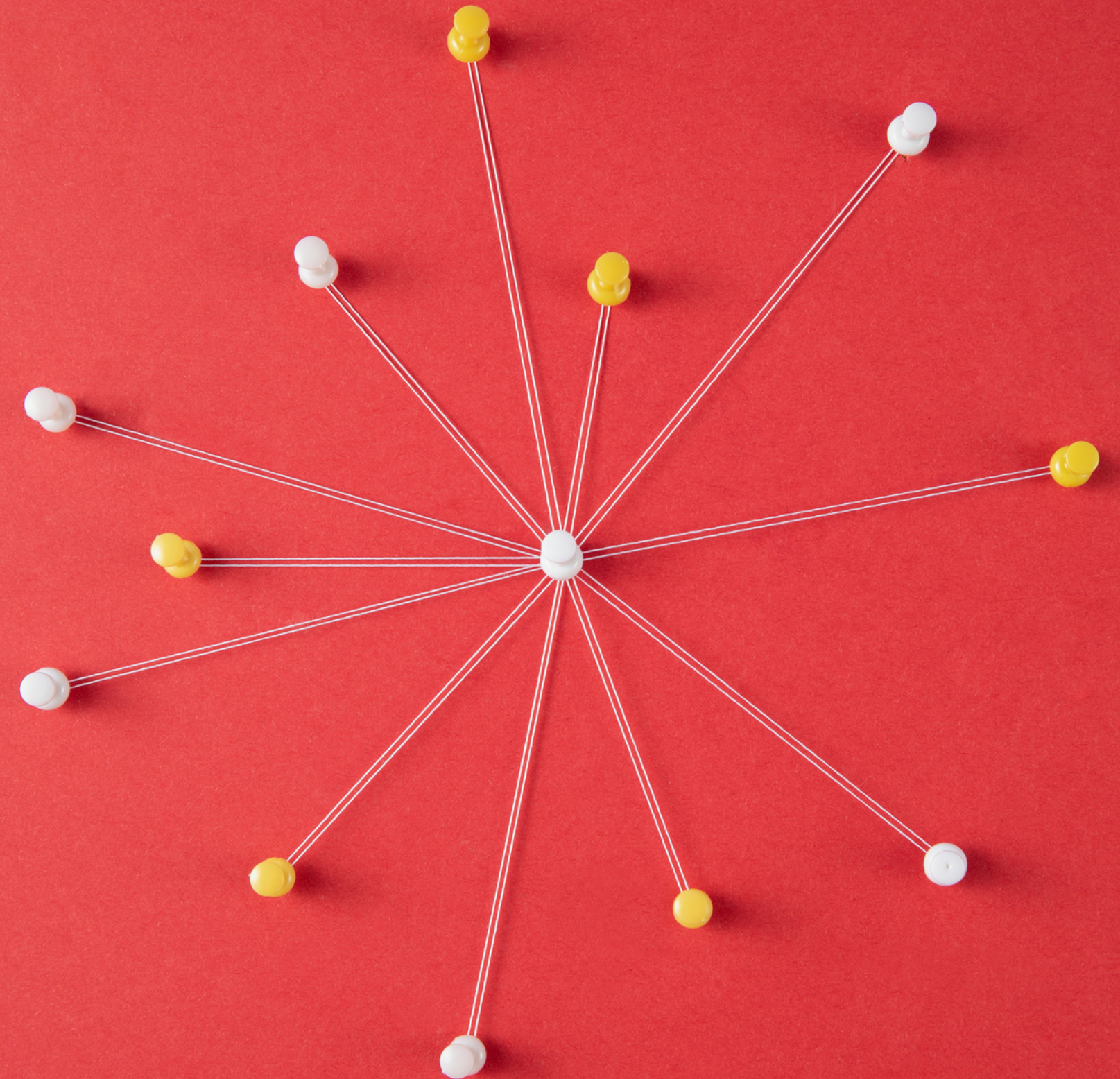
Previously, due to lack of cloud processing and other tools, organizations would extract, transform in flight, and then load into the data warehouse (a process known as ETL). This is generally an outdated and inefficient approach.

### Common ingestion methods:

- Flat File (CSV)
- REST or SOAP API
- Pre-built connector

### Common ingestion tools:

- MuleSoft
- Talend
- Informatica
- Microsoft Azure Data Factory
- Fivetran







## 03 Store data for analytical & transactional processing

Data storage can be called a number of things, but most financial institutions use a data warehouse. You may hear terms like data lakes, lakehouses (one of the newer terms), and databases.

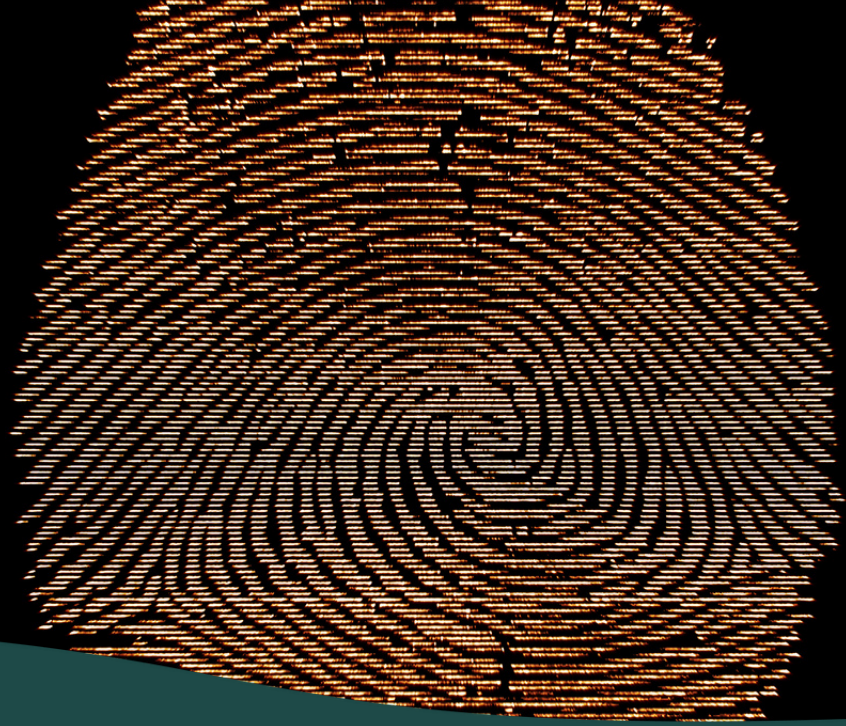
This data warehouse is typically used as OLAP (Online Analytical Processing). OLAP applies complex queries to large amounts of historical data, aggregated from OLTP (Online Transactional Processing) databases and other sources, for data mining, analytics, and business intelligence.

Examples include year-over-year financial performance or marketing lead generation trends. OLAP databases and data warehouses give analysts and decision-makers the ability to use custom reporting tools to turn data into information.

In many cases, we will also have another database used as OLTP. In OLTP, the emphasis is on fast processing, because OLTP databases are read, written, and updated frequently. This is where the data hub will get the data to be used in applications (see page 13).

Common OLAP data storage providers are Snowflake, Azure Synapse, and Databricks. Common OLTP data storage providers are Azure SQL/SQL Server, Postgres, and Oracle.





## 04 Transform data to create a Golden Record of a customer

Once the data is in the OLAP data warehouse, it must be Transformed (the "T" step of the ELT process). This generally involves modeling the data and creating analytics-specific tables which are aggregates or structured versions of some of the other tables in the warehouse.

Financial Institutions may be able to get a data warehouse set up with some data flowing into it, but they often lack the big picture view and the experience needed to make the data actionable.

Enter Zennify—over our years of working in the financial industry, we have developed an [industry model that is common to banks that standardizes the data across all of their sources to create a Golden Record of a customer](#).

**Three-stage transformation process:**





## 05 Define data governance to ensure effective & efficient information

Data governance is a collection of processes, roles, policies, standards, and metrics that ensures the effective and efficient use of information in enabling an organization to achieve its goals. It establishes the processes and responsibilities needed for quality and secure data used across a business or organization.

Data governance defines who can take what action, upon what data, in what situations, using what methods.

This area can be more process-oriented, but also has a technology aspect to it in terms of monitoring data usage, logging audit data, and more.

### Key concepts for data governance:

- Data Access: Who can access what & when
- Data Quality: Accuracy, completeness, & consistency
- Data Lineage: Identifying the origin of data, recording how it transforms & moves over time





## 06 Leverage data for the business

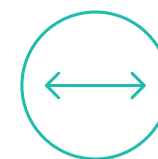
After all of that work to get the data ready, it's time to put it to use. Data-driven examples we find common in our banking customers:



**Analytics:** Feeding tools such as Tableau to enable data scientists to create visualizations and uncover insights. These insights can be fed back into the data warehouse for the uses below.



**Compliance:** Banks & credit unions spend a lot of time quarterly and annually auditing data to ensure regulatory compliance. Part of Zennify's special sauce is creating and storing metadata (data about data) such as data lineage, tracking when data was changed, what was changed, and by who/what system.

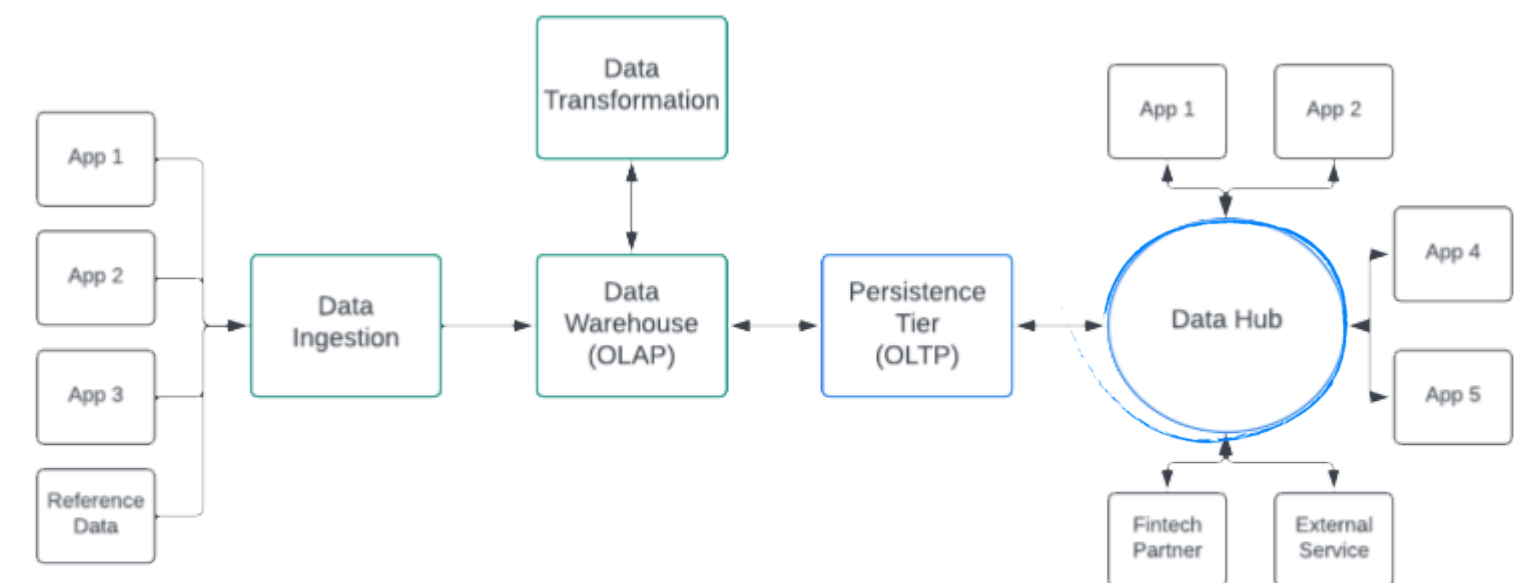


**Populating data in key systems:** This is the primary use case of feeding data into the systems that employees or customers are using. Many times, this needs to happen in reverse as well. For instance, if a user updates a customer address in Salesforce, it needs to be pushed back into the data warehouse so other systems can get the update.

## 07 Create a single-point-of-access data hub with API-led integration

To get data to the applications where it can be used, financial institutions need an API-led integration tool such as MuleSoft. This tool will connect to the OLTP database for data, and it will also connect directly to some systems to facilitate real time data needs. Holistically, this architecture pattern is referred to as a data hub.

A data hub is a central mediation point between various data sources and data consumers. It's not a single technology, but rather an architectural approach that unites storages, data integration, and orchestration tools. With a data hub, businesses receive the means to structure and harmonize information collected from various sources.







# Accelerators

Having worked alongside organizations with varied cores and systems used by different business units, Zennify has developed integration accelerators that dramatically reduce the manual work to tie systems together.

[VIEW ALL →](#)

## Jack Henry Silverlake

Our solution provides a REST API on top of jXchange for Customer 360 use cases, as well as a pattern to subscribe to EES events such as new customer and new account to push out to partners or internal applications.

[LEARN MORE →](#)

## Jack Henry Symitar

Our solution provides a REST API on top of symXchange for real-time Member 360 use cases. With our FSC Connectivity add-on, transform your core data from account-centric to a member-centric view in Salesforce.

[LEARN MORE →](#)

## LPL Wealth

Create a customer 360 by enabling users to see what customers work with LPL and their financial accounts. Banks and Credit Unions can receive a data feed from LPL to use the data to get a complete view of their customer.

[LEARN MORE →](#)

## Jack Henry Symitar nCino Booking

Jack Henry Symitar is a common core banking system for credit unions. Our solution provides a REST API to book loans and deposit accounts from nCino into Symitar as part of the origination process, eliminating manual processes.



# Accelerators

Each solution comes with APIs, integration templates, reference architecture and additional technical components, like lightning components, that are needed to support the solution.

[VIEW ALL →](#)

## Optimize Customer Experiences with CDP

This use cases leverages the power of APIs to easily ingest data from multiple sources into CDP to create a unified customer profile. This enables the delivery of more personalized customer experiences across multiple channels.

[LEARN MORE →](#)

## Customer Onboarding with Loan Origination

This use case leverages a generic Core Banking system, with Salesforce Financial Services Cloud to create an easy onboarding experience that converts a prospect to a customer via loan application.

[LEARN MORE →](#)

## Address Change Orchestration

This use case enables IT teams to deliver a streamlined address change orchestration and management solution. The solution also supports customer service teams' ability to upsell and cross-sell personalized banking products and services based on the new address.

[LEARN MORE →](#)

## Payments Modernization

This use case provides an application network that enables FIs to easily integrate with traditional payment channels such as ACH, SWIFT and emerging payment solutions such as blockchain. The application network can also be expanded to offer P2P and crypto payments.

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# More data resources from Zennify.



## Watch: Building a Digital Bank—A Candid Conversation with First United Bank

First United Bank's SVP Digital Transformation Officer, Jon Beller, has an open conversation with peers about the bank's specific approach to digital transformation.

[WATCH NOW →](#)



## Tech Stack Jenga: How a classic board game gives insight into technical architecture

Every tech stack is like a Jenga tower. Every forward-thinking company wants to evolve and keep up with the latest tech advances, but doing so often means making significant changes to your tech stack.

[READ MORE →](#)



# Our end-to-end data solutions.



# We unite data, applications, & *people*.

With Zennify's data services team, financial institutions can break down internal data silos to create a holistic view of the business. Our industry-specific models and architecture enable you to store all of your data in a single globally-available governed platform. This empowers you to leverage your data for action—driving customer growth and retention, employee efficiency, and operational cost reduction.

## Want a complimentary data audit?

Zennify has deep experience in both strategy and technology as a top Salesforce and MuleSoft consulting firm. Reach out for an audit that can help you grow by harnessing the full potential of your data and technology.

## Website

[www.zennify.com/what-we-do/services/data-intelligence](http://www.zennify.com/what-we-do/services/data-intelligence)

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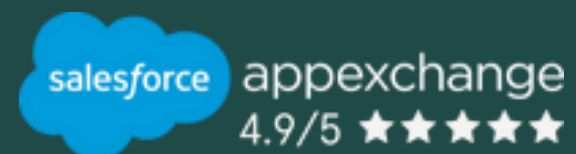
## Phone Number

855-936-6439

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## Email Address

[info@zennify.com](mailto:info@zennify.com)





# Automate Anything, Empower Everyone

Consistently ranked as a leader in Gartner's Magic Quadrant for Enterprise Integration Platform as a Service (iPaaS) and Full Life Cycle API management, MuleSoft is the world's leading unified platform for API management, integration, and robotic process automation for Financial Services.

Banks, credit unions and other financial service providers all over the world are benefitting from MuleSoft's proven API-led approach to unlocking the core and integrating apps and data in a secure and governed manner that saves time, cuts cost and increases productivity.

With the launch of its automation solutions, MuleSoft ultimately empowers your IT and Business teams to scale integrations securely and deliver connected customer experiences, faster.

## Website

[www.mulesoft.com](http://www.mulesoft.com)

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## Phone Number

415-229-2009

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## Email Address

[sales@mulesoft.com](mailto:sales@mulesoft.com)

