

If you're looking to enhance your product offering, improve business efficiency or anticipate customer behavior, Onica Intelligence is for you. In order for a business to implement machine learning, it requires significant knowledge of mathematics, algorithm design, computer programming, signal processing, data engineering and potentially mechanical & electrical engineering for IoT applications. Onica has deep expertise from data engineering to data science to help you gain intelligence from your data.

Artificial Intelligence (AI) is any computer system which can solve problems in ways traditionally associated with human cognition and learning.

Machine learning (ML) is the training of a computer system to make predictions using statistical models based on data, an important underpinning of AI.

XR (AR & VR) leverage advanced human-machine interfaces that may incorporate both language and machine vision solutions as part of the overall functionality but are distinct in that they have real-time interaction.

What is your business looking to achieve with AI/ML/XR?

Empower your data to make recommendations, take action pre-emptively and gain market insights:

Machine Vision

Solutions which rely on images or video data. Use cases include identifying and/or tracking objects in video/imagery, detecting changes over time and facial recognition.



Amazon
Rekognition
Video



Amazon
Rekognition
Image



Amazon
Textract



Amazon
SageMaker

Forecasting and Prediction

Solutions that involve making estimates about the unknown or the future. Common use cases include estimating future customer behavior (churn, purchasing, etc.), predictive maintenance for industrial equipment, and predicting future conditions to streamline inventory in logistics and supply companies.



Amazon
Forecast



Amazon
SageMaker

Extended Reality

Solutions which seek to leverage advanced human-machine interfaces, such as chatbots or AR/VR/XR. These may incorporate both language and machine vision solutions as part of the overall functionality but are distinct in that they have real time-human interaction as a key element.



Amazon
Sumerian

Language Processing

Solutions that involve speech or text. Use cases include interpreting speech as text, or transmitting text as speech, as well as parsing text for key terms, sentiment analysis, language translation or other interpretations of text data such as finding key words and discovering topics in a document corpus or recorded conversations.



Amazon
Polly



Amazon
Transcribe



Amazon
Translate



Amazon
Comprehend



Amazon
Lex



Amazon
SageMaker

Anomaly and Pattern Detection

Solutions which need to identify clusters of commonality or normal/anomalous distinctions. Common use cases include finding distinct customer segments, discovering similar products in a catalog, detecting in data when conditions have had a departure from normal operating conditions, or uncovering anomalous events that stand out (i.e finding similar customers in order to recommend products to an individual).



Amazon
Personalize



Amazon
SageMaker

Contact us today
onica.com/intelligence

Onica Intelligence Offerings

Proof-of-Concept

Proof-of-concept demonstrating the applicability of AI/ML to your business. Generally these POCs are scoped to about six weeks of effort to yield results quickly.

- ✓ Deploy and Manage Data Pipelines with Onica's Data Science Workbench
- ✓ Best Practices for hosting Data Lakes on AWS
- ✓ ETL, Data Warehouses, and Data Visualization

Enterprise Solutions

Full production solutions to automate business workflows or develop actionable predictions. These are scoped according to business needs and solution complexity.

- ✓ Actionable predictions for business efficiency and preemptive decision-making
- ✓ Automation of business workflow (e.g. customer service chatbot, automated transcription)
- ✓ Useful market insights (e.g. customer segmentation, recommendations)

On-Site Ideation Session

Instructor led enablement labs on AWS services tailored to your project needs and a whiteboarding session on requirements & high-level architecture defining "what AI/ML can do for my business".

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|--------------------|---|
| 9:00 AM - 11:30 AM | <ul style="list-style-type: none">✓ Deep dive into the AWS AI & ML Platform✓ Hear how businesses in your segment are leveraging AI & ML today✓ Collaborate around business drivers and desired outcomes |
| 12:00 PM | Lunch |
| 12:30 PM - 3:00 PM | <ul style="list-style-type: none">✓ Build a data pipeline from Amazon S3 to Amazon SageMaker✓ Deploy ML models fast with existing sample data sets✓ Identify problem formation ML method best practices |



Premier
Consulting
Partner

Machine Learning
Competency

IoT Competency

Data & Analytics
Competency

DevOps Competency

Migration Competency

Customer Success: Medical Device Manufacturer

The customer: A global Life Sciences Company seeks to manufacture a new line of cloud connected endoscopic surgical cameras with an AI/ML workflow to correlate surgery length with positive outcomes.

What we did: Onica designed and deployed a systemwide cloud side serverless architecture for devices & iOS application. The HIPAA-Compliant solution synchronized data in real-time between camera systems, in-hospital server products, EMR systems, the cloud, and mobile applications. Onica implemented a workflow which correctly detected events by evaluating the video stream. Machine learning categorized each image state as inside or outside the body and an inference model determined events from the changes in state estimates.

The Outcome:

- ✓ Globally scalable IoT-enabled endoscopic cameras that support thousands of physicians in multiple continents
- ✓ Solution provides real-time, remote access to critical surgical information
- ✓ Industry-first AI/ML workflow to correlate surgery length with positive outcomes
- ✓ Enabled modern collaboration and reinforced MDM's leadership role as a technology innovator in its industry