



# **Abjayon Digital Engineering Practice**

Accelerating Digital Transformation  
Across Industries

# About Abjayan - Powering Innovation

Abjayan is a global digital transformation partner, helping enterprises build intelligent, scalable, and future-ready solutions powered by digital engineering.



## Global IT Consulting

- End-to-end consulting & implementation across digital transformation initiatives
- Flexible engagement models



## Proven Track Record

- 50+ projects delivered across 20+ countries and 10+ industries
- Strong results in modernization, automation, analytics



## Robust IT Operations & Support

- Proactive governance, security, and compliance management
- Seamless infrastructure transformation with Cloud, Hybrid and On-Prem



## Deep Engineering Expertise

- Cross-domain depth
- 150+ experts in AI/ML, Cloud, Data, DevOps and Engineering
- Proprietary solution accelerators + AI-powered transformation tools

## Our Proven Process for Digital Engineering Success



### Discovery & Planning

Align goals, assess systems, and define a custom transformation roadmap.



### Solution Design & Architecture

Create tech blueprints aligned with priorities.



### Agile Development

Fast, feedback-driven development aligned with business goals.



### Quality Engineering & User Validation

Robust testing for quality and readiness.



### Deployment & Go-Live

DevOps-driven deployment with minimal disruption.



### Ongoing Support & Training

Support and train for continued success.

# Industries



Clinical  
Research &  
Lifesciences



Technology



Public Sector



Legal &  
Compliance



Hospitality



HR



Energy &  
Water



Education



Healthcare



Consumer

## Digital Engineering Offerings



### AI / ML Solutions

- Anticipate customer needs and behaviors with intelligent forecasting
- Automate decisions and actions across operations and support
- Enhance user experience with AI-powered assistants



### Data Intelligence & Integration

- Unify data from systems, devices, and apps into a single source of truth
- Make faster, insight-led decisions with real-time, trusted analytics
- Enhance agility and performance with story-driven KPIs and connected data flows



### Cloud, Network & Security

- Enable secure access and collaboration across distributed teams
- Modernize IT infrastructure to improve uptime and performance
- Meet compliance standards with robust security frameworks



### Outsourced Product Engineering

- Accelerate launch of new digital products and platforms
- Rebuild outdated systems for today's business needs
- Extend your team with specialized, full-cycle development squads



# AI/ML Solutions - Empowering Predictive, Proactive, and Personalized Digital Experiences

## What We Do

### AI/ML & Data Strategy

- Roadmaps, maturity assessments, and governance for enterprise-wide AI adoption

### Custom AI/ML Models

- Predictive, prescriptive, and classification models built for business outcomes

### NLP & Conversational AI

- Generative chatbots, document understanding, sentiment analysis, and summarization

### MLOps & Automation

- CI/CD pipelines for ML, model monitoring, versioning, and drift detection

### Industry-Specific AI Solutions

- Load forecasting, theft detection, clinical intelligence, document AI, and patient engagement

### AI Agents & Assistants

- Task-specific AI copilots for claims processing, operations automation, and CX enablement

## Tech Stack

### Core ML/NLP

- TensorFlow, PyTorch, Scikit-learn, Hugging Face Transformers

### GenAI Platforms

- OpenAI, Amazon Bedrock, LangChain

### Cloud & Ops

- SageMaker, Azure AI, GCP AI, MLflow

## USP (Why Abjayan)

- **Embedded AI** in enterprise products—not just models, but intelligence where it matters
- **Domain-Accelerated Models** for Healthcare, Utilities, Life Sciences, and Public Sector
- **End-to-End Delivery** from idea to live model—with built-in MLOps and monitoring
- **Hybrid Capabilities** AI + RPA + Integration for full process automation
- **Compliance-Ready Designs** HIPAA, SOC2, GDPR-aligned AI architectures

## Success Stories:

### Utilities

- AI-powered Energy Theft Detection using anomaly detection & pattern analysis
- Consumption Forecasting models for smart billing and load balancing
- AI-based Transformer Load Monitoring and predictive maintenance

### Healthcare

- Generative AI Chatbots integrated with patient data for appointment handling
- AI Agent for Insurance Claims: End-to-end lifecycle automation using Amazon Bedrock
- MedScribe AI: Conversational documentation assistant with speech-to-text and recommendation engine
- Patient Document Processing: automates patient data extraction and mapping from uploaded PDFs

# AI/ML offering

Model Type	Examples	Used For
Tree-based Models	XGBoost, LGBM, Random Forest	Load prediction, patient risk scoring, forecasting
Time Series Models	SARIMAX, ARIMA, LSTM, ANN	Transformer load trends, vitals monitoring, and consumption
Classification Models	Logistic Regression, SVM	Disease prediction, no-show analysis, binary outcomes
Clustering Models	K-Means, DBSCAN	Energy usage behavior
Anomaly Detection	Autoencoders, Isolation Forest	Outage detection, abnormal vitals, or lab results
NLP Models	BERT, GPT, Claude	Clinical chatbots, document summarization, MedScribe AI



# Data Intelligence & IntegrationAnalytics

Turning Disparate Data into Real-time, Actionable Insights

## What We Do:

- Build real-time dashboards, visual storytelling & KPI frameworks
- Design ETL/ELT pipelines for batch/streaming
- Integrate data across EHRs, devices, systems, smart meters
- Enable governed, secure, and scalable data platforms

## Tech Stack:

- Power BI, Tableau, Grafana, StarRocks, Redshift, Snowflake, Spark, Kafka, Airflow, Azure Data Lake, S3, PostgreSQL

## Unique Strengths (USP):

- Business-driven KPIs & predictive insights
- Unified pipelines for real-time & batch data
- Built-in governance, validation, lineage
- Deep domain experience in Healthcare & Utilities



## Success Stories :

### Healthcare

- Integrated patient data from EHRs, Real-time KPIs & Analytics

### Utilities

- Unified SCADA, GIS, CIS, smart meter data; Dashboards for grid health, outage detection, load forecasting

S U C C E S S



# Cloud, Network & Security

## What We Do:

- Migrate on-prem systems to secure, scalable cloud environments (Azure, AWS)
- Design and manage hybrid infrastructures (Cloud + On-Prem)
- Implement enterprise-grade VPNs, SSO, and identity management
- Ensure compliance (HIPAA, SOC2), vulnerability & patch management
- Monitor and manage infra with real-time observability and alerts

## Tech Stack:

- Azure, AWS, OCI, GCP, Docker, Kubernetes, Intune, Active Directory, ELK Stack, Grafana, Prometheus

## Unique Strengths (USP):

- Deep experience with regulated industries (Healthcare, Public Sector)
- End-to-end coverage: migration, setup, monitoring & support
- Cloud-native security with legacy system integration

## Success Stories

- Migrated from on-prem to Azure AD with Intune
  - HIPAA-ready infra setup
- End-to-end infrastructure and network security support for a multi-location healthcare organization
- Designed secure remote access infra with VPNs, SSO & patch compliance





# Outsourced Product Engineering

## What We Do:

- Full-cycle product development: design, development, QA, DevOps
- Legacy modernization with microservices and cloud-native architecture
- Scalable platforms for web, mobile, and hybrid environments
- Ongoing managed services, optimization, and compliance readiness

## Tech Stack:

Java, .NET, Node.js, React, Angular, StencilJS, Kubernetes, GitLab, Selenium, Azure, AWS, Docker

## Unique Strengths (USP):

- Industry accelerators for Healthcare, Hospitality, Utilities, Life Sciences
- Embedded DevOps, security, and compliance (HIPAA, SRA)

## Success Stories

- **AvanceCare (Healthcare – USA)**  
Next-gen Patient Engagement Platform, Intergration with HER System, DevOps setup, HIPAA audit, NetSuite + Kronos integrations, managed cloud & infra.
- **Otalio (Hospitality – Global)**  
Built Ship Property Management System with POS integration, PWA across platforms, microservices-based cloud-ready architecture.
- **Thermo Fisher (Life Sciences – Global)**  
Automated proteomics instrument software, upgraded legacy stack, enhanced front-end with StencilJS, test automation.
- **MatchGrid (Utilities – Middle East)**  
Developed Customer-to-Meter and Meter-to-Cash solutions, unified platform with analytics, cloud migration, and performance scaling.
- **Mithratech (Legal Tech – USA)**  
Modernized legal practice management suite with modular architecture, integrated scheduling, billing, and document workflows; ongoing DevOps and QA services.



# Flexible Engagement Models

Abjayon is a global digital transformation partner, helping enterprises build intelligent, scalable, and future-ready solutions powered by digital engineering.

## Project based

- End-to-end ownership of project scope
- Fixed Bid, milestone based delivery

## POD Model

- Agile squads delivering on fixed scope chunk
- Milestone or Time & Material bases

- Seamless integration with client processes
- Cost-effective models tailored to project needs
- Enhancing productivity through specialized skill sets

## Extended Team / Resource Augmentation

- Long-term partnerships fostering deep knowledge exchange
- Flexible talent allocation to scale with project demands





### Learn More

To schedule a live demo or find out more information,  
visit [www.abjayon.com](http://www.abjayon.com) or call **+1.510.824.3260**.