

# Solution Brief: Harnessing Disruption in the Financial Services Industry

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Tackling key industry use cases with a self-  
service, cloud data warehouse

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## Introduction

Powerful trends are reshaping the financial services industry. Customer expectations and behaviors are changing, new entrants are reinventing banking, SMBs are turning to digital alternatives for financing, and AI is replacing human interaction.

The exponential increase in available data is fueling new products and creating new opportunities; the ability to manage and harness all that data is critical to success. Financial institutions must not only mine insights for growth, but also to protect themselves from harm. Digitally native criminals are more sophisticated than ever and rooting them out requires at least equally sophisticated systems.

The past decade's Fintech phenomenon, as a pool of agile innovation, has changed banking forever. Technology giants such as Google, Apple, Facebook, and Amazon have been working to unbundle financial services, and they tend to be very effective at managing customer profiles as well as anticipating preferences and spending patterns. McKinsey [estimates](#) that the big tech companies could take upwards of 40 percent of the North American financial industry's revenues.

A [report from Omdia](#) shows that modernizing legacy systems is the #1 IT priority of financial institutions. Indeed, modern technologies enable both incumbent institutions and new competitors to address challenges they're facing as well as to innovate to seize new opportunities.

With Oracle Autonomous Database, financial services organizations can improve business agility, accelerate innovation, and reduce risks—while simultaneously lowering costs.

## Use cases in the financial services industry

Let's consider how [Oracle Autonomous Database for analytics and data warehousing](#) enables financial services customers to successfully implement marketing and sales excellence, combat fraud, innovate with new offerings, and empower employees—four key use cases in the industry.

### Sales and Marketing Excellence

[Up Sí Vale](#), a leading provider of payment and other financial services to 16,000 companies and 5 million consumers across Mexico, needed to centralize information and streamline data analysis to learn more about its diverse sets of customers—but it wanted to do so quickly and with minimal disruption to its operations.

Up Sí Vale consolidated data management of 240 million transactions from 10 sources, eliminating 90% of the time spent on database administration. It eliminated 75% of the time it took to assemble data in spreadsheets, allowing for more strategic customer segmentation and personalized marketing. The sales team can now take a more proactive approach with customers, helping the company reduce churn from 15% to 5%.

[Aon](#) boosted performance 50X to 60X for complex sales queries while significantly lowering costs vs its on-premises business intelligence tools. Aon sales teams can now easily visualize business trends, outliers, client sentiment, and sales performance.

[BBVA](#) improved the click-through and conversion rates of marketing campaigns by 30X to 40X leveraging machine learning.

### Fraud detection

[AsiaPay](#)'s digital payment gateway processes payments for multiple currencies, languages, channels, and devices across 15 countries. With Oracle Autonomous Database for analytics and data warehousing, the AsiaPay teams

could easily migrate data to the cloud, reduce administrative chores, rapidly build prototypes, and use machine learning to stop fraud in real time.

[Ripley](#) consolidated 10 different data systems into one centralized unified system, representing a single source of truth for fraud detection and actionable intelligence. Autonomous Database delivered significant benefits vs Amazon Redshift: 25% lower costs, 2X higher performance, 40% faster time to market.

### **Finance innovation**

[Forth Smart](#)'s 120,000 banking kiosks spread throughout rural Thailand. With Oracle's solution, the company gets real-time insights into customer behavior on its kiosk network, which handles more than 2 million transactions a day. Business analysts apply machine-learning algorithms to understand customer segments and predict how an offer will fare. Initially started to let people use cash and coins to top off prepaid mobile phones and transfer funds between friends and relatives, the kiosks now offer a greatly expanded number of services and ebanking functions.

[Federal Bank](#) relies on machine learning in Autonomous Database to determine just what to offer its customers, and succeeds in India's ultracompetitive banking industry.

### **Employee empowerment**

At [Generali](#), the HR departments compiled data manually in templates and sent those templates to the head office team for reporting and analysis purposes. This approach was time-consuming and susceptible to errors. Oracle Autonomous Database and Oracle Analytics transformed Generali's reporting process, empowering HR with direct access to more accurate information to support the management of the company's best asset: its people. Generali's HR community has embraced a more analytical culture, supporting the decision-making process with meaningful and easy-to-use workforce analytics.

[Learn more](#) about additional use cases implemented by our customers.

## **A complete, self-service data analytics solution**

Oracle delivers a complete, self-service data analytics solution empowering business teams to rapidly get the deep, trustworthy, data-driven insights they need to make quick decisions.

### **Self-service, governed, secure solution to meet business and IT needs**

With a self-service solution, business users independently load, transform data, build business models, and automatically discover insights powered by machine learning. IT reduces risks with a governed, secure solution. IT teams can additionally rely on a simple, reliable, and repeatable approach for all data analytics requests from finance departments.

### **Automation uniquely simplifies operations and boosts productivity**

Autonomous Database intelligently automates provisioning, configuring, securing, patching, backing up, performance tuning, and repairing of a data warehouse. This reduces administration effort by up to 90%, enabling business teams to operate independently while freeing up valuable resources for IT teams.

### **All-in-one solution with comprehensive suite of built-in tools**

Customers can quickly combine all necessary data across different sources and formats in a converged database to drive secure collaboration around a single source of truth. Analysts can use graph, spatial analytics, build machine learning models, and create new applications themselves with no/low code built-in tools. Nothing more to purchase, install, and integrate.

### **Elastic auto-scaling for consistent high performance and cost savings**

Any number of concurrent users can benefit from consistent, high query performance, even at peak times. Unlike other cloud services, Autonomous Database scales while the service continues to run and can do so automatically.

to maintain performance. Compute resources can conversely be reduced or shut down during more quiet periods to reduce customers' costs. All with no or minimal intervention from IT.

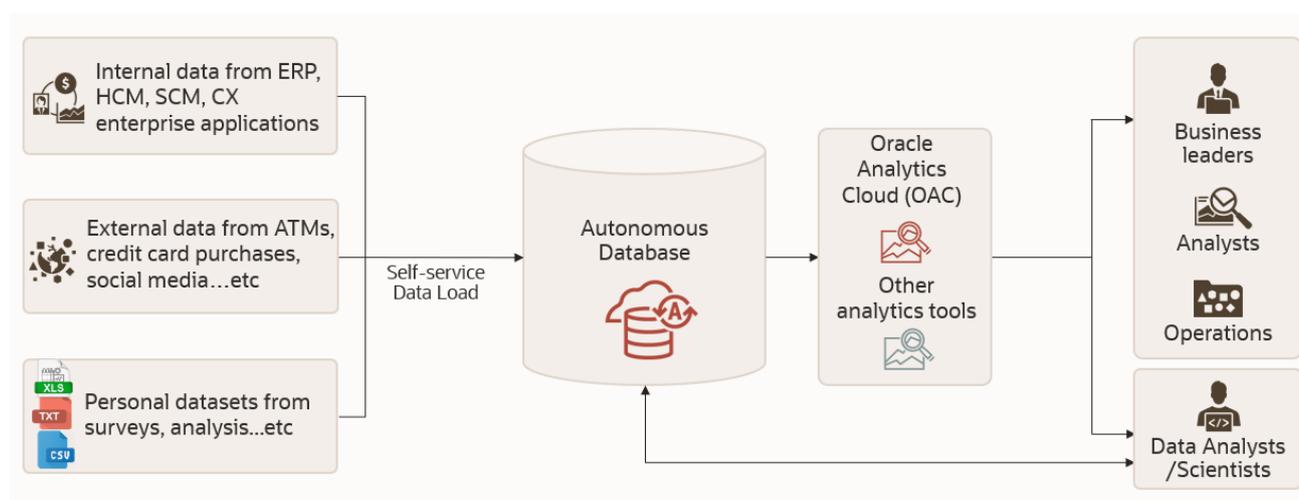
“It's like the iOS of the enterprise cloud data warehouse space.”

### Patrick Moorhead

Founder, President, & Principal Analyst at Moor Insights & Strategy

## Architecture and offerings

The architecture of the Oracle solution is represented below:



Data from all sources and formats can be combined in [Autonomous Database for analytics and data warehousing](#). It is the only cloud data warehouse that is **autonomous**, **self-service**, and **complete**, empowering business innovators with a suite of built-in tools:

- Built-in data tools enable self-service drag-and-drop data loading, data transformation, and business modelling. Analysts can automatically discover insights with machine learning algorithms—no coding required.
- Built-in graph analytics enables analysts to visualize relationships and connections between data entities. They can for example uncover money laundering schemes and conduct real-time fraud detection.
- With built-in spatial analytics, customers can discover risk zones or other patterns based on customer location data analysis and customize offers based on this intelligence.
- Expert and citizen data scientists can build machine learning models—with a no code interface—to support or automate decision making in areas such as credit risk management, trade pricing and execution, as well as general insurance pricing and underwriting.
- With the built-in Oracle APEX low-code development platform, professional and citizen developers can quickly develop applications for ad hoc needs and gaps/processes handled outside of enterprise applications— up to 38 times faster than with traditional coding and without having to join a queue of IT projects. Such applications can include ad hoc data rooms for acquisitions, tracking the progress of digital transformation initiatives, or COVID-19 related applications.

[Oracle Analytics Cloud](#) is connected to Autonomous Database, empowering business users and executives with modern, AI-powered, self-service analytics capabilities for data preparation, visualization, enterprise reporting, augmented analysis, and natural language processing/generation. Alternatively, Autonomous Database is [certified with all popular analytics tools](#) including Tableau, Looker, and Microsoft Power BI, ensuring freedom of choice for customers.

“Enabling data analysts, citizen data scientists, and business users to create and analyze their own data sets with self-service tools avoids IT bottlenecks and significantly improves their productivity.”

**Bradley Shimmin**  
Chief Analyst, Omdia

## Conclusion

The financial services industry is changing at a very rapid pace, and evolution is the key to survival. Oracle’s solution, powered by Autonomous Database, enables both incumbent financial institutions and startups to securely empower business teams with actionable intelligence for fast decision making. You can improve business agility and accelerate innovation while reducing risks and costs.

[Get started now](#), it only takes a few minutes to implement Autonomous Database!

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