

# Powering smarter decisions with AI

Combining functional expertise with deep capabilities in data, AI and ML, Aligned Automation unlocks hidden value embedded across your ecosystem.

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Complex, siloed data. Changing customer needs. Inefficient manual processes. Volatile macroeconomic conditions. We know the challenges businesses are facing as the digital landscape continues to evolve.

It's more important than ever to simplify and integrate processes and technology to maximize the value of your data and quickly get the outcomes you need. You need the right partner with the right skills to meet you where you are in your journey and help you adopt, implement and scale data and AI solutions, to get you to where you need to be—faster and more efficiently.

Our diverse teams bring exceptional business acumen and techno-functional domain expertise to every client engagement. Combined with leading accelerators and solutions, platforms and product partnerships, we collaborate with you to build and deploy scalable, transformative AI solutions.

With enhanced decision-making and improved risk management, your organization will realize a reduction in costs and an increase in revenue. You'll provide a better customer experience—and power your business into the future.

## AI and ML solutions

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### Custom AI

Build, deploy and scale customized AI/ML solutions (NLP, computer vision, predictive intelligence, recommendation engine) that meet the unique needs of your business. Leverage our integrated approach from data to decisions to enable faster, better decision-making, modernize business processes and enhance customer experiences.



### MLOps as a Service

Design and deploy AI/ML models, continuously improve & scale, leveraging our platform and tool-agnostic approach. Operationalize your ML models using our accelerators and assets and an MLOps framework built on years of collective experience that enable faster deployment, automate processes and extend your team's skills.



### Federated Learning

Train ML models directly on the edge. Our custom AI solution for on-the-edge computation, addresses data transfer, high data storage requirements, data privacy and real-time alert needs.



### AI / ML Forecasting

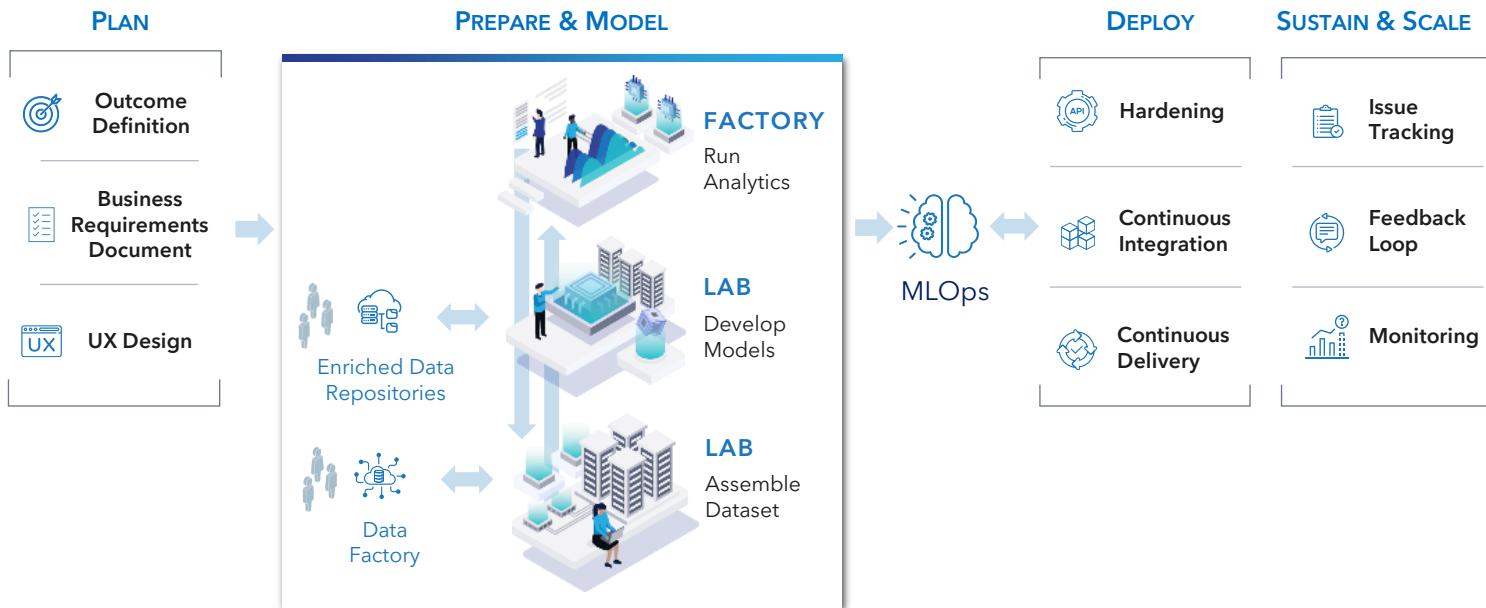
Drive success with our integrated ML forecasting solution, tailored to your unique needs. Predict future demand, anticipate pricing changes, optimize inventory, and allocate resources for improved customer satisfaction and profitability.



### AI for IoT / IIoT

Unleash the full power of machine learning and IoT to enable real-time decision making using visual inspection, predictive maintenance, asset failure prediction and more. Improve operational efficiency, reduce downtime and unlock new revenue sources with our tailored solutions and accelerators.

# Applied AI framework



## Benefits of an Aligned Automation partnership



### Rapid outcomes

We take a business-first lens to align on core challenges and outcomes, and then take a practical and an agile approach to unlock the true value of AI faster.



### Reduced effort

Our team of experts provide labelling, annotation and synthetic data-generation services to improve the quality of training data used for ML & jump-start your journey.



### Speed to value

Intelligently innovate, in a cost-controlled manner, with a range of accelerators.



### Enterprise-level scale

We operationalize AI/ML seamlessly across functions, and work continuously with stakeholders, from ideation to user acceptance.



### Flexibility

Our technology-agnostic solutions offer custom ML models to be built and operationalized on any environment and cater to your unique business needs.



### Sustained value

We utilize the DevSecOps framework to build ML models, ensuring that our solutions are easy to deploy, secure and integrated for sustained value.

# Results by the numbers

We've collaborated with Global 500 organizations across industries and functions in multi-year engagements to deliver scalable solutions with sustained value.

## 50% efficiency gain

ML-powered solution results in improved visibility to non-cataloged purchase order.

## \$24M added margins

Predictive intelligence solution delivers real-time insights into price fluctuations, driving improved decision-making.

## 10% improved on-time delivery

Forecasting MLOps delivers increased demand accuracy and improved customer satisfaction.

## \$2M+ savings

ML and ICR combined model drives intelligent sourcing decisions and reduced spend.

## 28% waste reduction

Regression models deliver optimization of production feeds and controls for chemical process.

## 50% faster cycle time

ML-based solution automatically corrects and validates customer address data real-time.

## 15% HSE event reduction

Computer vision-based solution prevents hazardous chemical leakages.

## 40% manual-effort reduction

Visual inspection and predictive modeling reduces need for manual corrosion-detection checks.

## 60% less data-storage cost

Federated learning solution extends the benefit of proactive alerts on the edge to wider customer base.

## Case studies

### Industry: Oil and gas

#### Preventive maintenance

A large global oil and gas company set a target to prevent leakages due to corrosion and plant downtime to zero by 2030.

Manual inspection of pipelines' integrity for failure signals has limitations:

- Time consuming
- Less responsive
- Error prone
- Non-scalable

#### AI for anomaly detection & prevention

We developed an AI application to synthesize and process drone images using computer vision to detect, classify, and provide early warning triggers for pipeline corrosion, and asset health driving preventive maintenance.

##### Technology stack:

Azure Blob storage, C3.ai

- Reduced downtime across thousands of miles of pipelines.
- 70% manual inspection effort reduction.
- 60% optimization of Cloud computation cost.
- Reduced HSE incidents and minimized environmental hazards.

### Industry: Chemicals

#### Source-to-pay optimization

A leading chemical company needed a new way to analyze and audit vendor invoices in order to make better cost-saving decisions in procurement.

Invoices were saved as images in SAP; Purchase order lines were in free-form text.

- Lack of analysed data and missed opportunities
- Time consuming
- Error prone

#### ML & ICR powered solution for intelligent spend management

We developed an ML & ICR powered solution to extract information from diverse vendor invoice images, built integrated data model and provided actionable intelligence to optimize free form text (FFT) PO process.

##### Technology stack:

Azure, Python, tesseract OCR, ABBY, Elasticsearch, Power BI

- 7% savings across undefined spend category.
- 50% workforce efficiency gains.
- 80% model accuracy.
- Sustained savings driven by actionable intelligence.

### Industry: Hi-tech

#### Inventory optimization

A hi-tech organization set to optimize their inventory and improve on time delivery with improved forecasting process to handle variations that existed across products and planning locations.

Current processes were inefficient, including:

- Siloed data
- Time-consuming
- Inflexible to adapt to changing business needs
- Limited scope and coverage

#### Demand forecasting MLOps and integrated inventory planning

We designed and delivered demand forecasting MLOps and integrated inventory planning solution to deliver real-time visibility, connected intelligence and proactive recommendations.

##### Technology stack:

SQL, Python, PySpark, FastAPI, Flask and Django, Docker, NodeJs

- 10% improvement in OTD.
- 18% improvement in forecast accuracy.
- 12% reduction in E&O.