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# Using a Data Platform to Power Your Data Strategy

Key Capabilities, Features, and  
Benefits To Look for in a Data  
Platform

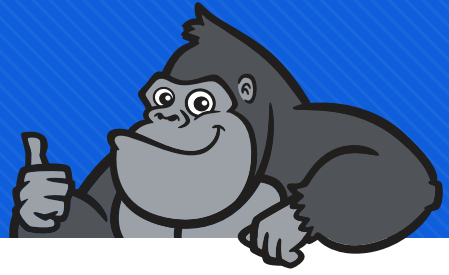
**LAWRENCE MILLER**



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# Using a Data Platform to Power Your Data Strategy

Key Capabilities, Features, and  
Benefits To Look for in a Data  
Platform

By Lawrence Miller

POWERED BY  **ActualTech**  
MEDIA

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# CALLOUTS USED IN THIS BOOK



## SCHOOL HOUSE

In this callout, you'll gain insight into topics that may be outside the main subject but are still important.



## FOOD FOR THOUGHT

This is a special place where you can learn a bit more about ancillary topics presented in the book.



## BRIGHT IDEA

When we have a great thought, we express them through a series of grunts in the Bright Idea section.



## DEEP DIVE

Takes you into the deep, dark depths of a particular topic.



## EXECUTIVE CORNER

Discusses items of strategic interest to business leaders.



### DEFINITION

Defines a word, phrase, or concept.



### GPS

We'll help you navigate your knowledge to the right place.



### KNOWLEDGE CHECK

Tests your knowledge of what you've read.



### WATCH OUT!

Make sure you read this so you don't make a critical error!



### PAY ATTENTION

We want to make sure you see this!



### TIP

A helpful piece of advice based on what you've read.

# INTRODUCTION

## Welcome to The Gorilla Guide To...<sup>®</sup> Using a Data Platform to Unlock the Power of Your Data!

In today's data-driven world, an organization's data is often its most valuable asset. According to [Mckinsey Global Institute](#), data-driven organizations are 23 times more likely to acquire customers, six times more likely to retain customers, and 19 times more likely to be profitable than less mature organizations. But far too often, that data is locked away in storage silos that are only accessible by a limited group of highly technical data consumers. Organizations with traditional data analytics, data warehousing, business intelligence, and business processes often take weeks to respond to requests for the right data.

Organizations are increasingly putting relevant, trustworthy, and actionable data directly into the hands of their front-line workers and decision makers to improve situational awareness as change is happening and empower them to decide on the best courses of action in the moment. Delivering on the promise of real-time analytics is challenging because companies need an easier way to connect, manage, and analyze data.

In this guide, you'll learn about the changing data management landscape, the evolution of the modern data stack, and modern analytics challenges. We'll introduce you to the data platform and explain how a data platform can help your business quickly and easily go from data to decision with trusted, real-time data insights. Finally, you'll explore some common business use cases in different industries and learn how Actian is helping customers successfully address their data management challenges.

## CHAPTER 1

# Understanding Data Management

**Data management refers to the ingestion, organization, storage, governance, and maintenance of data for use in analytics and business decision making.** The concept of data management originated in the 1960s and, as you might expect, it has evolved greatly since its inception.

## The Changing Data Management Landscape: From Programming Languages to Artificial Intelligence (AI) and Beyond

The early days of data management required very large computers—often taking up an entire floor of a building—and large fleets of programmers with knowledge of first-generation programming languages (machine-level languages), second-generation programming languages (assembly languages), and high-level languages (such as Fortran [Formula Translating System], Lisp [List Processing], COBOL [Common Business-Oriented Language], BASIC [Beginner’s All-purpose Symbolic Instruction Code], C, and C++).

In the 1970s, ETL (extract, transform, and load) tools became popular and remain popular today (far outlasting disco). ETL tools are used to *extract* data from different data sources, *transform* it into a consistent format, and *load* it into a data warehouse, data lake, relational database, or another application. At the same time, database management systems (a subset of data management) became popular, including SQL (structured query language) for relational data models, introduced in the 1970s, and NoSQL for “big data,” introduced in 1998.

## Data Management Terminology

**Data integration** is the process of discovering, moving, combining, and normalizing data from disparate sources to create a single, unified view of information for different business use cases and data consumers.

A **data pipeline** is a method of collecting, organizing, and storing data from various sources for use in data analytics applications.

A **data catalog** is a detailed inventory of an organization’s data assets, used to help data consumers find relevant data for analytics use cases.

A **data hub** is a data-centric storage architecture, designed for short-term storage, that aggregates data from multiple disparate data sources.

A **data warehouse** is a centralized repository used for long-term storage of data from multiple disparate data sources.





A **data lake** is a centralized repository used for long-term storage of massive volumes of disparate structured and unstructured data in its native format.

A **data fabric** is a data management architecture that integrates various data sources and cloud environments, allowing businesses to seamlessly access, integrate, model, analyze, and provision data.

A **data mesh** is a decentralized IT architecture that delegates ownership of data assets in a business to the departments and teams that are the domain experts for their data. The technology provides the tools needed to allow domain experts to publish their own data and the connectivity tools required to access data products others publish.

In the 1990s and early 2000s, as the Internet came of age, data integration, data pipelines, data catalogs, and data hubs were all introduced to the data management landscape. With the advent of cloud computing, data warehouses, data lakes, data fabrics, and data mesh architectures all came into their own. Today, generative AI is changing the face of data management. The need for well-prepared, high quality data has never been higher.

## The Evolution of the Data Stack



The traditional on-premises data stack was typically comprised of mainframes and, later, enterprise data warehouses in corporate data centers. Although an on-premises data stack gives an organization greater control over data residency and better performance (at least theoretically) than a cloud-based data stack, it has many disadvantages, including:

- **Data center maintenance and security.** Operating a private data center requires ongoing maintenance to ensure adequate and reliable power, cooling, and physical security. In the cloud, these aspects of data center maintenance and infrastructure security are the responsibility of the cloud provider.
- **Data accessibility.** Data stored and processed on-premises may be limited to certain users, such as data scientists and data engineers, particularly in mainframe environments.
- **Scalability and agility.** Compute and storage needs must be anticipated and provisioned well in advance to support rapidly growing and changing business needs. This inability to scale as business needs change limits agility.

The journey to the cloud is a logical undertaking for modern businesses. The cloud offers many benefits, including massive on-demand scalability, self-service access to the latest technological innovations, and (somewhat) predictable consumption-based pricing. The cloud is an optimal environment for data warehouses, and the massive amounts of compute and storage resources in the cloud enable extremely large volumes of data to be consumed for a myriad of use cases, including AI/ML applications.

The modern data stack is comprised of various software tools used for collection, transformation, storage, analysis, and visualization of data to accelerate time-to-value for business analytics. It's comprised of data from numerous sources including different clouds, databases, Software-as-a-Service (SaaS) applications, and more.

# Modern Data Management Challenges

With great power comes greater data challenges, and modern data management is no exception. Key data management challenges today include:

- **Exponential growth of data and changing data types.** According to Statista.com, the total volume of data created, captured, copied, and consumed worldwide is expected to reach [181 zettabytes \(that's nearly 165 billion terabytes\) in 2025](#). At the same time, the types of data, including structured and unstructured data from disparate data sources including IoT sensors and more, are exploding.
- **Multiple point solutions.** Over the years, organizations have deployed many data management solutions to address their unique business needs and “one-off” use cases. Until now, they have been unable to identify a single, comprehensive data management solution that meets all of their requirements. As a result, valuable data is siloed, there is no single source of truth, data quality suffers, and data management challenges are exacerbated.
- **Rising cloud costs.** Despite the many benefits of the cloud, organizations struggle to contain their cloud operating costs. According to the [Flexera 2024 State of the Cloud Report](#), managing cloud spend is the top cloud challenge for enterprises.

- **Specialized skills needed to work with data.** Data scientists, data engineers, and data analysts are in high demand and short supply. Without highly specialized data professionals, many organizations are unable to quickly tap into the value of their data.
- **Unwieldy integrations and needless complexity.** With a wide array of data management solutions available on the market, interoperability is too often an afterthought. Developing custom integrations is time consuming, costly, and complex.
- **Slow time-to-value and return on investment (ROI).** All the factors listed here together create friction, stifle agility, and limit the value of data to key decision makers across the organization.

## CHAPTER 2

# Mastering Data Management Challenges with a Unified Data Platform

Modern organizations recognize the importance of analytics to gain a competitive advantage in today's data-driven world. To effectively harness the power of data, businesses need innovative technology that enables rapid time to insights, along with massive scalability, native integration capabilities, and flexible deployment options to get the most value from all available data.

## What Is a Data Platform?

A data platform unifies a set of solutions and tools that collectively manage the operational and analytical needs of a business. It allows users and multiple personas to access and visualize their data easily and provides secure access to authorized users, applications, business intelligence (BI), and artificial intelligence (AI) tools. A modern data platform combines different data management elements including data ingestion, transformation, data quality and governance, together with a high-performance data warehouse with BI, reporting and analytics. In short, a data platform gives you the power of a full data stack, with the simplicity of a single platform that is designed to allow more access to more users to support better decision making.

# How Can a Data Platform Help with Data Management?

Businesses are overrun with data containing valuable insights that a data platform can help to uncover. One of the most common challenges modern businesses face today is getting vast quantities of data, with different data types, into various systems that can make this data useful. A data platform must be able to ingest data from various sources and transform it into a consistent format. Data integration technology provides the ability to connect, transform, and load multiple data sources to the data platform. The data is typically structured as tables accessed using structured query language (SQL). The table data is stored as rows for transactional systems and columns for high-performance data analysis applications.

The data platform could also support semi-structured and unstructured data access delivered in batches or as continuous streams. Data loading is performed as data becomes available in the case of streamed data or scheduled batches overnight or at regular intervals, depending on the requirements of the consuming application or analysis needs.

A data platform is an end-to-end solution for all your BI and analytic needs including:

- **Extract, Transform, and Load (ETL).** ETL technology transforms data before it's loaded into a data warehouse and is particularly useful for smaller-scale data sources with complex transformations.
- **Extract, Load, and Transform (ELT).** ELT technology cleans and organizes data after it's made available for analysis in the target or intermediate database. It's particularly useful for larger data sets, and provides greater flexibility and efficiency than ETL.

- **Streaming Data.** The Internet of Things (IoT), blogs, social media, and online gaming are examples of data types that drive the need for streaming data. Kafka and Spark are common technologies used to enable the collection of high volumes of streamed data and provide a publishing mechanism for applications such as data platforms to subscribe to message queues. Streaming data integration enables real-time applications that depend on immediate data access.
- **Data Quality.** Capabilities and features such as data profiling, low- and no-code transformations, and more, are crucial in a data platform to help organizations maintain (and improve) data quality.
- **Analysis.** A data platform needs to do more than store data. To gain useful insights, the loaded data must be analyzed and actionable. Data mining, advanced analytics, and simple SQL-based reports provide the visibility the business needs to make operational data-driven decisions. Visual dashboards created in tools like Power BI, Looker, and ThoughtSpot offer comprehensive chart types to present compelling insights into the collated data.
- **Data Warehouse Control Center.** A high-performance data warehouse to run complex queries against billions of records in seconds. The warehouse must be optimized for advanced analytics and query performance, connect to a variety of legacy and new sources of data, and offer flexible deployment options like hybrid and multi-cloud.



**Data streaming** is the process of transmitting, ingesting, and processing a continuous flow of data from single or multiple data sources in near-real time. Depending on the criticality or server resource constraints, data streams can be processed after small intervals as micro-batches.

## What Capabilities and Features Do You Need in a Data Platform?

A data platform provides comprehensive capabilities and features to connect, ingest, store, govern, and analyze data at scale. It helps ensure data quality and forms the basis for gaining insights, training, and executing ML models and supporting other AI applications. Key capabilities and features to look for in a data platform include:

- **Unified, end-to-end architecture.** The data platform must provide a data warehouse to centralize siloed data, data integration tools to easily bring data into the warehouse, and built-in data visualization and analytics.
- **Native out-of-the-box connectors.** The data platform should provide pre-built connectors and API connectivity that can securely access and connect to data wherever it lives.
- **Codeless/low-code/pro-code connection options to any data source.** The data platform must provide easy access to data consumers of all skill levels including codeless (or “no-code”) options for non-technical business users, low-code options for power users, and pro-code options for developers and data scientists.



- **Data Quality.** The ability to automate the data profiling and isolate non-conforming data for remediation.
- **Hybrid support for data access from any environment.** The data platform must support data processing for on-premises data and applications, cloud environments, and third-party and SaaS applications. The platform should also provide the capability to process data in all of the major cloud service provider environments.

## What Are the Benefits of a Data Platform?

The right data platform can unlock the value of your data. Key business benefits of a data platform include:

- **Tool consolidation.** The main purpose of a data platform is to provide a single layer for data management functionality, thereby eliminating the need for multiple point solutions. This reduces complexity, streamlines workflows, improves collaboration, and simplifies troubleshooting. All of these benefits ultimately save money and reduce manual efforts.
- **Fully managed data warehouse.** A data platform built for real-time analytics has a high-performance data warehouse at its core to centralize siloed data, even on-premises, and prepare it for efficient BI, reporting, and analytics.
- **Automated data pipelines.** A data platform allows you to easily connect to any data source and ensure accurate, timely, high-quality data. You can unify, transform, and orchestrate your data pipelines to provide predictable data delivery. Data engineers can automate data

pipelines and validate data quality and transformations using pre-built connectors and APIs, thereby lessening the strain on engineering resources, reducing errors, and eliminating the need for manual coding

- **Trusted data quality and governance.** A data platform automates data verification, helping organizations enforce data quality standards. Data that doesn't adhere to quality rules can be isolated from other data, thereby avoiding data bottlenecks. This data can then be cleansed manually or through automated workflows before it's integrated into the data warehouse or utilized by other applications, providing a single, trusted source of data.
- **Faster time-to-value and accelerated insights.** A data platform delivers reliable transactions and trusted, real-time insights, without the need to integrate multiple data tools. The ability to have a single platform for data makes it easier than ever to get from data source to decision quickly and confidently. Data analysts can perform analytics on the freshest data with native visualizations and easy, in-app connections to BI tools.
- **Self-service analytics and business intelligence (BI).** A data platform makes it easy for any user to be a data analyst without relying on IT staff to produce reports, which can take days or weeks, resulting in potentially missed business opportunities because the data insights were not available fast enough.
- **Deployment flexibility.** A data platform provides the flexibility to deploy on-premises, in the cloud, or in hybrid and multi-cloud environments. Additionally, it provides an administrative view to manage FinOps/cost.

## CHAPTER 3

# Exploring Key Use Cases for a Data Platform

**A data platform can help data-driven organizations address their most demanding analytics use cases.** In this chapter, we'll explore common industry use cases and how real-world Actian customers are leveraging the Actian Data Platform to maximize the value of their data insights.

## Customer Analytics



A true 360-degree view of a customer can't be sourced exclusively from internal data, let alone from a single system or department. Traditional customer relationship management (CRM) and data warehouse systems can't handle all the data sources needed to support the customer lifecycle. A data platform simplifies customer analytics with built-in data integration and data quality, such as deduplication and data enrichment, accelerating the mining of data sources, and delivering 360-degree actionable customer insights.

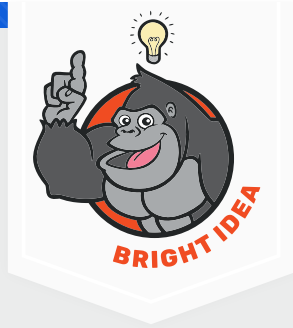
With a data platform, organizations can easily personalize the customer experience through micro-segmentation, next best action, recommendation engines, and market basket analysis while

improving customer acquisition and retention through campaign optimization, and churn analysis to increase customer loyalty, as follows:

- **Customer profiles.** Granular, multi-channel, real-time customer profile analytics can tell you about your customers, the best means to connect, the targeted offers that will resonate, predilection to churn, and the best ways to personalize the customer experience to win more business and drive-up loyalty levels.
- **Micro-segmentation.** Create meaningful customer experiences with targeted offers and responses resulting in a higher ROI. Uncover relationships between customers and key purchase drivers deriving the value of each customer while identifying new segments that provide a competitive advantage.
- **Next best action.** Maximize long-term customer value by predicting what a customer will do next while also influencing their next action. This includes creating recommendation engines to automate offers based on customer behaviors.
- **Campaign optimization.** Capture more wallet share using a data platform to deploy effective and highly personalized campaigns through deep analysis.
- **Market basket analysis.** Increase revenue by uncovering your most profitable product groups, learn which products benefit most from associations with other products, understand optimal shelf arrangements, and better target marketing and promotions.
- **Customer churn analysis.** Discover customer classifications and assign customer lifetime value and churn scores to understand and monitor which customers you can't afford to lose. Generate raw churn predictions informed by individual customer profitability.

# Turning Data into Actionable Customer 360 Insights

Based in California, the company offers an integrated portfolio of data management and data analytics products to customers operating in industries ranging from retail and manufacturing to financial services and healthcare. The company's customer base is global, and its revenues exceed over \$250 million annually.



## CHALLENGE

In response to market disruptions brought on by COVID-19, a midsize enterprise software vendor needed to optimize sales and marketing go-to-market (GTM) operations. The company had made major investments in solutions from Salesforce, Marketo, and many other vendors—all with the intent of gaining greater actionable insights into customer needs and behaviors—but sales and marketing strategists still lacked the full 360-degree view of the customer that they sought.

## SOLUTION

The Actian Data platform provided a powerful yet cost-effective means of rapidly aggregating data from all the systems containing critical customer information—including Salesforce CRM and the other marketing, sales automation, and transactional tools in use within the company. Actian also provided powerful customer 360 analytics capabilities that make it easy for non-IT users to run sophisticated analytics and visualization tools—in real time—to gain insights from the aggregated data.

## OUTCOME

With Actian, the company saw significant improvements at every stage of the customer journey. Real-time aggregation and analysis of data from multiple systems—including Salesforce CRM—led to more effective micro-segmentation and persona targeting, lead qualification, faster conversion from marketing qualified leads (MQL) to opportunities, and shorter sales cycles. The company even recouped the entire cost of its Actian Data Platform deployment in the first week by moving historical data from expensive Salesforce storage to low-cost Actian storage.

## Real-Time Analytics

Business agility comes from real-time responsiveness. You can't respond in real time if there's a delay in data access. A data platform enables real-time analytics by taking full advantage of the compute, memory, and disk to store, compress, and access data with unmatched performance.

A data platform transforms business by simplifying how people connect, manage, and analyze data, improving the time-to-value for your data. Key capabilities to look for in a data platform for real-time analytics include:

- **Scalable analytics in the cloud.** Businesses often choose a simple point solution for their first project, but as they try to implement additional projects, teams can be quickly overwhelmed by the sheer volume of data, data sources, consumers, use cases, and data pipelines. Data platforms allow businesses to add and remove resources as their business needs change.

- **Data quality.** High-quality data fuels real-time analytics. To enable the optimal “next best action” through data, it must be relevant, timely, in-context, trustworthy, and actionable to the data consumer.
- **Data privacy.** New data sharing use cases demand new approaches to data privacy. You need to comply with relevant data and privacy regulations in your geography and industry while also making sure that data is useful to analysts and decision makers.
- **Data governance.** To maximize the use of data, it must be easily accessible and usable for all users. Additionally, it is essential to manage data properly throughout its entire lifecycle.
- **Connecting business value with cost.** Real-time data analytics initiatives must align costs with business value delivered. This is more critical than ever before in today’s economically challenged, dynamic global markets.

## Split-Second Response Time Moves UK Insurance Carrier to the Top of Customers’ List

Established in 1905, The Automobile Association (AA) is the leading provider of roadside assistance services in the United Kingdom. The organization operates a wide variety of businesses, including The AA’s Insurance Brokers Group, which interacts with a diverse panel of underwriters to offer a range of vehicle and home insurance policies.



Of course, AA doesn't want to insure just any driver. It wants to target and provide highly competitive insurance rates to customers with the best driving records. To do this, it must be able to go beyond website-provided data and create a more complete risk profile of a driver before determining eligibility and rates.

## **CHALLENGE**

Insurance comparison websites in the United Kingdom, like GoCompare.com and Confused.com, give top billing to insurers who respond fastest to online requests for quotes. These insurance quote consolidators present driver-supplied data to insurance companies, which then must evaluate that user data and immediately respond with a competitive quote. Response time is so critical that many of the comparison sites will not even list a quote if it is returned more than two seconds after a customer submits their information. AA needed a solution that would enable it to underwrite a prospective driver and deliver a risk-balanced, competitive insurance quote with sub-second speed.

## **SOLUTION**

The Actian Data Platform deployed on Microsoft Azure is used to analyze hybrid data sources to provide real-time insurance quotes and provide executives with performance insights on AA's insurance business.

## **OUTCOME**

With the Actian Data Platform, AA routinely earns its top position on comparative insurance sites. AA can analyze applicant-supplied data, review data from public sources, and deliver risk-balanced competitive insurance quotes within fractions of a second.



# IoT-Powered Edge-to-Cloud Analytics

Edge applications and devices increasingly rely on complex data processing and analytics to improve automation and end-user decision support. The underlying data management solutions must leverage a variety of hardware architectures, operating systems, communications interfaces, and programming languages. A data platform provides broad, high-performant and cost-effective capabilities for this demanding set of requirements, including:

- **Intelligent and integrated automation.** IT investments in manufacturing, aerospace and defense, communications, energy production, and distribution will only achieve their full ROI potential with the combination of IoT, the cloud, and AI-enabled distributed applications.
- **Decision support at the point of action.** Edge-to-cloud isn't just about machine to machine. AI-driven digital assistants can combine user-owned learnings and controlled information with scenario-based demographic and behavioral response data to personalize decision support at the point of action in everything from grocery shopping to pilot simulations.
- **Grid management.** Local and perimeter security defense, oversight and governance for devices or human operations, and software updates including AI models in unsupervised edge device operations require tight communication and collaboration between data management platforms and analytics systems from edge-to-cloud and back.

- **Tracking and tracing.** Real-time data sharing and analysis across multiple parties with different systems, data stewardship, protocols, and legacy systems typifies many use cases ranging from transportation and logistics to communicable disease control.
- **Smart and autonomous vehicles.** Airplanes, cars, high-speed rail, and other connected smart devices represent the most challenging requirements across automation, tracking, and decision support.

## Bringing the IoT to ERP: One-Stop Shopping for Global Shop Solutions

Global Shop Solutions enterprise resource planning (ERP) software provides the applications needed to deliver a quality part on time, every time from quote to cash and everything in between including shop management, scheduling, inventory, accounting, quality control, CRM, global shop support, and more. Available in the cloud or on-premises, Global Shop Solutions' manufacturing customers benefit from real-time inventory accuracy, improved on-time delivery, lower administrative costs, increased sales, and improved customer service.

### CHALLENGE

The emergence of the IoT has changed the face of manufacturing. Inexpensive IoT-enabled devices are replacing expensive programmable logic controller (PLC)-based devices throughout the ecosystem. To meet customer demands for IoT-enabled options,



Global Shop Solutions needed a lightweight, embedded database solution that could interact efficiently with the Actian Zen database at the heart of its ERP solution.

## **SOLUTION**

Global Shop Solutions found the serverless solution it needed in the very solution it was already using: Actian Zen. Actian Zen Mobile operates as a lightweight, serverless database that interacts seamlessly with Actian Zen Edge, enterprise, and cloud editions, ensuring that Global Shop Solutions can deliver a powerfully integrated, high-performance ERP solution.

## **OUTCOME**

Because all Actian Zen products rely on the same data models, IoT and shop floor devices with Actian Zen Mobile embedded can easily share data with any other edition of Actian Zen—without the need for middleware to facilitate ETL. And because Actian Zen offers both transactional and relational interfaces, the Global Shop Solutions ERP system offers both high-performance transaction support as well as the opportunity for deep analytical insight through standard SQL queries.

# **Supply Chain Analytics**



Compared to just a few decades ago, manufacturing has become a far more complex process. Massive amounts of data need to be analyzed to optimize supply chains, manage procurement, address distribution challenges, and predict needs. A data platform helps companies aggregate and analyze supply chain data to gain data-driven insights for optimizing supply chain efficiency, reducing disruptions, and

increasing operating margins. Key capabilities in a data platform for supply chain analytics, inventory management, and demand planning include:

- **Data management and automation.** Gather insights around supplier performance, supply chain diagnostics, market intelligence, and risk management through end-to-end information management. Data lake analytics capture supply chain transactions accurately with high consistency and minimum redundancy while deriving patterns for optimization.
- **Supply chain simulation.** Model new supply chain strategies based on business and operating model changes, and current and future supply/demand/logistics constraints. Identify and validate the best cost-efficient network to achieve the necessary service level across the value chain.
- **Intelligent distribution and logistics.** Gain a more intelligent and responsive allocation across channels addressing challenges such as staffing, distributed warehouses, and direct distribution through real-time analytics.
- **Intelligent procurement.** Understand where and when to source using advanced machine learning algorithms based on past purchases, commodity pricing, and industry trends.
- **Supply chain control tower.** Establish a single source of truth from sourcing to delivery for all trading partners. See and adapt to changing demand and supply scenarios across the world and resolve critical issues in real time.

## Balancing Regulation and Insights with Unified Data

Aeriz, a multistate aeroponic cannabis brand renowned for its consistent and pure cannabis products, sought to cater to the increasing demand from patients and enthusiasts. Their innovative aeroponic cultivation method, which employs a recyclable grow medium instead of soil, has garnered immense attention. This led Aeriz to embark on a journey to establish a cutting-edge cannabis cultivation facility in Illinois, a decision driven by the company's need to stay ahead of growing demand.



### CHALLENGE

Aeriz needed to reduce the time spent on manual efforts to aggregate data from disparate sources. Unifying data from on-premises applications and delivering it to the SaaS ERP system was extremely time consuming.

### SOLUTION

The Actian Data Platform provided Aeriz with a modern way to integrate data from its on-premises track-and-trace system into its ERP system for accurate data analytics, delivered in real time.

### OUTCOME

Analyst teams estimate that they will save 150 hours per month (an 80% reduction) by avoiding manual data preparation using the Actian Data Platform. They are also no longer limited by batch reporting and can take faster action by using real-time data to predict changes in supply and demand.

# Financial Analytics and Fraud Detection

Financial services organizations are engaged in a digital transformation arms race, moving their infrastructure and applications to the cloud. Separation of the winners from the losers will hinge on how well organizations can move their analytics to the cloud and edge in support of key initiatives including:

- **Client Relations.** Incorporate income, assets, area code, and other micro-demographic segmentation, along with an individual's transactional records, and where and how they interact with your financial services organization to define and personalize the relationship with customers.
- **Modernize financial services applications.** Transform your legacy applications and data architectures into secure intelligent applications on modern cloud-based platforms. Increase ROI and leverage cloud, AI, mobile, and IoT.
- **Fraud detection and prevention.** Modernize fraud detection and prevention by giving its core AI/ML the right data for training and query. Rapidly extend the inputs to new data sources from mobile, IoT, and third-party sources with a connected real-time cloud data warehouse with edge-to-cloud data retrieval and analysis capabilities.
- **Risk analysis and management.** Determine if a loan or credit line should be approved or if an investment portfolio is optimized based on complete data at the speed your business requires. Fully harness AI/ML with real-time connected data warehousing of data from customers, business partners, and even government sources to fully optimize growth, profitability, and business risk.

# Academy Bank Transforms Operations in a Hybrid Environment

Academy Bank is a full-service commercial bank with over \$1 Billion in assets and 77 branch locations in Arizona, Colorado, Kansas, Missouri, and Florida. Academy Bank provides a wide range of financial solutions for businesses and individuals, including commercial and small business lending, treasury management, and mortgage services. Academy Bank is a wholly-owned subsidiary of Dickinson Financial Corporation, a \$3.7 billion bank holding company with two separately chartered banks—Armed Forces Bank and Academy Bank—offering clients an easy way to diversify their own banking relationships under a single umbrella.



## CHALLENGE

Create, maintain, and expose data integrations and orchestrations using a hybrid cloud environment.

## SOLUTION

The Actian Data Platform allowed Academy bank to securely expose previously developed integrations to cloud-based applications and third-party vendors with automation that provides real-time updates to their core banking system.

## OUTCOME

Saved 4+ hours of daily manual data entry and developed new online services to improve customer experience. Ability to develop and migrate integrations to support cloud and hybrid-cloud infrastructure.

## Wrapping Up



Throughout this Gorilla Guide, you've learned about data management and storage challenges in the modern data stack, how a data platform can help you address those challenges and quickly derive valuable insights from your data, and how a data platform supports common business use cases.

For a deeper dive into the Actian unified data platform, be sure to visit [actian.com/data-platform](https://actian.com/data-platform).

The best way to get started would be a [free trial](#) or [demo](#).



# ABOUT ACTION



# ACTIAN™

a division of HCLSoftware

Action makes data easy. We deliver cloud, hybrid, and on-premises data solutions that simplify how people connect, manage, and analyze data. We transform business by enabling customers to make confident, data-driven decisions that accelerate their organization's growth. Our data platform integrates seamlessly, performs reliably, and delivers at industry-leading speeds. Learn more about Action, a division of HCLSoftware: <http://www.action.com>.

# ABOUT ACTUALTECH MEDIA



ActualTech Media, a Future B2B company, is a B2B tech marketing company that connects enterprise IT vendors with IT buyers through innovative lead generation programs and compelling custom content services.

ActualTech Media's team speaks to the enterprise IT audience because we've been the enterprise IT audience.

Our leadership team is stacked with former CIOs, IT managers, architects, subject matter experts and marketing professionals that help our clients spend less time explaining what their technology does and more time creating strategies that drive results.

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