

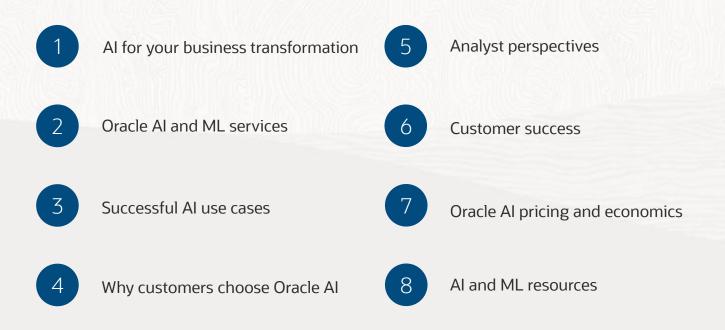
ORACLE

Oracle Artificial Intelligence

Explore how companies apply Oracle AI & ML to uncover data insights and accelerate business transformation



Topics Covered



Oracle AI for your business transformation

Although applying data and Al is becoming a prerequisite for business success, according to <u>Capgemini</u>, fewer than 40% of organizations use data-driven insights to drive business value and innovation. <u>IDC</u> states that early Al adopters reported 39% improvement in CX and 33% improvement in employee efficiency and accelerated innovation with the rollout of Al solutions.

Today businesses may not be taking sufficient advantage of their data – however, given industry wide momentum, it is becoming evident that Al can provide vast benefits should companies combine the right data management and SaaS strategy with an Al platform designed for enterprise success.

OCI AI Services are a part of OCI's comprehensive platform that helps organizations simplify operations and deploy models at scale. The family of AI services enables developers to add prebuilt and custom-trained models to applications and operations.

Often overlooked with Al adoption is a healthy and robust data management system which remains essential to a successful Al strategy. Organizations would greatly benefit from accurate data reporting from SaaS apps, data warehouses and data lakehouses that feed into Al models through efficient processes. However, having data stored in multiple platforms and the cost required to manage those systems are only some of the major datarelated challenges.

A successful AI strategy should be a combination of robust data, a collaborative team, and a reliable platform. To overcome some of these challenges, it is essential to choose a performant cloud platform that offers comprehensive AI and machine learning services, like <u>Oracle AI</u>.

Having a collaborative platform also remains important to an Al strategy. OCI Data Science has a project-based, collaborative interface for ML teams and offers a centralized platform for assets so that data scientists have visibility into their colleagues' work. Data scientists can also share work, standards, and best practices. The service's model catalog also makes it possible for data scientists to share and reuse previous work. With Machine Learning in Oracle Database, data scientists and business analysts can significantly benefit from the speed of in-database machine learning.



CMRI discovers improved business insights, cuts costs by 25% with Oracle Cloud Infrastructure

This Australian research institute embraced OCI Data Science to improve flexibility and scalability, discover new insights, and perform analysis faster. Future projects with OCI Vision and OCI Data Labeling will allow them to innovate and scale faster.

CMRI partnered with OCI over AWS and Google for its proven ability to work closely with CMRI's business and technical teams to move disparate data sources to a single, unified OCI platform.



Agility

Unique scale-up/scale-down capabilities and benefits of various storage options for data with high input/output requirements.



Performance

With OCI Data Science, a numerical simulation that took about 30 days to perform now takes only five days.



Efficiency

Big data management and machine learning technology helped automate routine database tasks, database consolidation, operational reporting, and batch data processing.

"A typical numerical simulation will take around 30 days with a small computer that already has a GPU. With Oracle Cloud Infrastructure Data Science, we can do the same simulation in about five days."

Pablo Galaviz

Senior Data Scientist, Bioinformatician, Children's Medical Research Institute

Solution Overview / Oracle Artificial Intelligence / Copyright © 2022, Oracle and/or its affiliates / Public

Oracle Artificial Intelligence and Machine Learning Services

A unified AI and ML platform spanning cloud services, apps, and data assets

OCI AI Services

Oracle makes AI accessible to everyone with its collection of AI services. Developers can custom-train models, deploy ready-made ML models, and enhance apps and solutions with AI capabilities—without needing to be machine learning experts.

Oracle AI comes with advanced models that are pretrained on business data which can be customized by domain and customer data. This set of AI services makes it easy for developers to apply AI to their applications and analytics missions.

ML Services

Oracle's machine learning services help data scientists collaboratively build, manage, and deploy machine learning models with favorite open-source frameworks or benefit from the speed of in-database machine learning.





OCI Digital Assistant Create conversational experiences for your business applications and customers through text, chat, and voice interfaces.



OCI Language Pretrained models trained on industry data to perform sophisticated text analysis at scale, with no data science expertise needed.



Al Services

OCI Speech Easily convert recorded audio conversations to textual data, across multiple languages. You can even filter profanities out of your transcription.



OCI Vision The best of visual and text technologies to understand your scanned documents, PDFs, video stills, and photographs.



OCI Anomaly Detection Build multiple anomaly detection models and automatically select the most accurate to flag critical incidents earlier.



OCI Forecast

Forecast any time series metric—product demand, revenue, and number of service requests—based on the most accurate, automatically generated models.



OCI Data Science A managed end-to-end environment for building, deploying, and managing your machine learning models.



ML Services

Machine Learning in Oracle Database A complete data science environment that is optimized for performance in your Autonomous Database or Data Warehouse.



OCI Data Labeling

A simple service to label your text or images—and then use those labels to customize ML models and build shared catalogs.

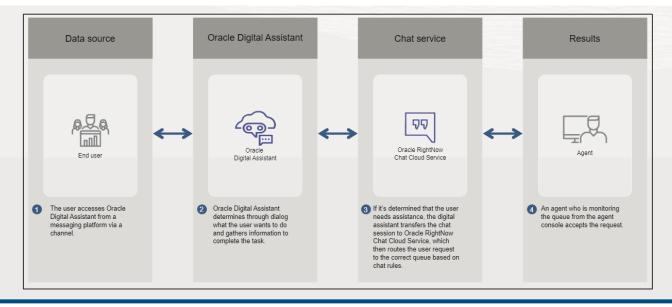
Oracle Artificial Intelligence Use Cases

Oracle AI not only addresses the requirements of different users, but it also provides comprehensive machine learning and artificial intelligence services. The flexibility of Oracle AI covers many AI business use cases within your managed environment without creating additional environment management burden to your IT teams.

Handle user tasks with Oracle Digital Assistant

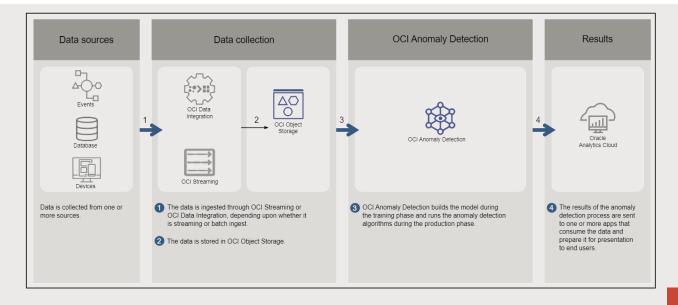
Improve customer satisfaction and reduce the cost of providing chat-based support with Oracle Digital Assistant's skill bots.

See the reference architecture Learn about Digital Assistant



OCI Anomaly Detection for managing assets and predictive maintenance

OCI Anomaly Detection ensures optimal asset operation while avoiding excess cost and minimizing operational disruptions in smart manufacturing. <u>See the reference architecture</u> Learn about OCI Anomaly Detection

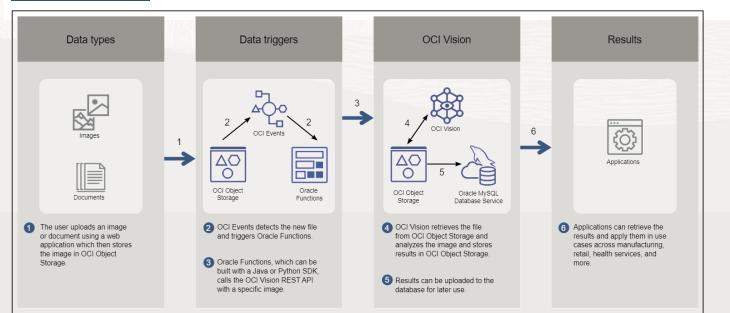


Oracle Artificial Intelligence Use Cases

Use OCI Vision to extract data from images and scanned documents

Extract data from images and scanned documents, and then use OCI Vision's pretrained models to conduct optical character recognition, image classification and object detection, document classification, anomaly detection, and more.

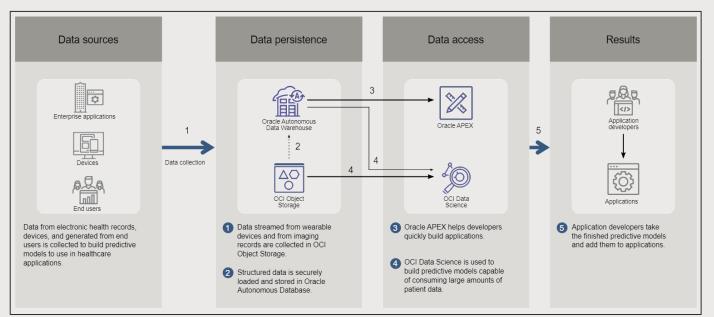
See the reference architecture Learn about OCI Vision



Build predictive models with OCI Data Science

See how to deploy an architecture that can securely handle large amounts of source data to build predictive models.

See the reference architecture Learn about OCI Data Science



≜ LogicManager[.]

Enterprise risk management vendor leveraged OCI Data Science and migrated from AWS for improved cost and performance

LogicManager automated the contract process



Accelerated: Leveraged data science model deployment and the OCI platform to accelerate document analysis for end users.



Enhanced: More advanced document analysis workloads are being considered with OCI Data Science and OCI Vision.



Efficiency: More efficient processes integrating OCI Data Science and Oracle Autonomous Transaction Processing

SS Global LLC

Transportation logistics company uses OCI Anomaly Detection to improve vehicle uptime and ensure on-time delivery.

"Identifying anomalies in real-time is key to delivering desired service levels and therefore, we were looking for a compelling anomaly detection solution. We chose OCI Anomaly Detection service for its ability to determine anomalies in multivariate complex datasets and for the significant investment Oracle is making in this AI service." **Sunil Sharma** CEO, SS Global LLC

Why customers choose Oracle AI



AI designed for enterprise workflows

Oracle provides prebuilt AI models trained on business data, which developers can customtrain to provide more accurate insights. Data scientists can use OCI Data Science or Machine Learning in Oracle Database for the entire machine learning lifecycle.



Improved integration across services

OCI AI Services can integrate to provide ways to better custom train models. A consistent set of APIs makes model training and deployment easier.



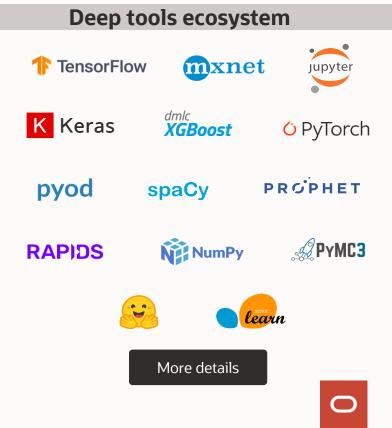
All of your favorite ML tools

Gain access to the most popular open-source libraries and frameworks through Oracle Cloud—or bring in old favorites.



Managed infrastructure

There is no infrastructure to provision or manage. This allows your team to focus on building innovative applications and solutions.



Analyst perspectives on OCI

66 "Oracle Cloud Infrastructure, through its offerings across regions globally, **proves to be a credible choice for enterprises** to place their enterprise and heterogeneous workloads strategically across cloud, core, and edge locations."

ΟΜΟΙΛ

Why all clouds are not the same

Read the report



"Oracle's new cloud AI services aim to bring out-of-the-box machine learning to the SMB masses."





Read the report

ISVs carefully considered Oracle's capabilities with respect to innovative technologies such as AI/ML, IoT, blockchain, AR/VR, Kubernetes, containers, and microservices. The consensus was that the availability of such functionality gave ISVs confidence that they could augment their existing innovation focused digital solutions and develop new ones by leveraging Oracle's portfolio of innovation-centric technologies.

– IDC, The Benefits and Value of Platforming on Oracle Cloud Infrastructure



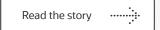
-Omdia

Seattle Sounders FC gets data science in the game with Oracle Cloud

Implementation and results

Professional soccer club Seattle Sounders FC needed to apply machine learning at scale to optimize its tactical game strategies. After evaluating providers such as AWS, Azure, GCP, and Snowflake, the Sounders selected Oracle Cloud Infrastructure for its scalable data ingestion, storage, and data science capabilities. With OCI Data Science, the Sounders can now build predictive machine learning models to better inform future game strategies. They have accomplished the following:

- Manage 100x more data on a weekly basis and generate insights 100x faster
- Build a data model for detecting line-breaking passes
- Automate the identification of a player's pattern with pattern detection
- Reach the MLS Cup Finals by building more effective game strategies
- Reduce database management by 100%



Razer provides gamers with selfservice through Oracle Digital Assistant

Implementation and results

The company wanted to improve its service strategy in an increasingly digital era. To elevate its customer support capabilities, Razer wanted to optimize and <u>automate its service process</u>. Razer chose <u>Oracle</u> <u>Service</u> for its functionality, ease of use, scalability, and cost. The cloud service included <u>Oracle Digital</u> <u>Assistant</u>, which enabled Razer to provide chat as a customer service option.

- Deflection rates increased from 9% to 35% as automated chat diverting tickets to a live agent
- International deflection rates across Europe and Asia reached 50%
- Can now identify queries that a chatbot based on Oracle Digital Assistant can handle
- Increased customer satisfaction and resolution rates

Customer Success



*Almost all sports now have huge datasets with unique characteristics. Investing in a secure, stable analytics and data science from Oracle Cloud Infrastructure will empower teams like ours to focus on what we're good at: using our data to deliver more wins."

Ravi Ramineni

Vice President of Soccer Analytics and Research, Seattle Sounders FC



C "The self-service aspect of Oracle Service is key. The ability to best serve customers and make sure we're putting the right type of content and solutions in front of them is important to our business."

Nik Tran

Senior Manager of Customer Advocacy, Razer

Artificial intelligence pricing

Oracle AI offers a free or low-cost pricing tier, making it affordable for everyone to experiment with building machine learning models or adding prebuilt AI models to applications. <u>Learn more</u>.

Al for any budget

Free AI model training

Add prebuilt AI models to apps for US\$0 cost (up to 1,000 or more transactions)

Applies to: OCI Anomaly Detection OCI Language

Starting from US\$0/transaction

For the first 1,000 transactions or more, depending on the service

Experiment with limited cost

Free model building

Build, train, manage, and deploy ML models, with a budget for experimentation

Specs

No additional service charges for OCI Data Science and Machine Learning in Oracle Database

Only pay for compute and storage







Superior value

Economical ML compute

Reduce your costs by matching compute to workload profile with preemptible and burstable instances

Specs VM.Standard.E3.Flex 1 OCPU 1 GB RAM

Starting from US\$0.007/hour

Lower barrier to entry

Low-cost deployed models

Deploy low-latency, hot-deployed models into production without breaking the budget.

Specs

VM.Standard 2.1 1 Load Balancer base 10MB/sec

Starting from US\$0.076/hour

For a model serving real-time requests 24/7 (US\$54/mo)

Resources



Learn more about the solution

- Oracle Al
- Oracle Cloud Infrastructure
- What is Al?
- Explore Developer Live
- <u>Customer Success</u>
- Oracle Al Pricing
- Free Oracle Al Trial



Blogs, Technical Briefs, & Industry Reports

- Infographic: Three Strategic Considerations for Al Success
- Oracle Recognized as a Leader in the 2021 IDC Marketscape
- Lifecycle of Machine Learning Models

Stay Connected



https://blogs.oracle.com/ai-anddatascience/

facebook.com/OracleCloud/



Demos & Workshops

- Explore Guided AI and ML workshops
- Build the Perfect Digital Assistant
- Introduction to OCI Language
- Introduction to OCI Vision
- Get Started with Anomaly Detection
- Speed up Data Science
- Machine Learning on Autonomous Database



Technical Assets + AI Services Documentation

- Oracle Architecture Center
- <u>AI/ML reference architectures</u>
- Oracle LiveLabs
- Oracle Digital Assistant
- OCI Language
- OCI Speech
- OCI Vision
- OCI Anomaly Detection
- OCI Data Science
- Machine Learning in Oracle Data
- OCI Data Labeling



twitter.com/OracleCloud/



linkedin.com/showcase/oracle-cloud/

Ready to get started?



Connect with us

<u>Try a guided</u> workshop



Try Oracle Cloud

