

AI in Life Sciences

Srikanth Bogadapati

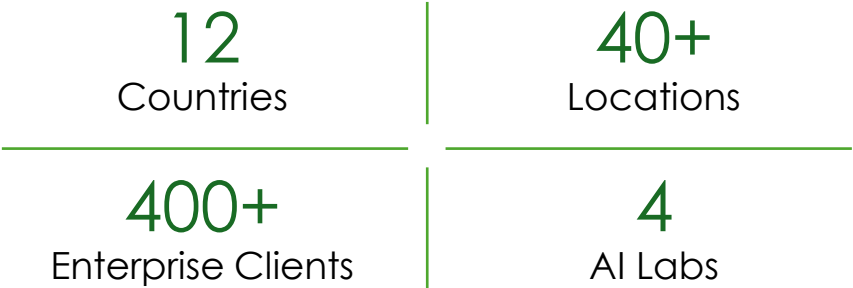
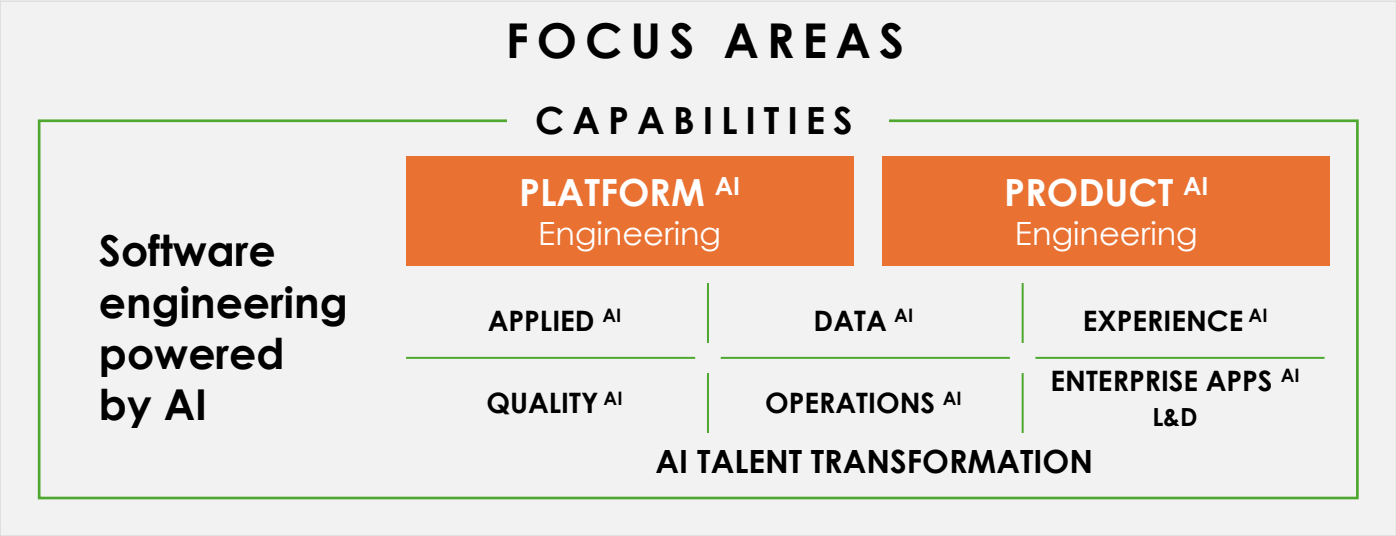
Head of Life Sciences - Ascendion Inc

AI in Pharma & Biotech  Massachusetts
Institute of
Technology
Making Data Driven Decisions with AI  Massachusetts
Institute of
Technology
Generative & Agentic AI  CORNELL
UNIVERSITY

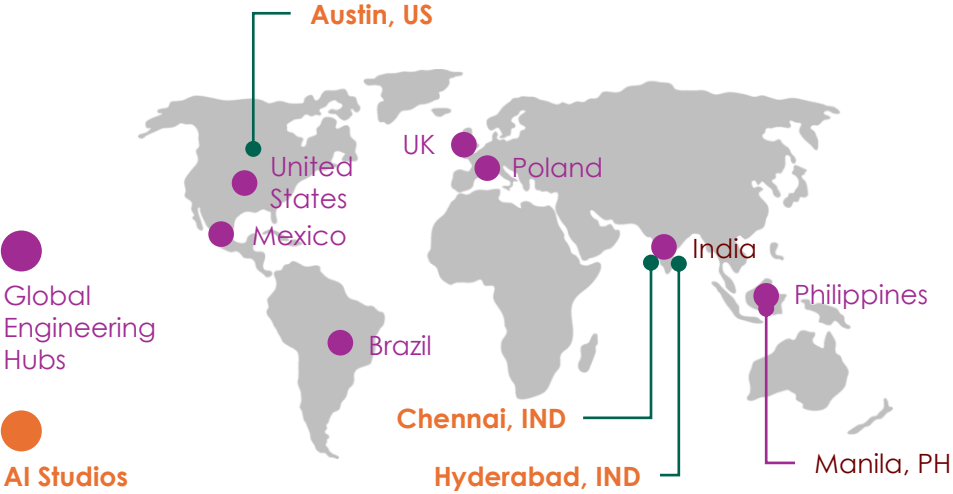


A word about my Company

Ascendion – An AI Native Life Sciences Partner



Ascendion AAVA™
Industry recognized Engineering ^{AI} platform



Analysts Recognize That We Are Bringing a New Value Model to Our Industry

Independent analyst & industry recognition 2024–2026

ISG

**Global Leader —
Generative AI Services**

ISG Provider Lens™
2025 · 2nd Consecutive Year

HFS

**Market Leader — Agentic
Services**

HFS Research
January 2026

HFS

Market Leader — Horizon 3

HFS Horizons: Gen Enterprise
Services
2025

GARTNER

AAVA™ Platform Featured

GenAI in Outsourced Software Development
2024–2025

GLOBEE

Gold — AI Service Provider of the Year

Globe® Awards
2025

We are a proven AI-native disruptor.

Certifications



Our Life Sciences Practice & Client Engagements

2000+ AI agents	40 Active AI projects	20+ AI Platforms & Studios	7+ Therapeutic Areas	600 Clinical Trials Supported with AI	\$220M Saved with AI
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CLIENTS: Over 40 Pharma, Medical Devices, CROs, CMOs and CDMOs

KEY ENGAGEMENTS

 R&D

 Clinical Ops Modernization

 Regulatory Affairs & Intelligence

 Digital Manufacturing

 Commercial

 Quality

 Pharmacovigilance

 IT - Data , AI , Analytics AppDev, Support, Cloud

PARTNERSHIPS





Our High Impact Areas of AI across Life Sciences



**Bio-Medical Knowledge
Graphs**



CSR,CTD, ICF Auto Generation



**CDP, Site Selection, Site Doc
Digitization , CDISC**



**Clinical Data Management,
BioStats Review**



Regulatory Intelligence



**Smart Glasses in Digital
Manufacturing**



**GxP with AI (Doc Generation,
Reviews, Remediation)**



QMS with AI



**Commercial Pharma Digital
Twins, Dynamic Dashboarding**



Patient Services



MMX, AB Testing, ROI



**Segmentation, Capture Rate
Improvement, Analytics**



Data Ops Automation with AI



Support Ops with AI



User Experience



SDLC with Agentic AI

Our Impact In Accelerating Life Sciences with AI Adoption

Drug Discovery	Clinical Trials	Regulatory	Manufacturing	Commercial	Post Market
Bio-Medical Knowledge Graphs Competitive Intelligence Real World Data Analysis Target Product Profile	CDP, Trial Design , Site & Patient Selection Clinical Data Management Site Risk Scoring & Analysis , Site Review Automation Lab Test Code Governance Auto generate CTD, ICF Statistical Analysis Plan & Statistical Reporting iETMF Site Doc Digitization, iETMF Biostatistics Analysis Clinical Ops	Auto Generate Clinical Study Report Regulatory Intelligence Regulation Analysis Engine Medical Writing Regulatory Inspection Review Product Change Management Globally Regulatory Services EUMDR, UDI, B/MUDI Submissions	Digital Manufacturing 4.0 Smart Glasses Integration with Agentic AI bots QMS with AI Digital Twins, Building Twins, Process Twins MBR, EBR Reviews, eOJTs Process & Equipment Validation MES, DCS Integration, Sensor Visualization Lab Data Automation Smart Planning	Market Access Solutions Digital Twins /Synthetic Personas For Market Access/ Research Sales planning Data Capture Rate Improvement Marketing Analytics, Media Campaign, Omni Channel Product Flow, Patient Support Prescriber behavior Master Data Reports Field Reporting	Case Management Signal Detection Safety Data Migration MIR/ Reporting Vigilance Change Management
Quality					
GxP / CSV	Manufacturing Quality/Equip Validation	Compliance Analysis / QC	QC/QMS/CAPAs	Quality Automation / Digital Quality Bots	Audits/Inspections
Project Mgt					
Digital PMOs	Digital PMs	Project Management Services	Project Management Platform	Automation & Intelligence	Digital Process Workers
Enterprise IT					
Platform/Cloud/ Cyber/ Support/ AIPO	OCM / L&D	Enterprise AI Platform / Data Solutions / AI	AppDev/SDLC with Agentic AI	Salesforce	AR/VR / Meta Verse/ Experience Engg



AI, GenAI solution deployed

High Value Case Studies – Delivering Impact to Life Sciences



Smart Glasses & Agentic AI bots for Pharma Manufacturing

Deployed agentic AI bots integrated with smart glasses with display to continuously monitor the floor for deviations, provide immediate access to SOPs in Quality, Manufacturing and Supply Chain personnel

- **\$150M** in productivity gains
- **10,000** deviations reductions



QMS with AI

Deploy AI accelerators in deviation management, change controls, validation

- **\$50M savings** in deviations
- **35-40%** improvement in informed choices during decision-making



GxP/ Validation with AI

Deploy AI solutions in GxP documents generation, review, remediation

- **60%** reduction of GxP costs
- **Improved accuracy** leads to low error rate



Digital Twins/Synthetic Personas for Market Access/Market Research

Deploy synthetic personas, digital twins to test market access and market research scenarios

- **Savings of \$10 M** per annum on market campaigns
- **Improve ROI by 25%**



Regulatory Intelligence

Deploy regulatory intelligence platforms to accelerate HAQ response authoring

- Improve HAQ response authoring **by 50%**
- Improve response acceptance rate **by 40%**

AAVA™ - Ascendion's Agentic AI platform that is focused on bringing efficiency across software engineering life cycle: planning, designing, architecture, building, testing, deploying, and supporting.

Today's Demos



Document Digitization

Digitize documents for downstream configuration, consumptions, ingesting into AI models , documents generation,



Document Generation

Generate documents (CSRs, CTDs, ICF,...)



Document Review

Review documents for GxP Compliance



Thank you

Ascension is a global, leading provider of AI-first software engineering services, delivering transformative solutions across North America, APAC, and Europe. Our headquarters are located in New Jersey. We combine technology and talent to deliver tech debt relief, improve engineering productivity solutions, and accelerate time to value, driving our clients' digital journeys with efficiency and velocity. Guided by our "Engineering to the power of AI" [EngineeringAI] methodology, we integrate AI into software engineering, enterprise operations, and talent orchestration, to address critical challenges of trust, speed, and capital.

ASCENSION



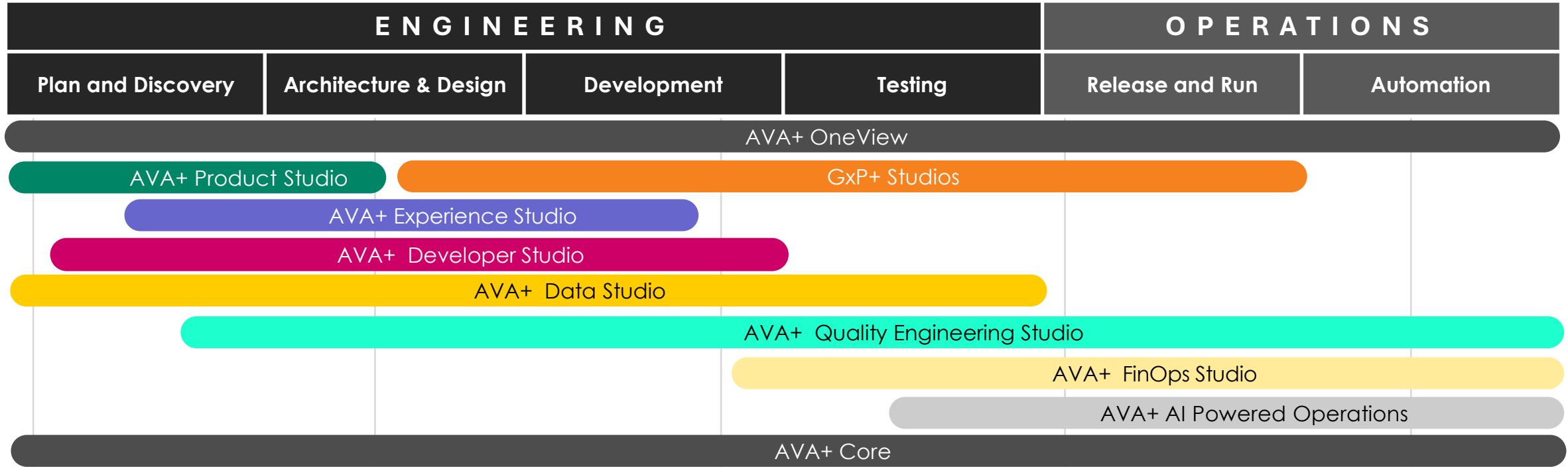
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Appendix 1 : Platforms, Tools & Accelerators



AVA+ :Our Platform Supporting Agentic AI Transformation

AVA+ studios prioritize an AI-first approach expediting the pace of transformation and release cycles



with Ready-Made UI Components Accelerated, Inclusive Modern Experiences

30%

reduction in UI development efforts

to Orchestrate Engaging Experiences Rapid, Enterprise System Integrations

40%

effort reduction in implementing and integrating diverse applications

for coding companionship, API design assistance, technical documentation generation, for Productivity Shrinking release cycles and accelerating Modernization

60%

efficiency in time to market

for Data Migration Accelerated Data Modernization

90%

automation

for Quality Engineering Automated Quality Engineering Transformation and Test Cost Reduction

40%

improved cycle time

ICE for Cloud Economics Specific & Contextual Cloud Savings, Transformation & Spend management

20%

Savings on costs

for Operations Engineering Support and Run Cost Efficiencies

30%

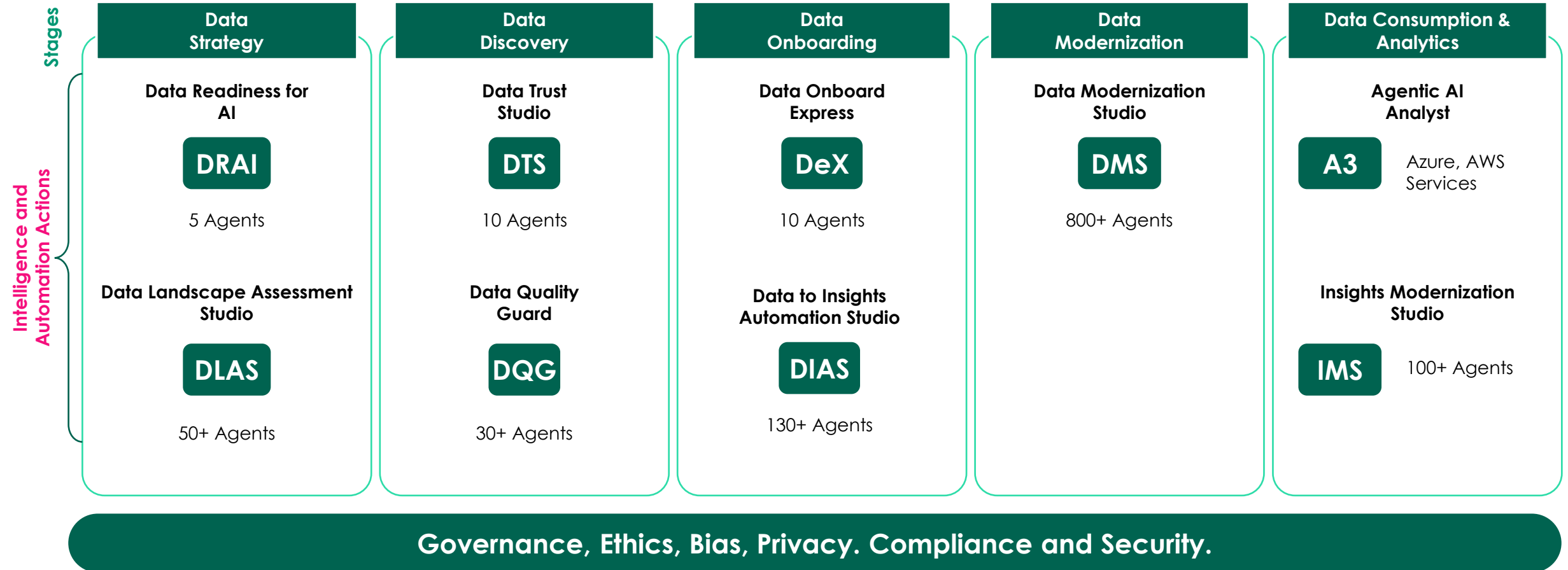
Savings on costs

for Transparency & Trust Near Real-time Engineering Optics and Program Rollups

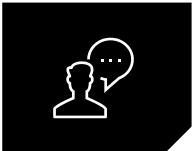
100%

Engineering Transparency

AAVA Data AI studios accelerates business value outcomes using Agentic AI



Our Accelerators in Life Sciences



AceDO

Data Observability accelerator for commercial data



AceAI

LLM & AI accelerator for quick RAG solutions



AceMDM

Pharma MDM



AceCDW

Custom Pharma commercial data warehouse



Experience Studios

Experience studios to design high end user experience at rapid pace



AgentForce Solutions

Custom Pharma commercial AgentForce Solutions



Document Generation Studios

Generate any document by templatizing with AI



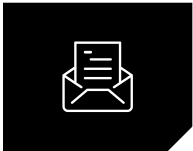
Ace Connect

Enterprise knowledge sharing platform connecting diverse teams



Ace Data

Easy to use, Intelligent ETL solution for data on-boarding, transformation and automated pipelines



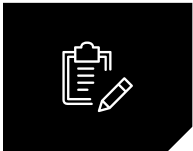
Ace Customer

Autogenerate and update customer segments like grower-decliner, dominant, look-a-like, deciles, quintiles and other custom segments



Ace Optim

Measure and optimize marketing and sales investments to improve business outcomes



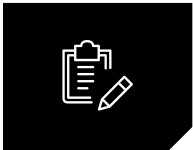
Ace Tracker

Interactive, highly visual performance reports and dashboards



Ace Measures

Evaluate data against business objectives to identify/validate lead and lag KPIs



GxP Review Studios

Conduct GxP reviews, , auto generate remediation steps