Pariveda Overview

Pariveda Solutions Inc. is a leading management consulting firm delivering strategic services and technology solutions. Our focus is simple. Start with the right people, deliver consistent value and partner enthusiastically with our clients. We grow and deploy talented people to solve technical and strategic challenges. We are passionate about delivering exceptional value to our clients. We excel at both thought leadership and execution. Our solutions lower risk and amplify value.

Our Clients

Pariveda solves the complex problems of clients ranging from Fortune 100 to Global 2000 to startup companies and spanning multiple industries.

Clients partner with us for our high-caliber combination of technology and business problem-solving experts, our high-quality delivery consistency and our focus on building lifetime relationships. We have served over 400 clients since inception.

Our Locations

Key Details

ON-SHORE ONLY
100% on-shore – in-person matters

FOCUSED TEAMS
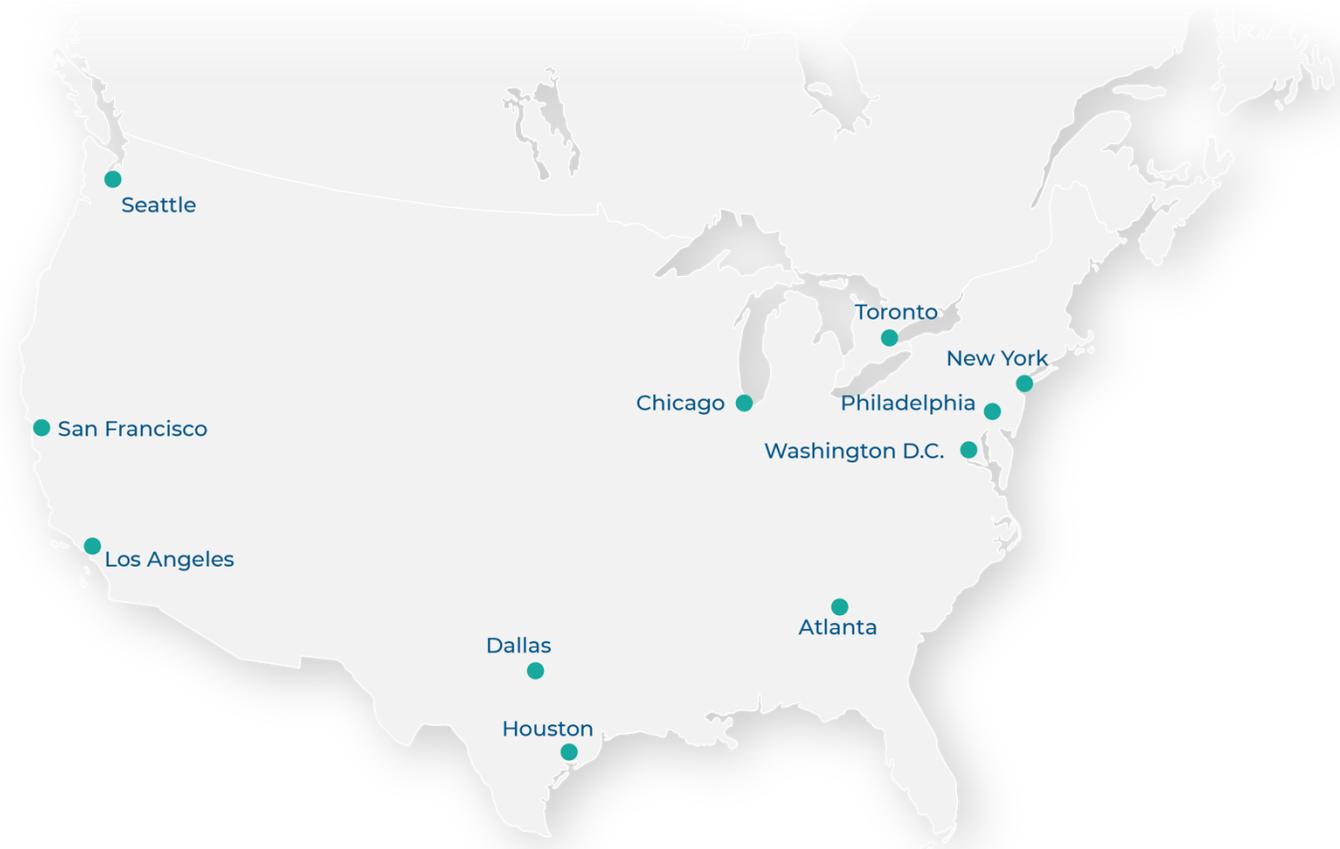Small teams to solve complex problems efficiently

TRUSTED RELATIONSHIPS
94% repeat/referral business

400 BUSINESS TRANSFORMATION
Valued by over 400 clients

PARIVEDA

Our success building modern healthcare solutions with Azure

DIVERSE
USE CASES

Admin | No-show Prediction | Supply Chain | Revenue Forecasting | Infection Prediction | Advanced Diagnosis | Membership Enrollment | Wellness Checks | Call Center Routing | Clinic Availability

12+
Industry Areas

Hospitals
Physical Therapy
Health Insurance
Manufacturing and Delivery

Physician Burnout
Clinics
Dental Insurance
Pharmacies and Prescriptions

Emergent Care
Modernization
Electronic Health Records
Maintenance

25+
TECHNOLOGIES/F RAMEWORKS

DATA ORCHESTRATION & INTEGRATION
Data Factory | Event Hub | IOT Hub | Synapse | Stream Analytics

DATA STORAGE
Data Lake Gen 2 | Cosmos DB | SQL | Blob Storage

COMPUTE & TRANSFORM
Azure Functions | Azure Databricks | Delta Lake | Python

ANALYTICS & MACHINE LEARNING
Machine Learning | Cognitive Services | ML Flow | Container Registry

DATA & ML OPS
Azure Pipelines | Kubernetes Service | Azure DevOps | Container Instances

APPLICATION INTEGRATION
Logic Apps | Redis Cache | App Service | Service Bus

DATA EXPLORATION & CONSUMPTION
Data Catalog v2 | Power BI | Data Share | Cognitive Search

PARIVEDA

Pariveda's Machine Learning POCs prove ideas to the point where they meet the "line of feasibility" to progress toward operationalization.

Development Phases

Idea Maturation

Ideate - Create Concept Cards
Engage internal stakeholders, capture new business ideas and collaboratively build Concept Cards

Idea

Review & Prioritize
Review Concept Cards w/ Executive Leadership, prioritize and select concepts to research further

Good Idea

Research & Prototype
Engage external & related parties to formalize dependencies; Develop mock-ups and/or prototypes

Real Idea

Concept

"Line of feasibility"

to

Validate - Field Test
Fully functional prototype for subset of customers or users

Viable Idea

Reality

Release
Production launch of product/service after incorporating lessons learned from Market Test

Valuable Idea

PARIVEDA

Healthcare organizations are faced with solving unknown, unmet and highly complex real-world problems that require value-driven, innovative solutions

PARIVEDA HAS PARTNERED WITH ORGANIZATIONS TO CREATE IMPACTFUL EXPERIENCES THAT DELIVER EXTRAORDINARY OUTCOMES

Optimized competitive pricing models through a cloud-based ML model to allow for top-line revenue growth and competitive advantage at a Global Medical Supplies Manufacturer

Accurately predicted back-ordered product ship dates at a Global Medical Supplies Distributor by enabling a cloud-based predictive analytics platform

Enabled organizational transformation at Major Health Insurance Company to move from a metrics-driven mindset to a customer-centric purpose-driven culture

Prevented an infectious disease outbreak, improved health outcomes and saved lives at a Pediatrics Hospital Institution by leveraging the power of predictive analytics, AI and ML

Predicted customer demand by up to 6 weeks in the future at a Major Transportation Company to dynamically adjusting capacity and price using predictive analytics and ML
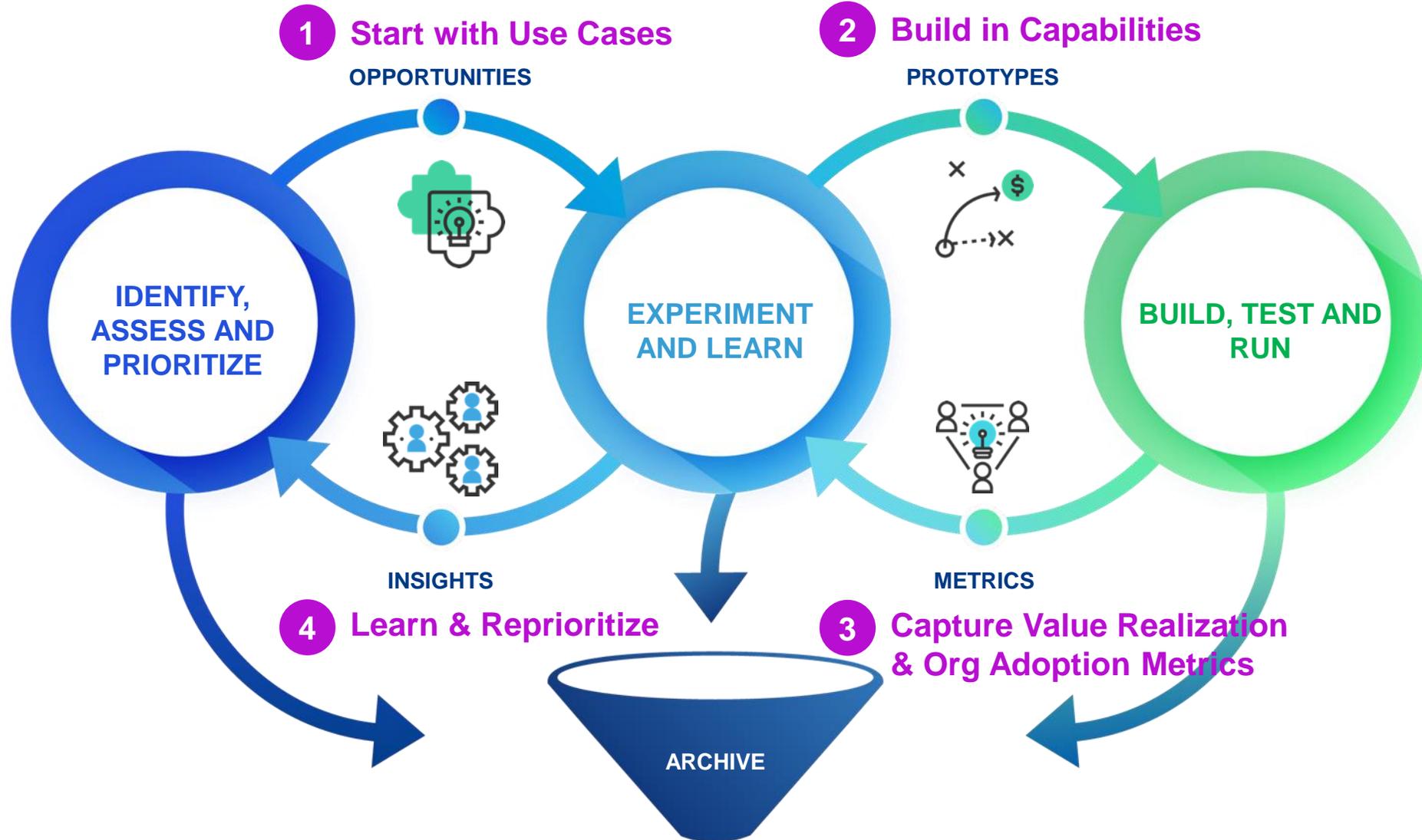
Enabled Supply Chain Agility at a consumer goods company by designing ML logic to predict market demand up to 3 months in the future, resulting in improved forecast accuracy, reduced chargebacks and reduced inventory carrying costs
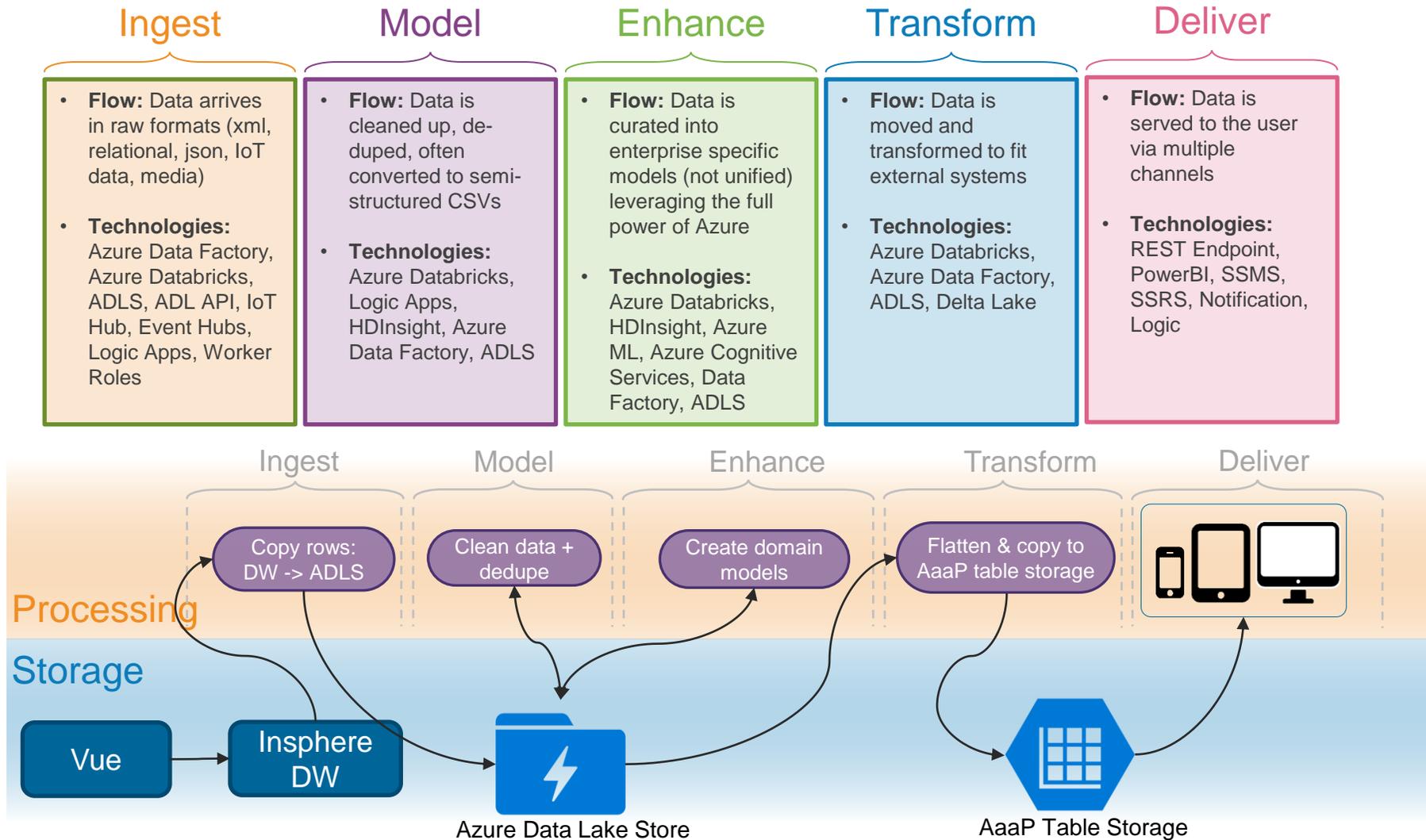
PARIVEDA

Pariveda's AI/ML Product Delivery Methodology

Three continuous loops that allow appropriate information to move through the process at an independent pace. Ideas that aren't sufficiently predictive or won't provide enough value are archived.

1 Start with Use Cases

OPPORTUNITIES

2 Build in Capabilities

PROTOTYPES

IDENTIFY, ASSESS AND PRIORITIZE

EXPERIMENT AND LEARN

BUILD, TEST AND RUN

INSIGHTS

METRICS

4 Learn & Reprioritize

3 Capture Value Realization & Org Adoption Metrics

ARCHIVE

PARIVEDA

Pariveda and IMETD - A cloud pattern which encompasses the *what, where, when, why* and *how* for data as it flows through the data lake.

Ingest

- **Flow:** Data arrives in raw formats (xml, relational, json, IoT data, media)
- **Technologies:** Azure Data Factory, Azure Databricks, ADLS, ADL API, IoT Hub, Event Hubs, Logic Apps, Worker Roles

Model

- **Flow:** Data is cleaned up, de-duped, often converted to semi-structured CSVs
- **Technologies:** Azure Databricks, Logic Apps, HDInsight, Azure Data Factory, ADLS

Enhance

- **Flow:** Data is curated into enterprise specific models (not unified) leveraging the full power of Azure
- **Technologies:** Azure Databricks, HDInsight, Azure ML, Azure Cognitive Services, Data Factory, ADLS

Transform

- **Flow:** Data is moved and transformed to fit external systems
- **Technologies:** Azure Databricks, Azure Data Factory, ADLS, Delta Lake

Deliver

- **Flow:** Data is served to the user via multiple channels
- **Technologies:** REST Endpoint, PowerBI, SSMS, SSRS, Notification, Logic

Ingest | Model | Enhance | Transform | Deliver

Processing

Copy rows: DW -> ADLS

Clean data + dedupe

Create domain models

Flatten & copy to AaaP table storage

Storage

Vue

Insphere DW

Azure Data Lake Store

AaaP Table Storage

PARIVEDA

Predictive Analytics in Other Industries

Retail Energy Providers
- Predict energy consumption given individual consumer characteristics

Healthcare Applications:

Predict appointment no shows given individual patient characteristics

Worker's Compensation
- Utilize reimbursement history to submit claims with codes that will be approved

Utilize reimbursement history to follow up on rejected claims with highest probability of approval

Retail
- Utilize buying history to predict when a customer will have a life event and adjust marketing tactics accordingly

Utilize treatment history to predict when a patient may contract an infectious disease

PARIVEDA

Legacy and On-Premise Transformation to Cloud-Based Data Platform and Analytics

SITUATION

A group within a non-profit organization consisting of multiple medical centers and nearly 2,000 physicians was in the process of developing a Modern Data Enterprise (MDE). Goals included improvement of reporting, analytics of data for new insight, and elevating events for outcomes.

Pariveda was asked to review the current progress and provide guidance and support where possible to ensure platform goals are reached. Through the course of discovery Pariveda identified recommendations for process and technology improvements that would accelerate delivery and enhance the value the data platform provides long term via the use of cloud technologies, machine learning and predictive analytics.

SOLUTION

Pariveda aligned focus with the client, producing a cloud-based solution that focused on event-driven architecture, a scalable data platform / data enrichment, and predictive analytics. A multi-layered approach on security ensured maximum data integrity while allowing self-service for both the client's business partners and large customer base.
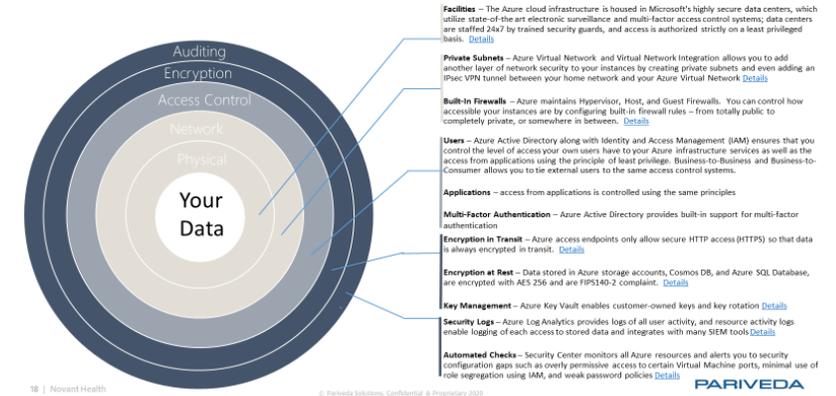
VALUE PROVIDED

Pariveda has been a trusted partner with the client and providing input, solutions, and advisory services to provide shareholder value and accelerate a new normal operating mode:
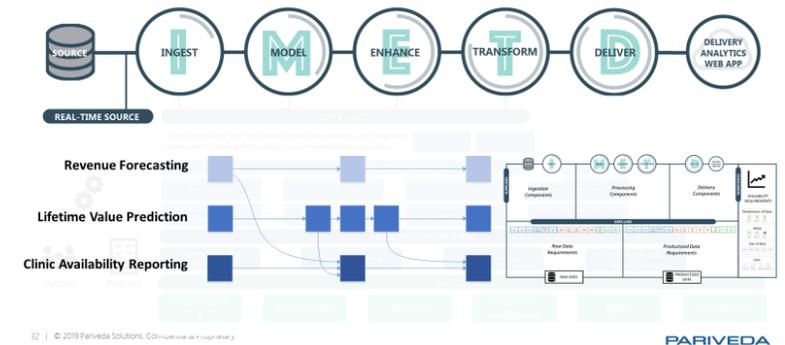- Revenue Forecasting
- Clinic Availability Reporting
- Event-driven Data Platform

Now, the more resilient digital organization can predict and respond customers and business partners they serve.

Layered Security to Protect Your Data

Data Flow Development is Use Case Driven

Well-Child Intervention via Predictive Analytics

SITUATION

A non-profit children's hospital wanted to explore the use of Predictive Analytics and Machine Learning to guide care coordination for members who are likely to be non-compliant in the HEDIS W15 Measure. The HEDIS W15 Well-Child Measure is the percentage of patient members who attended six or more well-child visits during their first 15 months of life. Understanding which members are more likely to be non-compliant, and why, can help guide efforts to encourage members to attend more visits – promoting better health outcomes and higher ratings.
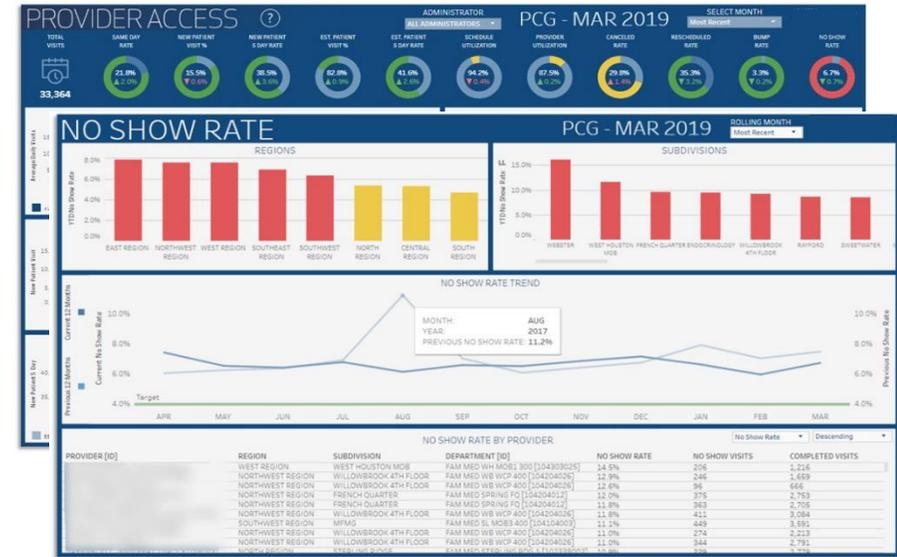
SOLUTION

Pariveda developed a machine learning model with relevant information about the patient (age, birth outcome, etc.), mother's prenatal habits, sibling patterns, claim history, and more create to a non-compliance risk score.

Enhanced an automated call campaign targeting members at high risk for non-compliance by improving the focus and efficacy of each call using insights from the machine learning model.

VALUE PROVIDED

By predicting patients' probability of not making at least 6 well-child visits within their first 15 months of life, the model provides benefits across the following areas:

- Higher HEDIS Measure rating led to more public recognition as well as more federal funding
- Able to target high-risk patients and schedule timely outreach to encourage them to attend more visits
- Targeted approach led to lower operational costs and less call volume
- Targeted calls led to higher customer satisfaction. Previously, parents were frustrated, often receiving multiple calls a week due to a lack of strategy and data
- Prevention (vaccinations / immunizations)
- Tracking growth and development

Adaptive Organization Characteristics