

ORACLE

How Nine Industries Drive Transformation Through Autonomous Technology

Enabling the Autonomous Enterprise

Worldwide, we create around 2.5 quintillion bytes of data every day. And as data becomes easier to capture and contextualize—thanks to innovations like the Internet of Things (IoT) and Al—the rate of data growth is only going to accelerate.

For enterprises, pulling and contextualizing data from multiple sources is now a competitive necessity. So, too, is operating an efficient database infrastructure to help manage, protect, and deliver fast, scalable data and application availability when it's needed most.

The unfortunate reality is that IT spends much of its time performing manual, labor-intensive management and maintenance tasks. This not only stops IT from pursuing initiatives that can drive growth and innovation; the impacts of human error and resource limitations can also have catastrophic effects on uptime, performance, and security.

But there is a solution.

Oracle Autonomous Database technologies, running on Oracle Cloud Infrastructure are changing how we manage, consume, and protect data. Oracle Autonomous Data Warehouse and Oracle Autonomous Transaction Processing are the result of four decades of innovation, enabling you to accelerate transaction times, order processing, and data queries while also significantly reducing downtime by automating patches, upgrades, and data-backup tasks.

In this guide, we'll explore how the following key industries are using autonomous technology to take greater control of their data, better meet customers' needs, improve security, and much more:

- Financial Services
- High Technology
- Media and Entertainment
- Communications
- Research and Education
- <u>Healthcare</u>
- Industrial Manufacturing
- Retail and Consumer Goods
- · Logistics and Distribution

You'll also hear from industry peers and leaders from around the world who are using Oracle's autonomous technology to transform their database operations.



Oracle Autonomous Database **Key Benefits**

Reduce costs

Cut administrative costs by up to 80% and runtime costs by up to 90% with complete automation, self-optimization, and an elastic pay-per-use model.

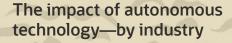
Reduce risk

Eliminate cyberattack vulnerabilities and protect from all types of downtime with the latest automatic security updates.

Innovate more

Free your database administrators and app developers from routine maintenance tasks so they can accelerate time to market and deliver more-strategic insights.





Financial Services

Financial Services has traditionally been slow to embrace technological innovation, but rapidlychanging customer expectations mean it must take a pragmatic approach to digital transformation.

Today's B2B customers expect greater security and service availability, while B2C customers want fast, connected, and personalized omnichannel services. To meet their expectations, finance firms can use blockchain to secure transactions, and AI to automate businesswide functions—including consumer lending, fraud detection, customer service, and more.

In fact, it's predicted that by the end of 2020, approximately **85% of all business-customer interactions** will be handled by Al-powered chatbots.

Data analytics can also help firms capture, contextualize, and regulate data more effectively—using these insights to improve product, service, security, and customer-experience strategies.

Above all, firms can foster greater trust and transparency between customers and providers—and drive business growth.

Oracle supports over 9,000 financial institutions, servicing over 1 billion customer accounts. Each day, we deliver billing for 1 billion debit- and credit-card transactions—and our Autonomous Database remains our key to ensuring secure practices and innovative journeys for our customers. Leveraging advanced analytics, businesses can make better risk-management decisions while reducing costs and speeding operations.

Select a case study



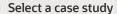






















Forth Smart Transforms Thai Finance with Oracle Autonomous Database



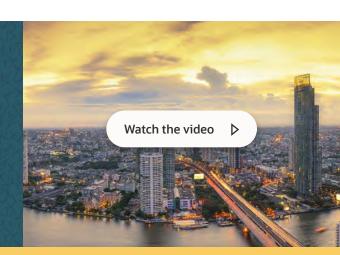
Serving millions of customers each day, Forth Smart is a financial technology (fintech) disrupter that helps convert cash into digital currency at its 120,000 kiosk ATMs that dot local bodegas and schools, even in fishing villages and local community centers.

Using Oracle Autonomous Data Warehouse, the ambitious fintech can now analyze more than 2 million transactions per day in real time—this used to take two to three days. Query response times have also been cut from three hours to just a few minutes, empowering business users to perform more-creative and valuable marketing analysis such as advanced customer segmentation without DBAs.

What's more, machine learning (ML) in Oracle Analytics has enabled Forth Smart to double conversion rates through intelligent targeted marketing.

"Oracle Autonomous Data Warehouse has given us the ability to transform into a data-driven company with a powerful analytical platform that also has encryption for cybersecurity."

Pawarit Ruengsuksilp, Business Development Analyst, Forth Smart



Read the full Forth Smart story here

Kingold story















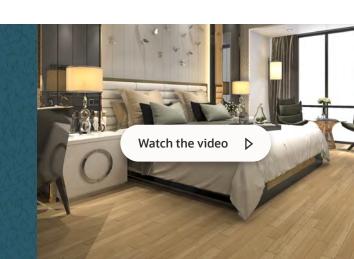
Kingold is a luxury real-estate developer that provides property management and hotel experiences for residents. It was looking to expand its digital services across marketing, sales, customer service, and various businesses by pulling data together in Oracle Cloud. Kingold uses Oracle Autonomous Data Warehouse and Oracle Analytics to allow business users to perform their own market intelligence with company and internet data for new and preowned homes in the major 17 cities in China—without having to buy expensive market reports.

It has accelerated data warehouse projects from six months to just a few weeks and critical financial reporting from 12 minutes to just 41 seconds—allowing IT talent to focus on data analytics and modeling rather than laborious DBA tasks.

"When you make the data work for you, and empower the people around you, that's when you become a digital CIO.

Real transformation can't start until you start working the data to make changes."

Steven Chang, Chief Information Officer, Kingold Group



Read the full Kingold story here

Forth story

AU Small Finance Bank story















AU Small Finance Bank Uses Oracle Cloud to Support India's Rural Entrepreneurs



AU Small Finance Bank brings essential banking services to entrepreneurs in rural communities across India—where nearly 200 citizens have no access to a bank account.

Since 2017, the firm has used Oracle Cloud Infrastructure and Oracle Database to provide unbanked areas with access to business finance, complete with biometric verification. As a result, rural entrepreneurs, from farmers to photographers, can fund the equipment they need to grow, and build India's economy at a local level. Oracle Autonomous Data Warehouse and Oracle Autonomous Transaction Processing are keeping customer data timely, accurate, accessible, and secure.

"By taking our bank-on-a-tablet to remote areas, we've been able to grant nearly a million loans. With Oracle, we are helping our entire country flourish."

Ankur Tripathi, Senior VP for Technology, AU Small Finance Bank



Read the full AU Small Finance Bank story here

Kingold story

AsiaPay report













AsiaPay Innovates Safely Using Oracle Autonomous Data Warehouse



AsiaPay is experiencing huge growth among international retailers, by making it easy to standardize their payment flow across currencies, languages, and devices. To defend this position, the company needs the agility to add new payment channels quickly—but it needs to do that without compromising fraud detection, which means analyzing up to 100 data points for each transaction.

Having worked with Oracle for more than 18 years, AsiaPay is now using Oracle Autonomous Data Warehouse to easily migrate complex data to the cloud. There, machine learning can help to stop fraud in real time, freeing the company to create innovative new services.

"Fierce competition means that we need to continually explore new ways to support increasingly diverse payment methods, channels, and experiences."

Isaac Leung, Senior IT Manager, AsiaPay



Read the full AsiaPay story here

AU Small Finance Bank story

Federal Bank story





High

Media and Entertainment

Select a case study











Federal Bank Designs Successful New Services with Oracle Autonomous Database



As India's economy grows, its billion citizens need an increasingly diverse range of financial services—creating a fiercely competitive banking market. Federal Bank is in the vanguard, with 1,276 branches, and almost 25% retail growth in 2019.

The success is built on creating a sophisticated mix of services that match its customers' changing needs. And the bank gains that deep customer understanding by using Oracle Autonomous Data Warehouse and Oracle Analytics Cloud together on Oracle Cloud Infrastructure. The result is the secure, high-performance database a financial institution demands—with the insight and flexibility to see new opportunities, and react fast.

"For us, analyzing and understanding customer data is the bread, butter, and jam of everything we do as we look at future decisions. Oracle Autonomous Database is at the core of that."

Shalini Warrier, Executive Director, Federal Bank

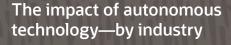


Read the full Federal Bank story here

AsiaPay story

2. High Technology





High Technology

High technology companies are entering a more mature phase of cloud adoption, with many choosing to evaluate their existing IT infrastructure to better take advantage of the cloud.

To keep pace with rapid digital change, firms must deliver highly tailored solutions that show a deep understanding of their customers' needs—critical in areas such as software development, cybersecurity, and data and infrastructure.

By adopting database automation, firms can better unlock and contextualize their data to tailor customer offerings, as well as accelerate time to market, reduce costs, and improve database performance.

But the more these firms expand their digital footprint and create new endpoints, the more important cybersecurity analytics becomes in protecting against data breaches. Al-powered automation can go a long way to reduce security complexity and help isolate sources of risk and data vulnerability.

With Oracle Autonomous Database, we deliver unprecedented levels of automation so customers can speed deployment and shorten product lifecycles. With AI and machine learning (ML), companies can discover new patterns and produce innovative experiences for customers.

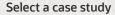
Select a case study

















11880 Enhances Intelligent Search with Oracle Autonomous Database

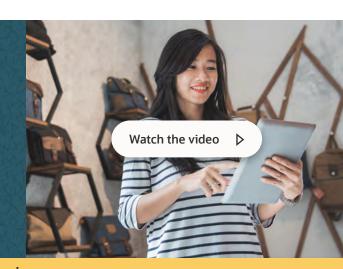


11880 is Germany's second largest phone assistance firm. It offers strategic digital search services, builds websites, and aggregates more than 90 million recommendations for 1 million small and midsize businesses.

11880 uses Oracle Autonomous Data Warehouse for its big-data queries, helping it consolidate seven DBA roles into one architect. Not only has 11880 quadrupled its performance speeds, but it's also simplified peak demand, helping it minimize costs and lower its TCO.

"Compared to Amazon Redshift, we had a speed increase of 4×, and the ROI was achieved within 12 months."

Christian Maar, CEO, 11880 Solutions AG



Read the full 11880 story here

intive story











intive Accelerates Innovation with Oracle Autonomous Database intive

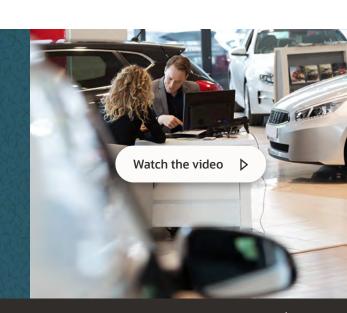
With 1,600 software engineers worldwide, intive is a German digital agency that serves some of the world's largest automotive, finance, and media companies.

By using Oracle Autonomous Data Warehouse, intive was able to improve AI performance for research and development in the financial services while also helping to eliminate database administration.

As a result, it saw a 70× performance increase, 3× development velocity, and 4× fewer errors compared to its legacy on-premise environment.

"Oracle Autonomous Data Warehouse supporting our research and development is beautiful, because now we can focus on our ideas and innovation, and not have to tackle IT maintenance and routine tasks."

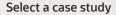
Marcin Niczyporuk, CTO, intive



11880.com story

Data Intensity story











Data Intensity and Reporting with Oracle Autonomous Database

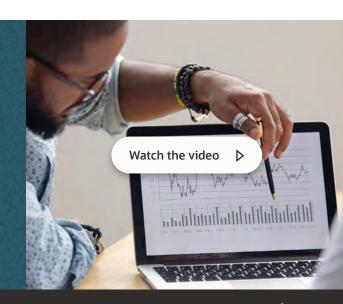


Data Intensity is a multicloud managed services provider specializing in ERP applications, database management and analytics, and infrastructure.

By using Oracle Autonomous Data Warehouse, the company has revolutionized its financial reporting and agile development to achieve 5× more performance, 10× more user adoption, and 10× fewer resources—including nearly US\$250,000 in cost savings and zero downtime.

"We chose Oracle Autonomous Data Warehouse because it's quick, easy, and solved a lot of problems for us—and really suited our agile development. We achieved an initial saving of nearly \$250,000, and we're running on 10× less hardware than before."

James Anthony, CTO, Data Intensity



intive story

3. Media and Entertainment



The impact of autonomous technology—by industry

Media and Entertainment

From Spotify and Netflix to YouTube and Steam, the way consumers ingest media and entertainment is constantly evolving. Massive amounts of content are being created and shared every day.

To remain competitive in an age of digital immediacy and user-defined content, traditional media organizations must efficiently manage and scale digital distribution without loss of revenue or incurring large OpEx costs.

That's where AI and database automation come in.

By simplifying their content supply chains, postproduction processes, and database operations, and traditional industry players can accelerate content delivery. They can also develop new means to scale profitability, and respond to new agile competitors.

In addition, advanced analytical capabilities introduce greater predictability to areas such as advertising, security, and customer demand. In fact, <u>85% of industry executives</u> believe that digital innovation will help aid cost transparency in technology and marketing functions.

In a consumer-focused industry, Oracle Autonomous Database is helping companies improve operations and increase agility to meet fluctuating customer demands. This enables businesses to produce more creative, effective services for users. In addition, automation and analytical capabilities enable businesses to reduce costs while making informed decisions that help curate relevant content to drive retention.

Select a case study



agea





agea

OUTFRONT Media Innovates Sales with Oracle Autonomous Database

OUTFRONT

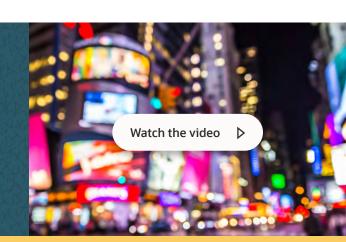
OUTFRONT turned to Oracle Autonomous Data Warehouse and Oracle Analytics to speed the process and expand the insights. Today, in minutes, the company can load and merge terabytes of data and securely publish interactive dashboards for its salesforce. The salesforce can now share a comprehensive view of customers' ad spending—across outdoor, online, TV, radio, and print channels—to show them how their investment would perform better by shifting spend to outdoor.

The cloud-based Oracle Autonomous Data Warehouse requires OUTFRONT to pay only for the capacity it uses, so it costs less than on-premise and other subscription database cloud solutions while delivering more robust performance.

Because Oracle Autonomous Data Warehouse is self-tuning, self-patching, and self-securing, IT staffers no longer need to spend 25% of their time on administrative tasks, freeing them to work on higher-value data modeling.

"Oracle helps us achieve maximum results for our customers, which in turn grows our business."

Derek Hayden, SVP Data Strategy and Analytics, OUTFRONT Media



Read the full Outfront story here

Agea story



View more information at oracle.com/cloud

OUTFRONT!

agea

Agea Accelerates Innovation with Oracle Autonomous Database

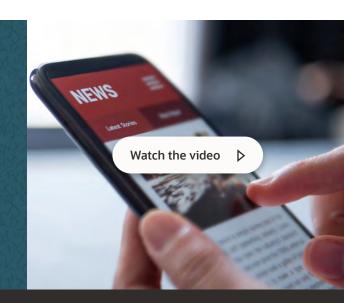
agea

Agea is a media company that publishes Clarín, the largest newspaper in Argentina. To accelerate its shift to digital content and advertising, Agea turned to Oracle Cloud.

Oracle Autonomous Data Warehouse with Oracle Big Data Appliance helped the company to reduce maintenance costs by 50%, increase availability, (compared to a previous on-premise teradata solution) and build a 360-degree customer view by tracking 20 billion clicks and searches a day. And by integrating data from Autonomous Database Warehouse with Oracle Marketing Cloud Applications, Agea has empowered marketing business users to drive more-targeted, personalized campaigns, reduced time to market from four days to hours, and grown revenue by US\$2 million in 18 months.

"The biggest challenge before adopting Oracle Autonomous Data Warehouse was analytical maintenance. Now, we've reduced our analytics costs by 50% and we have more time to spend on new business initiatives."

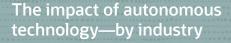
Pablo Giudici, Manager, Big Data and Analytics, Agea Clarín



OUTFRONT story

4. Communications





Communications

The emergence of smart, cross-channel connectivity has fundamentally changed the way companies engage with customers, suppliers, employers, and investors. In response, communications providers must innovate for the future and rethink their operating models to deliver the fast, connected services today's consumers expect.

Al and automation can enable telecom providers to self-configure, monitor, manage, correct, defend, and analyze without the need for human intervention, helping to reduce operational costs and free IT staff to innovate.

As for making smarter use of data, analytics tools can help providers better identify and respond to

customer and industry trends while enabling greater operational visibility across the company—and market.

When coupled with AI, data analytics can also help providers automate valuable services like predictive maintenance and fraud detection, freeing more time for IT to spend on critical security issues and service innovation, while also nurturing customer trust.

Today, Oracle connects millions of applications and secures thousands of networks, servicing billions of mobile devices around the world. Using Oracle Autonomous Database, organizations can deliver quicker reporting and optimize their networks, helping to reduce costs and drive better customer experiences.

Select a case study















SKY Brasil Transforms Telecom with Oracle Autonomous Database

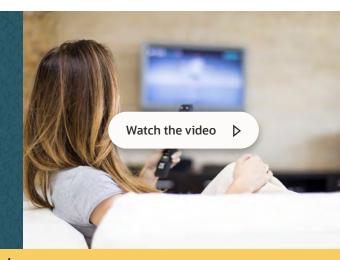


SKY Brasil is the leading provider of satellite telecom services and 4G Internet connection for rural regions of Brasil. The growing demand for seamless, personalized services and content required a new approach to innovation. By turning to Oracle Autonomous Data Warehouse, SKY Brasil can now perform real-time marketing analytics in a high-performing, secure environment—helping it build targeted marketing strategies that satisfy the needs of individual customers.

Oracle Autonomous Data Warehouse transformed Sky's digital transformation by accelerating time to market by 90% and saved 60% in hardware procurement and software licensing compared with its previous on-premise solution. 90% of IT staff time is now spent on higher-value data modeling rather than on maintenance.

"In addition to the high performance of Oracle Autonomous Data Warehouse on Oracle Cloud Infrastructure, the adoption has streamlined our processes and enabled us to reach our customers with the right offering at the right time."

André Nazare, IT Director, SKY Brasil



Read the full SKY story here

Vodafone Fiji story



View more information at oracle.com/cloud







Vodafone Fiji Innovates with **Oracle Autonomous Database**



Helping to drive smartphone adoption across the South Pacific, Vodafone Fiji is Fiji's leading mobile and internet services provider. It delivers world-class services to more than 800,000 subscribers, reaching about 96% of the Fijian population. The company uses Oracle Autonomous Data Warehouse and Oracle Analytics Cloud to gain the benefit of real-time operational reporting and dashboards that don't require IT administration.

With Al and machine learning, it can also better

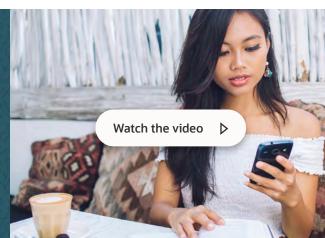
records per day—the equivalent of 50 terabytes

of data per month.

predict customer churn, and empower staff to be more proactive and customer-focused.

"We leveraged Oracle Analytics to interrogate the data and give us some great business insights. The biggest advantage of Oracle Autonomous Data Warehouse is it significantly cut down processing time and helped simply reporting and analytics, so we could go to market much faster."

Ronald Prasad, COO, Vodafone Fiji

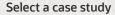


Read the full Vodafone Fiji story here

SKY story

Telecom Fiji story











Telecom Fiji Innovates with Autonomous Database



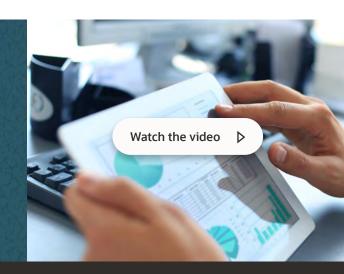
Telecom Fiji is one of the region's largest telecommunications providers and needed to accelerate its decision-making processes.

By replacing slower, manual analytics processes in an on-premise database environment with Oracle Autonomous Data Warehouse, it can now generate business performance and customer activity insights from multiple sources—fast. Self-tuning reduced time to produce reports on terabytes of data from two weeks to minutes. Autoscaling has provided more capacity flexibility on demand to ramp up for peak reporting performance, and down to minimize costs, saving the company hundreds of thousands of dollars in on-premise equipment and software licensing.

Telecom Fiji also uses Oracle Analytics to improve customer service, with business users empowered with real-time actionable insights.

"With Oracle Autonomous Data Warehouse, we can empower our IT staff to innovate ways to apply data analytics. Because of this, they're now performing more of an advisory role to management."

Shalvin Narayan, Head of IT, Telecom Fiji



Vodafone Fiji story

5. Education and Research



The impact of autonomous technology—by industry

Education and Research

Digital transformation is challenging the expectations of both educators and learners by enabling new possibilities in areas like content delivery, student management, and research.

The introduction of cloud computing allows organizations to streamline processes in data collection and data management.

Autonomous database technologies can help innovate scientific research and the academic curriculum. Al automates data integration and expands data sources to conduct experiments faster on higher-performance computing to capture breakthroughs. Oracle Autonomous Database transforms traditional data processes by delivering intelligent automation for quicker processing and analytical tools for deeper insights. With this, institutions can uncover more with their data and share that knowledge in new, immersive ways.

Al also plays an important role in transforming academic administration with analytics to help boost student recruitment, admissions, and retention—identifying ideal students, responding to individual needs, and predicting behavior. Teachers can also use Al-powered analytics to automate time-consuming functions like curriculum planning and grading.

Select a case study















CERN Scales for 75,000 Visitor Registrations with Oracle Autonomous Database

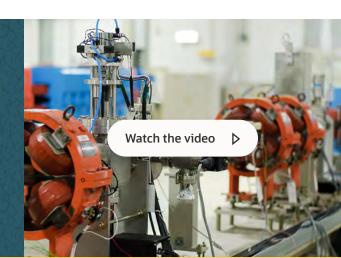


The Nobel Prize-winning physics research organization, CERN, houses the world's largest and most powerful particle accelerator, the Large Hadron Collider, 100 meters underground on the French–Swiss border. CERN's purpose is to discover the subatomic building blocks of the universe, so when it began registration for its annual Open Days public conference event, it's understandable that demands on the visitor registration system were huge.

To ensure a great user experience in the face of such attention, CERN openlab built a cloud-native application for 75,000 registrations and hosted it all on Oracle Cloud Infrastructure. Oracle Autonomous Transaction Processing scaled up the database 10× and Kubernetes engine scaled up 3× in minutes. The event-registration application was not only delivered at scale and fast (in 75 days); there was also no database management—freeing the IT staff to have more flexibility and control.

"The best thing about the Oracle solution and architectural design was the collaboration between the teams. We have a much more flexible and scalable system now. We're excited about the future."

Viktor Kozlovszky, Software Architect, CERN



Read the full CERN story here

Woolcock story



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Woolcock Innovates Medical Research with Oracle Autonomous Database

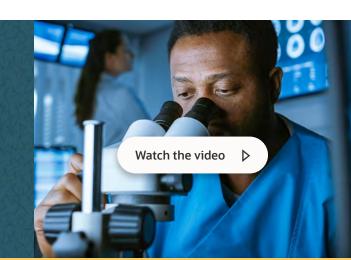


With over 200 medical researchers and doctors working to uncover the causes of diseases, find better treatments, and provide the best treatment for patients, The Woolcock Institute of Medical Research at the University of Sydney in Australia is a leader in breathing and sleep research.

Using Oracle Autonomous Data Warehouse, it was able to clean, process, and analyze insomnia research data in just hours, rather than weeks. Machine learning also enables it to simultaneously use and process 100 million different health data points and signals per patient, for prescribing personalized sleep treatments.

"The Oracle Autonomous Data Warehouse system is very friendly, even for people who have no idea about the programming. It's easy to access, easy to upload data, no matter what kind of format, structured or unstructured data, visualize the data, and do machine learning."

ChienHui (Tancy) Kao, a data scientist at Woolcock Institute.



Read the full Woolcock story here

CERN story

Sharda University story









Sharda University Improves Student Experience with Oracle Analytics Cloud



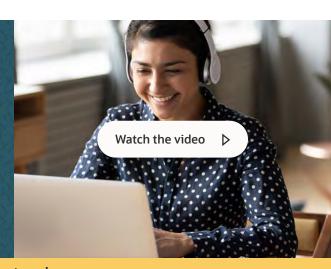
Education is changing, fast. And Delhi's Sharda University is developing new, technology-assisted approaches that encourage its 20,000 students to take their learning outside the classroom. Now, students build projects using cloud technologies and machine learning.

All those learning experiences also give the university a rich source of data. It uses Oracle Autonomous Data Warehouse to store the information securely in the cloud- the two-week implementation and scale required far fewer staff than the previous database.

Oracle Analytics is helping track community projects, academic programs, and student outcomes.

"We are using Oracle Autonomous Data Warehouse and Oracle Analytics Cloud to extract insights from our data. This has helped us improve the teaching—learning experience for students."

Divesh Kamboj, Vice President of IT, Sharda University

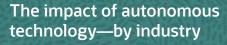


Read the full Sharda University story here

Woolcock story



6. Healthcare



Healthcare

New digital technology is creating life-changing opportunities in healthcare, from identifying new diseases at scale to enabling real-time monitoring of health epidemics to synthesizing new medications.

Innovations like wearables are introducing new methods of recording crucial medical data, which, when processed by Al and machine learning tools, McKinsey believes they could save \$100 billion each year for medicine and pharma.

Data can also be used to transform operational reporting, helping medical professionals get deeper insights into patients' needs. In some medical spaces, consumer technology such as virtual reality headsets can help doctors visualize this data, enhance patient education, and even help with treatment.

Process and database automation can also simplify complex processes and remove administration tasks, freeing medical professionals to spend more time delivering patient care.

Oracle powers clinical development for the top 10 pharmaceutical companies and is ranked first for patient safety and signal detection. With Oracle Autonomous Database, businesses can leverage Al and machine learning to automatically uncover patient insights that drive quicker resolutions to critical health problems.

Select a case study



















AOA Innovates Healthcare with Oracle Autonomous Database



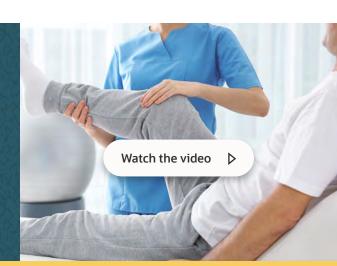
Arlington Orthopedic Associates Specialists (AOA) is the largest orthopedic practice in North Texas, with 54 physicians and professionals working across 12 locations. It uses Oracle Autonomous Data Warehouse and Oracle Analytics to help streamline its finance and accounting, electronic medical records, and data analytics.

By eliminating database maintenance, patching, and tuning, the company has freed up six financial and IT analysts to focus on more-strategic insights. And with Oracle Analytics Cloud, AOA can now deliver real-time performance dashboards and reports for healthcare providers for more valuable time with patients.

Since deployment, AOA has doubled its patient count without increasing its IT maintenance and support costs.

"We're using Oracle Autonomous Data Warehouse and Oracle Analytics Cloud. Before, we'd spend hours just to generate one month's report; now, I click once and it shows up. And it can answer important questions like where are my patients coming from, and how much is it costing me? Are we getting reimbursed by insurers?"

Honey Ranario, Chief Finance Officer, Arlington Orthopedic Associates



Read the full AOA story here

Grupo DPSP story











Grupo DPSP Accelerates Time to Market by 60% Using Oracle Autonomous Database

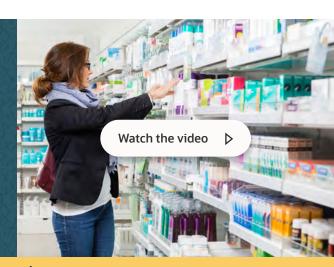


Brazil's second-largest retailer, the Pacheco São Paulo Drugstore, set itself an ambitious four-week target to develop a mobile app, used by millions of customers to access pharmacy services around the clock.

To accelerate the process, the company replaced its conventional database with Oracle Autonomous Transaction Processing. Based securely in the cloud, with self-encryption, the database enabled a 60% reduction in implementation time (which was a record), while enhancing scalability from 50 to 10,000 simultaneous user sessions with zero maintenance time. Now, DPSP guarantees customers the best price and choice for superior customer service.

"Because Autonomous Transaction Processing technology incorporates artificial intelligence, it manages itself. This is critical, because it exempts us from operational activities so we can focus more on what's important for the business and serving our customers."

Eliseu Rocha, Head of IT Enterprise Architecture, **Grupo DPSP**



Read the full Grupo DPSP story here

AOA story

National Pharmacies story











National Pharmacies Joins up Patient Data with Oracle Autonomous Database

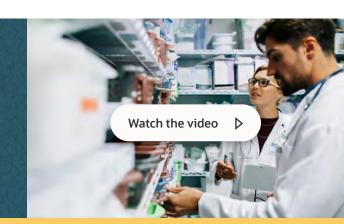


Australia's healthcare organization National Pharmacies is using technology to better serve its 350,000 members. A new technology system, relying on Oracle Cloud Infrastructure, joins the dots across multiple sites and data sources. The customer conversation can focus less on the patient's medical history and more on their current needs.

Oracle Autonomous Transaction Processing enables the company to quickly scale promotions from 1,000 test customers to 100,000 or more by autoscaling computing capacity, and integrating sales and inventory information in real time to deliver the precise medicine to members. Members can view their accounts online with greater accuracy and transparency. Oracle Autonomous Data Warehouse integrates data from the company's JD Edwards supply-chain application to achieve faster insights. As a result of running these Oracle Autonomous Databases and applications on Oracle Cloud Infrastructure, National Pharmacies has optimized inventory to better serve members by reducing out-of-stocks, tracking sales and responding to spikes, and shifting or adding inventory—while cutting AU\$7 million from working capital.

"We're using Oracle Autonomous Database to deliver data very quickly from the many different stores and healthcare systems we use into one repository. This allows our employees on the floor to make decisions quickly, in the best interest of our patients."

Ryan Klose, Executive General Manager, National Pharmacies



Read the full National Pharmacies story here

Grupo DPSP story

Sejong Hospital story



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Sejong Hospital Combats Children's Heart Disease with Oracle Analytics Cloud

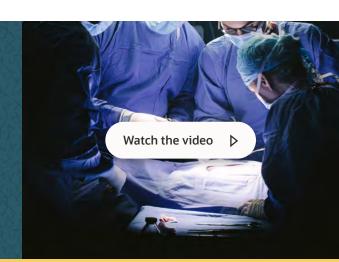


South Korea's only cardiac specialty hospital, Sejong Hospital, is on a mission to eradicate childhood heart disease. Since 1983, its doctors have carried out life-changing surgery on more than 12,000 children, free of charge. And Oracle is proud to help.

Sejong Hospital uses Oracle Autonomous Data Warehouse and Oracle Analytics Cloud to collect data without extra work, and dramatically accelerate the clinical decisions that can save lives. Al increases access to more in-depth quality-of-care clinical data and secure patient data.

"With Oracle Cloud, lifesaving decisions that used to take hours can be done in minutes. Our mission is to eliminate childhood heart disease, and Oracle Cloud is helping to make that a reality."

Park Jin-Sik, Chairman, Sejong Hospital



Read the full Sejong Hospital story here

National Pharmacies story

7. Industrial Manufacturing



The impact of autonomous technology—by industry

Industrial Manufacturing

Speed and efficiency are key measurements of quality in manufacturing, and new digital technologies can help manufacturers enhance these qualities as well as drive agility and scalability to better meet market demand.

Advancements in AI, cloud computing, analytics, and robotics—to name a few—are helping manufacturers take control of their operations and respond to market-banded threats. For example, AI enables automation across various industrial functions to deliver businesswide performance improvements that can save time and resources—resulting in better profit margins.

When converged with AI, the Internet of Things (IoT) can provide intelligent insights on processes, costs, and productivity while adding greater visibility across the supply chain. It can even help regulate factory conditions and improve quality control.

In fact, by the end of 2020, it's estimated that manufacturers will invest US\$267 billion in IoT.

Beyond process improvement, data-driven predictive maintenance is helping to improve equipment availability, and reduce planned outages to drive field-service efficiency and customer-satisfaction levels. Companies can better analyze customer data and feedback to provide more customized products and new sources of value.

With Oracle Autonomous Database, companies can build an intelligent supply chain and elevate their operations. With access to advanced analytical tools, businesses can uncover new insights into their business and their consumers to deliver competitive products, improve productivity, and create new business models that drive revenue.

Select a case study















MESTEC Innovates Manufacturing with Oracle Autonomous Database

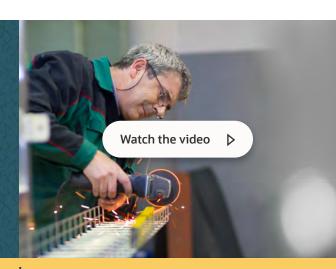


Supporting some of the largest capital equipment makers, MESTEC is a leading SaaS provider of intelligent manufacturing planning and execution solutions.

By harnessing the power of data, MESTEC is able to improve productivity by 60%, reduce working inventory by 20%, and cut customer complaints by half.

"Moving to the cloud removes a lot of the barriers to innovation we had with our legacy on-premise proposition."

Mark Carleton, Services Director, MESTEC



Read the full MESTEC story here

Unior story









Unior Accelerates
Operational Reporting with
Oracle Autonomous Database

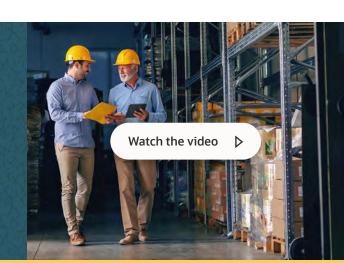
S UNIOR°

Unior is a global supplier of automotive equipment, hand tools, and specialist specialist machines—producing 100,000 items daily. Using Oracle Autonomous Data Warehouse, it has accelerated data loading and query performance for concurrent workloads, improving the time it takes to set up new development projects.

The company now also manages 85 million data records without the need for DBAs, helping it drive real-time insights and better decision-making—enabling it to focus its resources on customer service and sales, and reduce costs.

"From the first moment we started to use Oracle Autonomous Data Warehouse and Oracle Analytics, we were back in control of our production and our future. With dashboards updated every day, we have the insights to make the right decisions."

Rok Planinšec, Chief Information Officer, Unior



Read the full Unior story here

MESTEC story

MineSense story









MineSense Accelerated Time to Value with Oracle Autonomous Database





MineSense is a leader in intelligent digital mining. It improves operational profitability and sustainability, supports the technology mining companies of copper, zinc, nickel, and iron ore in Latin America, Australia, and Africa.

Oracle Autonomous Data Warehouse ingests gigabytes of daily Internet of Things (IoT) sensor data at 2× faster performance and with flexible

autoscaling to quickly onboard new mines and to save costs. The company has seen a 65% reduction in DBA workloads with increased productivity on development and reporting.

With APEX built into Oracle Autonomous Database, development to deployment of new low-code apps has been reduced from six weeks to one week for hundreds of users accessing data for reporting.

"Oracle Autonomous Database is the only data management platform out there that, with APEX, has built-in application development and deployment capabilities, which makes it an all-inclusive, full-stack platform"

Frank Hoogendoorn, Chief Data Officer, MineSense Technologies



Read the full MineSense story here



8. Consumer Goods and Retail

The impact of autonomous technology—by industry

Consumer Goods and Retail

Traditional supply chains are being tested by changing buyer expectations, shorter product lifecycles, new regulations, and fluctuating demand. In addition, products have been replaced by personalized and connected experiences as the key competitive differentiator.

To win customer loyalty and drive growth, retailers and consumer goods manufacturers must deliver the best products while also improving end-to-end supply-chain efficiency.

Organizations are using emerging technologies to automate their processes and deliver end-to-end visibility for real-time decision-making. It enables them to identify market patterns, customer behaviors, and accelerate time to market—all while staying compliant with the latest industry regulations.

Retailers can also tap into onsite and ecommerce customer behavior to make smarter decisions about promotions, sales strategies, and customer communications. In fact, an autonomous database and cloud platform can help achieve this at scale, and even free IT resources to focus on developing innovative new customer experiences.

Oracle is empowering commerce for more than 5,000 retail deployments, helping organizations anticipate demand and inspire new forms of engagement. Oracle Autonomous Database provides extensive analytics that allow companies to make more-informed business decisions for improved customer retention. Digital and analytical tools allow companies to stay connected with their customers, for quicker response to consumer needs and improved production of competitive goods and services.

Select a case study



























Drop Tank Fuels Growth with Oracle Autonomous Database

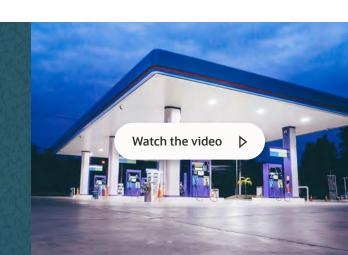


Drop Tank is a solutions provider of fuel loyalty programs based in Illinois. It has partnerships with major fuel providers such as Marathon Petroleum, as well as household names in the retail, consumer goods, airline, and hotel industries.

The company uses Oracle Integration Cloud to automate multiple point-of-sale systems, as well as Oracle Autonomous Data Warehouse to autoscale its marketing campaigns 500× in seconds. As a result, Drop Tank can better grow and expand to support millions of its loyalty members, and increase its retail presence from 3,500 to 10,000 units without expanding IT maintenance and support.

"Oracle Data Warehouse enables us to stand up a data warehouse in about an hour, and then within four hours, we're able to start pulling information that's useful to the business—that's the kind of speed to market that we need to be successful."

David VanWiggeren, CEO, Drop Tank



Read the full Drop Tank story here

TaylorMade Golf story















TaylorMade Golf Tees off with Oracle Autonomous Database

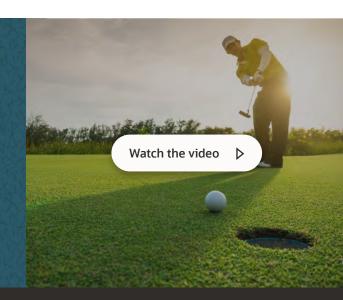


Taylor Made Golf is a leading golf equipment manufacturer with multichannel sales. In its growth, it turned to Oracle Autonomous Data Warehouse to help underpin its cloud-modernization strategy and drive innovation.

By taking advantage of the platform's scalability, analytics tools, and autonomous capabilities, the company can better prepare for seasonal workloads, pinpoint opportunities for business diversification, and accelerate infrastructure performance. Data warehouse projects can be set up in days. And compared to its previous on-premise database solution, TaylorMade Golf has achieved a 40× increase in performance and moved 1TB database out of ERP on-premise, reducing costs by 40%.

"With Oracle Autonomous Data Warehouse, we now have a scalable, low-cost cloud platform to power our business. This will help sustain growth and free up valuable employee time so they can focus on more mission-critical initiatives and be more creative."

Tom Collard, VP of IT, TaylorMade



Drop Tank story

Wengfeng Auto story















Wengfeng Auto Uses Oracle Cloud to React to China's Volatile Car Market

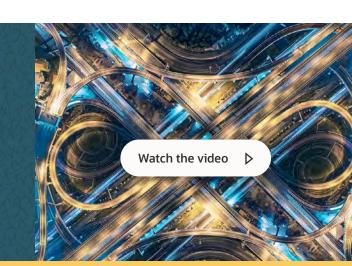


Growing a business in a volatile market takes rapid, accurate decision-making—and that requires fast access to detailed sales and financial data. Despite China's falling demand for cars, Jiangsu Wenfeng Auto Chain Development Company has achieved an impressive 8% increase in sales revenue for Mercedes-Benz, Cadillac, Lexus, and Volvo vehicles.

The company has used Oracle Autonomous Data Warehouse to open up silos of dealership data, and see front-end sales and financial data for real-time, multidimensional analysis for personalized, targeted marketing. The company has reduced IT costs from the self-patching database, eliminating maintenance and consumption-based pricing.

"Due to complex management processes, the domestic auto retail service industry is backward in digital operation management."

Yingzhen Gu, Vice President, Wenfeng Auto



Read the full Wengfeng Auto story here

TaylorMade Golf story

d.light Auto story















d.light Brings Power to the People with Oracle Autonomous Database

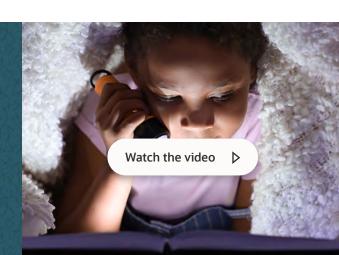


d.light has changed more than 100 million lives across Africa, China, and India. Using a simple, pay-as-you-go business model, the company leases clean, solar-powered appliances for just cents per day toward ownership.

To gain visibility across such a diverse business and customers, d.light needed to move its data from spreadsheets into a reliable, cloud-based analytical platform. By choosing Oracle Autonomous Data Warehouse with Oracle Analytics, it was able to cut time to insight from hours to minutes, while reducing DBA workload by 75%.

"After implementing Oracle Autonomous Data Warehouse, we were able to consolidate data from different sources to get a holistic view of the business and the customer. Our business users benefit from fast insights to understand the market and get to the market faster."

Jeremiah Ochieng, Director of Technology, d.light



Read the full d.light story here

Wengfeng Auto story

Hehegu Catering story















Hehegu Catering Chooses Oracle Cloud to Gain Fast Insights into Fast Food



In a competitive market, Beijing Hehegu Catering Management's fusion of Chinese cuisine and fast food service is a clear winner. The company has enjoyed phenomenal growth since 2003, and is now one of China's largest fast-food chains.

Its success has been driven by its ability to analyze data from the 60,000 orders taken every day by Hehegu's 150 stores. The company uses Oracle Autonomous Data Warehouse to build clear customer profiles for real-time marketing, sales, and inventory insights and trends. Operational costs were reduced in eight weeks by avoiding unnecessary material loss.

"After years of effort, Hehegu ingeniously blended traditional Chinese dishes with fast food elements, which have been well received by consumers."

Zhao Shen, Founder and Chairman, Beijing Hehegu Catering Management



Read the full Hehegu Catering story here

d.light story

PTG Energy story















PTG Energy Powers Customer Insights with Oracle Autonomous Database



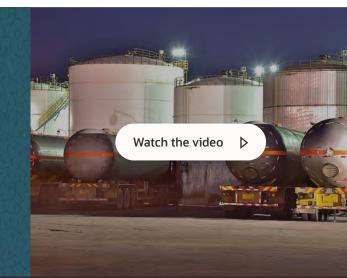
PTG Energy provides fuel products and convenience items to 10 million loyal customer members through a fleet of 500 delivery trucks, 1,800 fuel service stations and 200 Maxmart stores.

As increasing amounts of data rolls in daily from customer interactions and store operations, Oracle Autonomous Data Warehouse automates data loading and integration to reduce time to generate business performance reports from 2-3 hours or days to minutes.

Oracle Analytics expanded strategic insights of store performance by any measurement, empowering retail business managers to optimize store footfall, inventory, and costs by time of day.

"Oracle Autonomous Data Warehouse helps us to adjust our business quickly to meet and exceed customer expectations. Our PTG mission is to create the utmost satisfaction for customers, partners, and employees. Oracle helps us do this everyday."

Dr. Vanlapha Santithammarak, Chief Transformation Officer, PTG



Hehegu Catering story

9. Logistics and Distribution



The impact of autonomous technology—by industry

Logistics and Distribution

With changing consumer expectations for expedited shipping and ever-expanding product portfolios, retailers and consumer goods manufacturers are under constant pressure. They have to optimize inventory to deliver exactly what was ordered on time and the first time—or the customer will shop elsewhere next time.

Distribution warehouses are becoming increasingly automated. Using Al has been critical to satisfy 24/7 order fulfillment to streamline processes for enhanced safety, quality, and security. Trade continues to be interconnected and complex, with cargo containers crisscrossing the seas carrying the latest fashion, electronics, automobiles, or food.

To accelerate operational insights across delivery networks and provide real-time tracking information, logistics providers are turning to machine learning in Oracle Autonomous Database. It provides them with the ability distill increasing amounts and types of data from seaport sensors, warehouse robots, and customer interactions—with no database administration.

Select a case study



















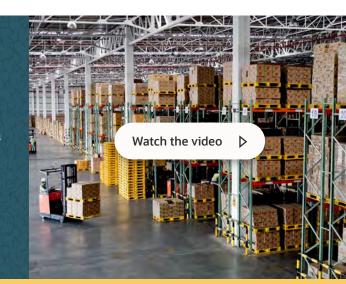
JASCI Innovates Logistics with Autonomous Database

JASCI Software is a SaaS innovator that uses AI to optimize its customers' warehouses, inventories, orders, labor, and shipping with real-time visibility.

Since deploying Oracle Autonomous Transaction Processing, JASCI Software has eliminated the risk of human administrative errors in the database, improved the reliability of disaster recovery, and improved order processing by more than 100×.

"With Oracle Autonomous Transaction Processing, we can process twice as many orders with half the labor, allowing our customers to process more orders at a lower cost. We can also now take on a customer of any size from autoscaling. These autonomous database innovations empower us to deliver our customers' goods faster, and successfully compete in the age of next-day shipping."

Craig Wilensky, CEO and Cofounder, JASCI Software



Read the full JASCI Software story here

JNE Express story











JNE Express Maximizes Quality of Service with Autonomous Database

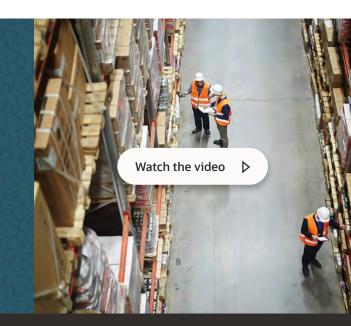


Indonesia's express and logistics leader delivers over 1 million packages per day across 7,000 service locations. It uses Oracle Autonomous Data Warehouse, which can be set up in less than an hour for faster and more direct access to data.

Employees are empowered with actionable insights in minutes, which give them the ability to monitor and predict operations from customer purchase to delivery.

"Now, using Oracle Autonomous Data Warehouse, we can turn the information gathered from each delivery into actionable insights within minutes. This means were are more efficient, can respond faster to every case, and can provide our customers with real-time tracking information."

Agusnur Widodo, COO and GM Express, JNE



JASCI Software story

Kerry Logistics story











Logistics and

Distribution

Kerry Logistics Widens Its Influence with Autonomous Database



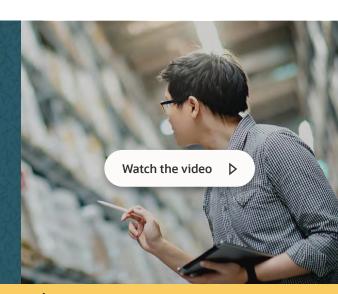
Based in China, Kerry Logistics Network provides supply-chain services worldwide, marshaling 45,000 employees in 55 countries and territories, with more than 500 distribution centers across Southeast Asia.

Kerry Logistics is developing intelligent logistics services that leverage emerging technologies such as predictive analytics and the Internet of Things to optimize operations that generate an explosion of data that will compound the company's data-processing complexity.

Oracle Autonomous Data Warehouse consolidated data from across the company's global operations onto an integrated platform to analyze logistics in real time, reduce undiscovered waste costs by 3%, and provide customers with more-efficient and higher-quality services.

"With Oracle Autonomous Data Warehouse, we're able to pull accurate and relevant data for adjustment of business strategies that used to take two to three months. [This can] now be done in two or three weeks, which helps us gain core competencies."

Yichen Xu, IT Director Kerry Logistics



Read the full Kerry Logistics story here

JNE Express story Johor Port story









Johor Port Gains Deeper Operational Insights with Autonomous Database

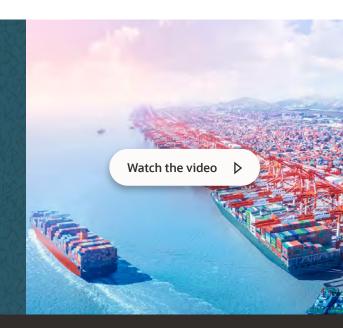


Malaysia's logistics provider manages over 1 million cargo containers per year. It has one of the world's busiest seaports that is almost 5 kilometers long.

Oracle Autonomous Data Warehouse has now enabled the staff to collect 50GB of data per day from various systems, such as Terminal Operations Systems, Visitor Entry Systems, and gate sensors to gain deeper operational insights. Using Oracle Analytics provides visual dashboards and reports every 10 minutes instead of hourly. Now Johor Port is able to achieve higher operational excellence, business expansion, and waste reduction with less IT costs.

"Without real-time information, we can't see the current productivity levels and checking manually takes time and tends to be inconsistent. Every minute counts, as every minute is costing money. Oracle Autonomous Data Warehouse paves the way for operational empowerment, and more growth opportunities."

Omar Othman, Head, Information, Communication & Technology Johor Port Berhad





Kerry Logistics story

