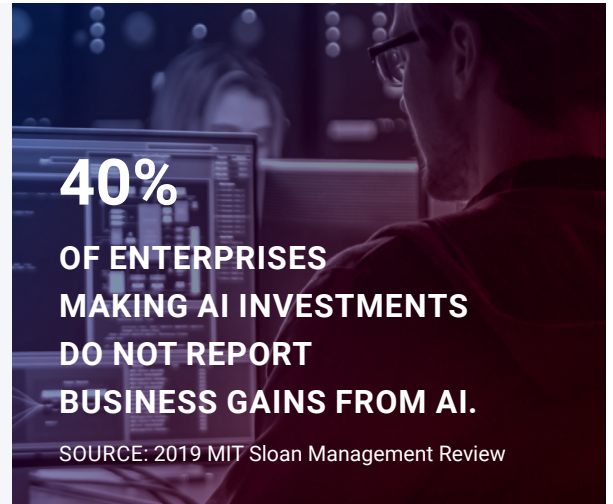# Cognitive Digital Engineering

WE BUILD INTELLIGENT DIGITAL PLATFORMS THAT POWER YOUR BUSINESS.

OVERVIEW

We build custom intelligent digital platforms that use artificial intelligence and the power of the cloud to solve clients' complex business problems. These platforms synthesize all forms of complex data (quantitative, voice, video, image, text, & IoT/sensor data) with AI to make business processes more powerful and effective. You own the IP with no subscription fees and zero vendor lock-in.

40%
OF ENTERPRISES
MAKING AI INVESTMENTS
DO NOT REPORT
BUSINESS GAINS FROM AI.

SOURCE: 2019 MIT Sloan Management Review

OUR SERVICES

Enterprise AI Platforms

Building enterprise scale Cloud Native Intelligent Digital Platforms and infusing them into business processes.

Data Modernization

Unlocking data silos and making data available for consumption across the entire enterprise for business value.

Cloud Architecture and Cloud-Native Solutions

Making digital platforms more scalable, available, maintainable and secured, supporting business continuity.

WHY PACTERA EDGE

▸ We solve critical business problems such as increasing revenue, reducing costs, and improving customer experiences by building intelligent platforms on the cloud.

▸ We have a proven track record of delivering enterprise-scale, cloud-native, AI platforms across multiple industries.

▸ Our cross-functional talent pool has deep experience building enterprise-scale AI platforms.

▸ We use a tested playbook: our tri-loop enterprise AI implementation framework results in 30%-40% faster time-to-market.

▸ Thanks to our entrepreneurial start-up culture, we are agile and nimble and can adapt to client's needs with near zero latency.

AI FOR BUSINESS: ENVISIONING TOOLS

▸ **Dendron**
Integrated Advanced NLP Platform Using Deep Learning applicable across industries that require processing of audio, video or text data for generating business value.

▸ **Locus**
Deep Reinforcement Learning Based Network Optimization Model Demonstrates how to solve the problem of optimization (Minimizing cost or maximizing revenue across industries).

▸ **FinWhiz**
Use of AI in Asset Management/Credit Risk Industries Can be used across industries for Product/Price Classification, Investment bucket Classification etc.

▸ **Picasso**
Use of NLP for Complex Business Analytics and Insights Demonstrates the use of NLP Engine for running advanced analytics with insightful visualization for business, without relying on any proprietary 3rd partly visualization tools.

Our methodology for Accelerating Enterprise Intelligence

1 ENABLE HUMAN CENTRICITY

2 VALIDATE HYPOTHESIS

3 ACTIVATE AND SCALE
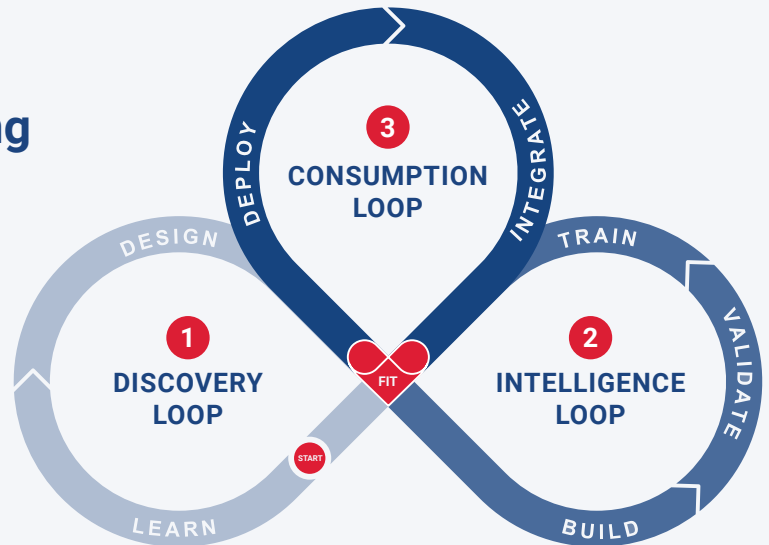
CASE STUDY TOP 5 CPG LEADER

Intelligent Trade Promotion Optimization

THE CHALLENGE

The client's trade promotion management was plagued by manual promotion planning processes and incorrect sales data. The client wanted a more flexible trade promotions platform that would allow them to generate optimal business plans to improve forecasting. A specialized localization infrastructure was needed that enabled the client to cover 100 markets.

OUR SOLUTION

Oue E2E solution helped our client migrate to the cloud for the first time. The solution relies on an AI platform powered by a time series-based (ADL) Machine learning model. It predicts the total sales and baseline sales by each product line for each retailer, among other features. The entire platform was built on Microsoft Azure cloud and can easily be scaled in their counterparts in different continents.

RESULTS

▸ **Increased demand forecasting accuracy to 85%.**

▸ **More versatile forecasting on total and baseline sales in promo weeks by product ID, sub-category, retailer, and geography.**

▸ **Intuitive user experience supports fast decision-making**

CASE STUDY CPG MANUFACTURER

Institutional ML Ops

THE CHALLENGE

The client wanted its machine learning models to reflect the fast-changing consumer buying patterns and a faster product development to improve the business ROI. The client also wanted to leapfrog the automation journey to avoid manual interventions in the machine learning lifecycle.

OUR SOLUTION

Pactera EDGE implemented MLOps using Azure Services to manage the ML lifecycles through a pipeline version control, test, build and deployment steps.

▸ Azure ML Pipelines are used for speed and flexibility in building and maintaining ML workflows.

▸ CI/CD has been implemented using Azure DevOps. Resource creations and maintenance have been automated by using Infrastructure as Code.

▸ Azure Functions have been created to automatically retrain models on every data refresh also to scale down resources when they are idle.

RESULTS

With the adoption of MLOps, the client can structure and automate the development of machine learning models leading to increased quality, faster delivery and scalability. Data scientists can focus more on developing models and worry less about product development, retraining, and redeployment. And with Microsoft Azure, every component can auto-scale, resulting in more cost savings.