



Marlabs Global Data & AI Day 2024

1



Team Marlabs



Thomas Collins,
Chief Executive Officer,
Marlabs



Scott Morgan,
Chief Operating Officer,
Onebridge - A Marlabs
Company



Bhargava Ramadas,
Vice President - Data,
Analytics & AI,
Marlabs



Andrew Bittermann
Vice President - Data Strategy,
Onebridge - A Marlabs
Company



Introducing Marlabs

We help global enterprises with comprehensive digital solutions and help craft a future that's driven by data at every touchpoint.



People-first
Data-ready
Sustainably-conscious





Our Marquee Data Clients

Stronger Together



Amplifying Our Capabilities

The acquisition of Monitora and Onebridge accelerates our global delivery capabilities and deepens our data expertise across the **pharma, lifesciences, healthcare and manufacturing** domains.



Onebridge Acquisition

- Deep focus on Data & Analytics
- Integrated partners in driving enterprise change management
- Focus on next-gen technologies and data-powered decision intelligence



Monitora Acquisition

- Strong nearshore presence
- Deep expertise in ADM, Data, and Analytics
- Strong relationships with local clients across pharma, lifesciences, banking, and manufacturing

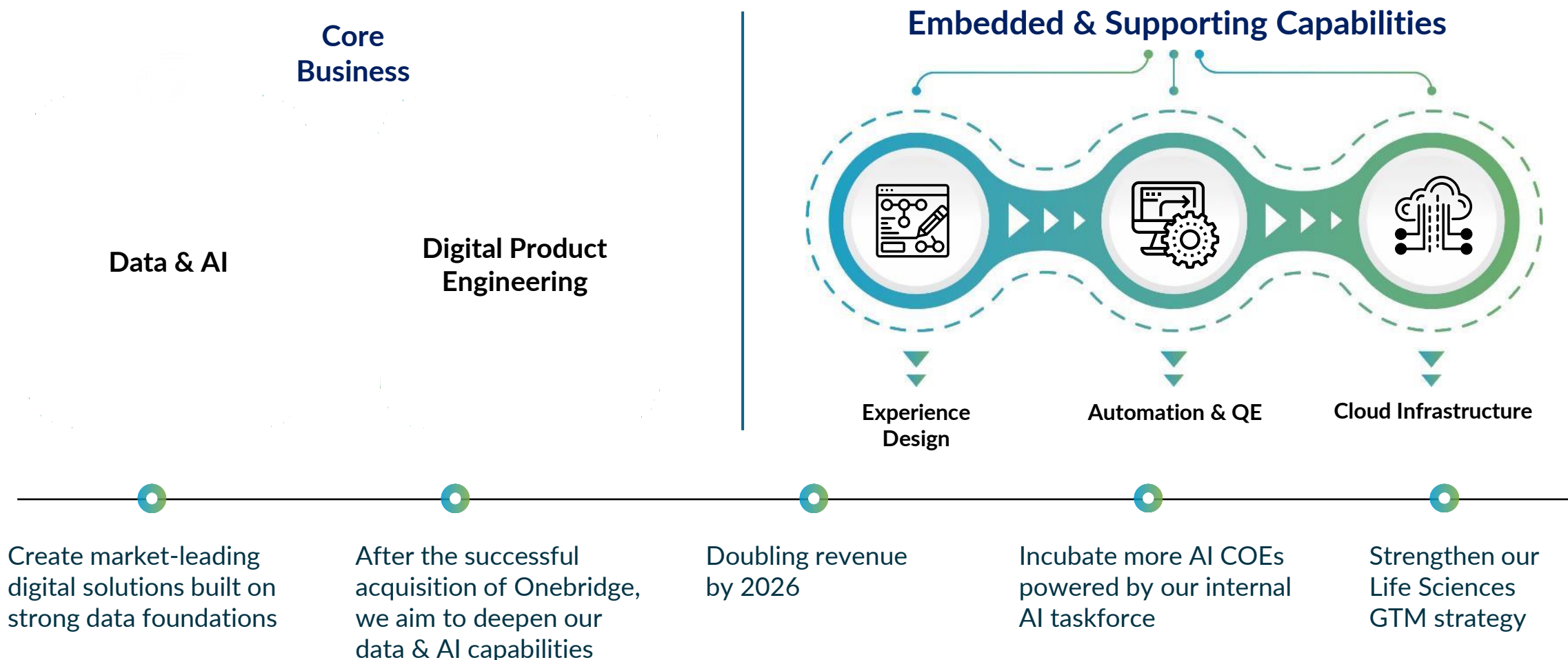


Marlabs' Enhanced Offerings

- Stronger Data Consulting expertise
- Enhanced skills in data, Business Intelligence (BI), and Artificial Intelligence (AI)
- Proven data accelerators and frameworks
- Intensified focus on healthcare and life sciences
- Global delivery capabilities
- Experience with Fortune 500 and high-tech startups



Our Strategy for 2024 and Beyond

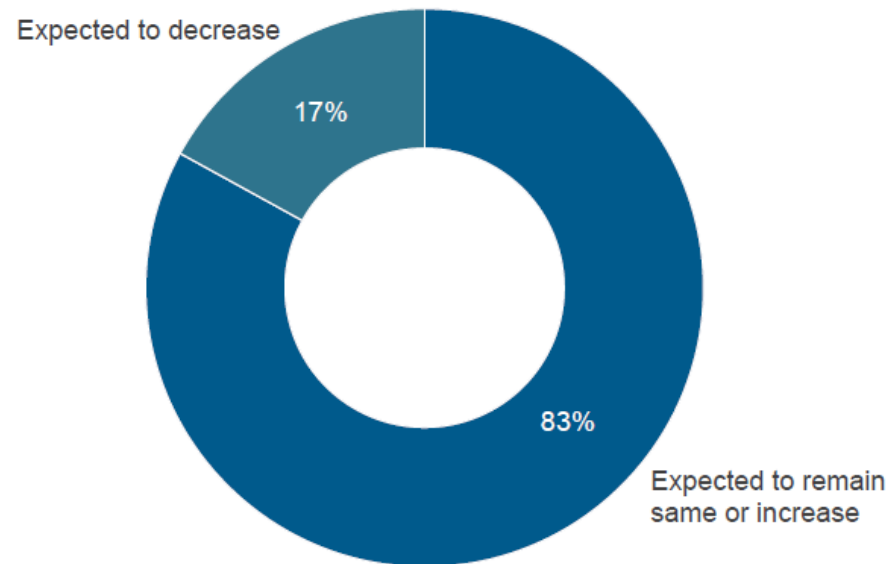


Data as a Catalyst to Digital Transformation

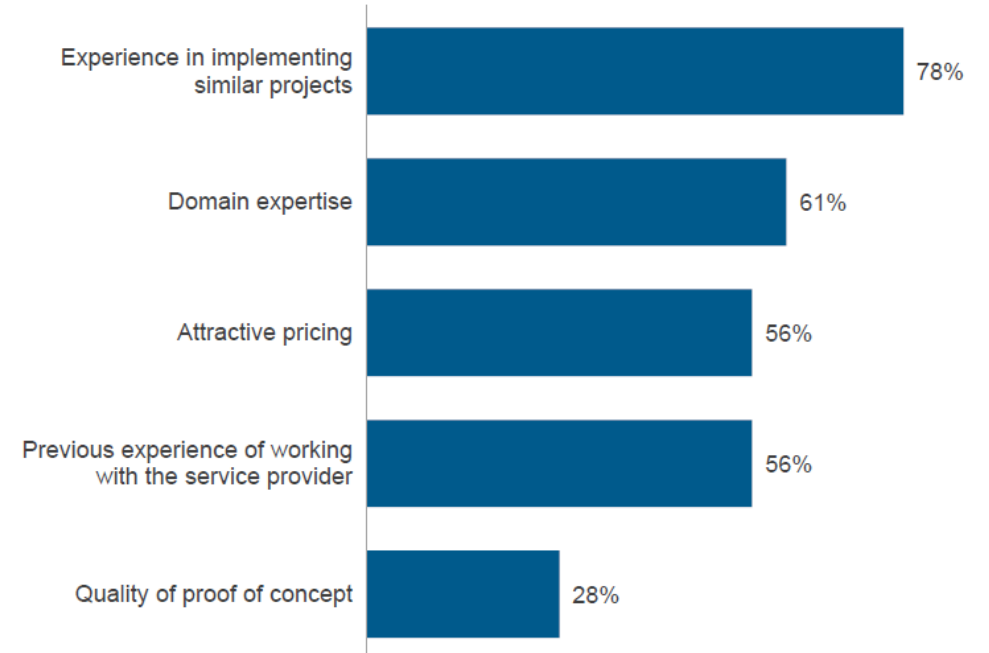


The evolving global Data landscape

Expected change in data investments in 2024*



What enterprises are looking for in their data partner*





Areas of Opportunity as Predicted by Leading Analysts



Modernization of data architectures

Enterprises are leveraging modern data architecture approaches such as data fabric and mesh to tackle challenges in distributed data systems and focus on a product-focused mindset.



Investments in life sciences for data-powered outcomes to rise

Data & analytics adoption by the healthcare and life sciences industry to grow at ~15% leading up to 2025 with focus on value-based care and privacy.



Focus on modernization and security

Cloud data modernization, data observability, and data-driven sustainability are key growth drivers in the D&A market.



Strategic partners for outcome-oriented constructs

Enterprises are looking for service provider partners offering support for outcome-oriented D&A services and those who can help realize return on investments.



Cloud and data costs management solutions

With managing cloud and data costs becoming a key challenge, enterprise investments in cloud FinOps and data observability solutions are rising.



Gen AI focus to continue for the foreseeable future

Nearly 83% of global enterprises are either actively testing Gen AI capabilities or have adopted it for one or more production-grade use cases



Marlabs x Onebridge

Marlabs + Onebridge



Marlabs is now equipped with advanced Data, Analytics, and AI capabilities that empower enterprises to solve complex business challenges with data and leverage them to activate decision intelligence.

A company focused on data

- We now provide evolution-ready digital solutions with Data at the center.
- With almost two decades of experience, we have the expertise and experience needed to excel in a rapidly evolving data-first world.

A proven framework

- We used our comprehensive experience working with Fortune 500s and startups to create the MAP (Modern Analytics Framework) and COMPASS (Comprehensive Map Assessment) frameworks to guide companies to Data success.



A holistic approach

- Marlabs customers benefit from our global expertise in business strategy, delivery execution, and technology enablement needed to realize the promise of data and AI.

Comprehensive Approach

We understand that successful outcomes with data and AI require a comprehensive approach across strategy, execution, and enablement. Our team brings the strategic thinking, the resources to execute the work, and the organizational change management to ensure your success.



Strategy: We help you create or validate your overarching data strategy to provide context and line-of-sight for individual data projects as they are implemented along your journey.

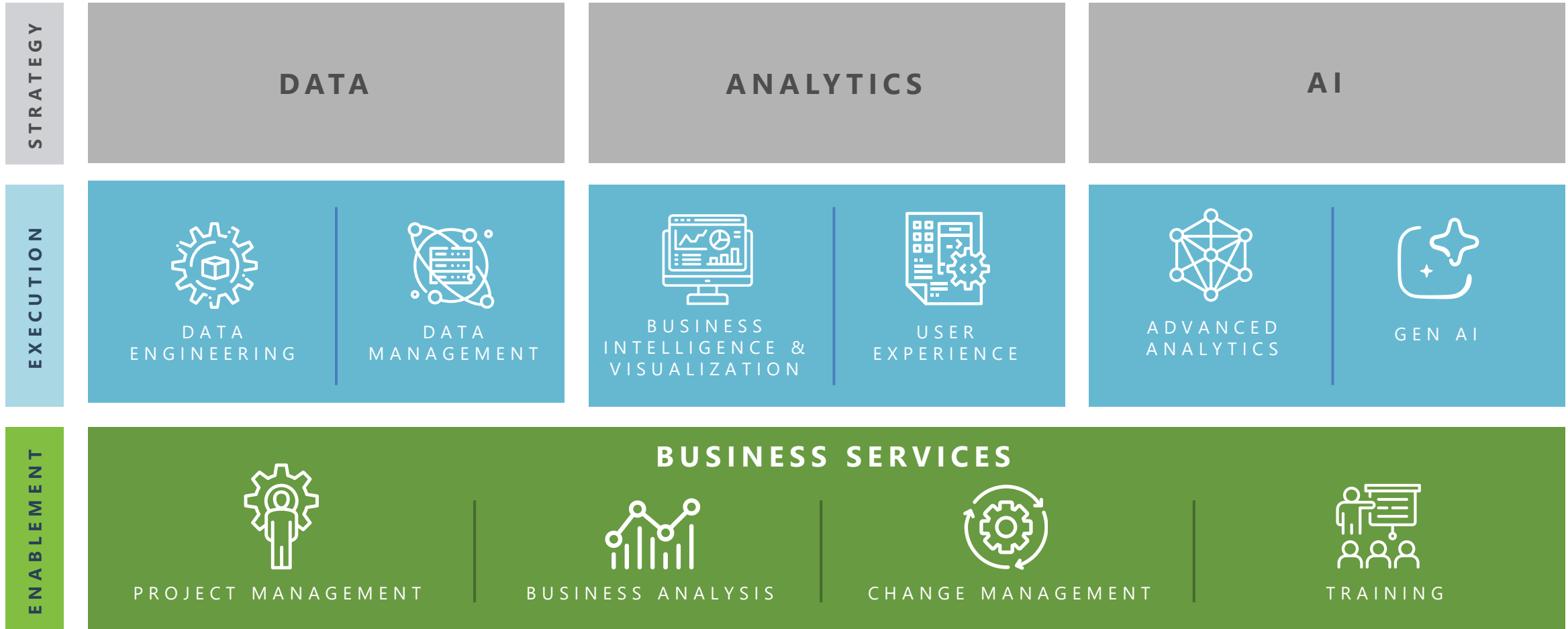


Execution: Our consultants help ensure that you are leveraging the right blend of technologies and then executing the actual work according to plan.



Enablement: We'll help guide your successful adoption of the strategy through intentional communication, education, training, and general organizational change management.

Service Offerings





MAP

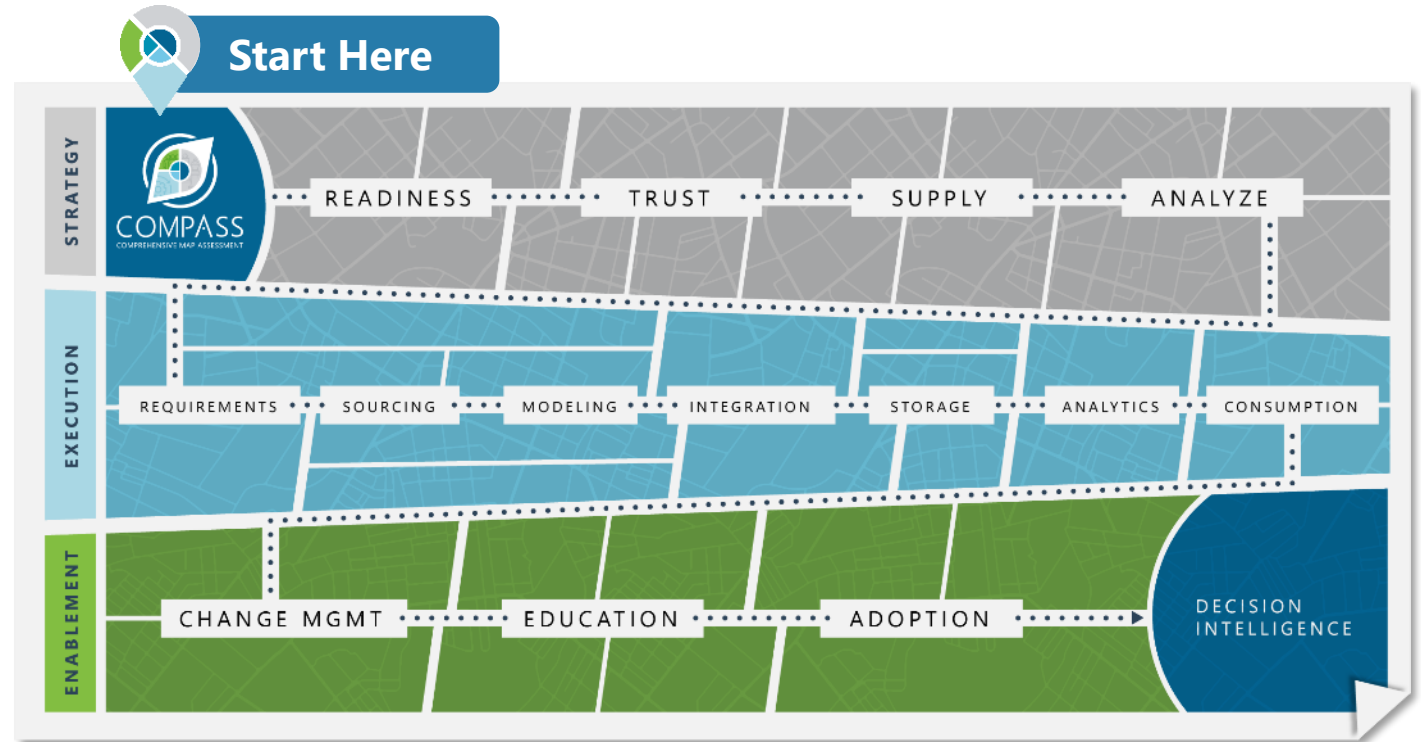
MODERN ANALYTICS PLATFORM



MAP (**Modern Analytics Platform**) is a data strategy framework developed to help enterprises fully realize the promise and power of data-driven decision intelligence. With experience, we learned that successful data initiatives require a holistic approach that encompasses people, processes, technology, and data.

MAP is a tested, proven, and customized road map designed to help you assess, plan, guide, and execute enterprise-level data strategy. It includes a series of accelerators and custom solutions that greatly **shorten the time-to-value of any data-driven endeavor**.

We use MAP as a guide for strategy, execution, and enablement throughout our partnerships so you have a clear understanding of where you stand and what you need to do next. We start the process with a comprehensive assessment called COMPASS.



MAP encompasses the entire journey your organization must travel to get to your destination – reliable, effective decision intelligence that improves business outcomes and delivers value.

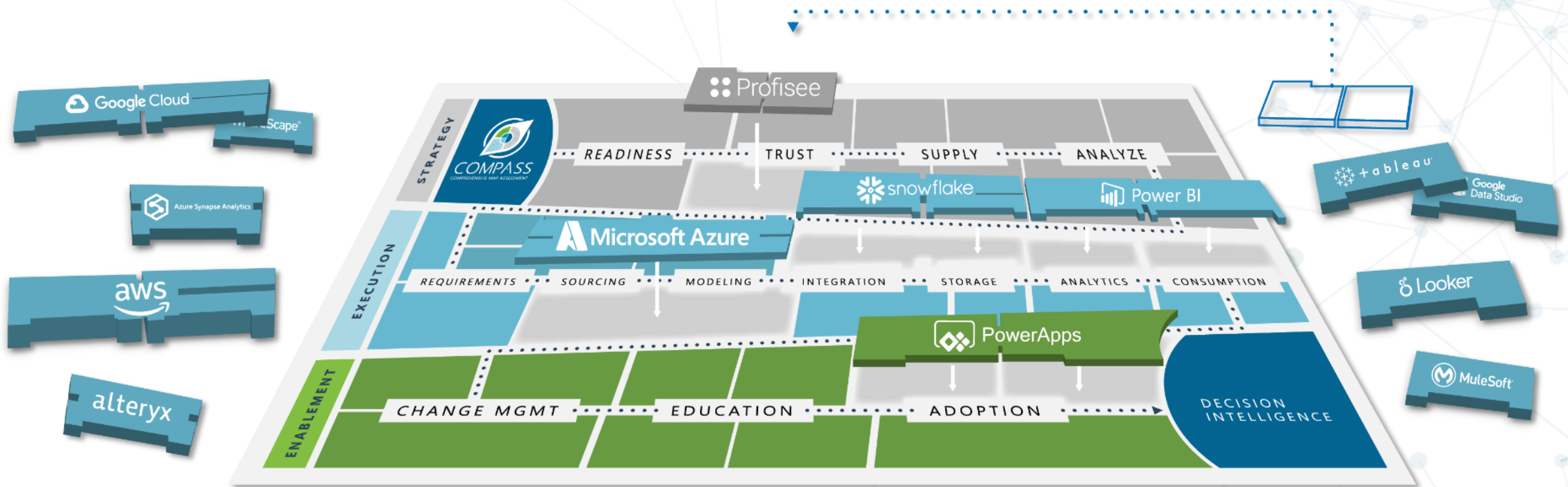


COMPASS

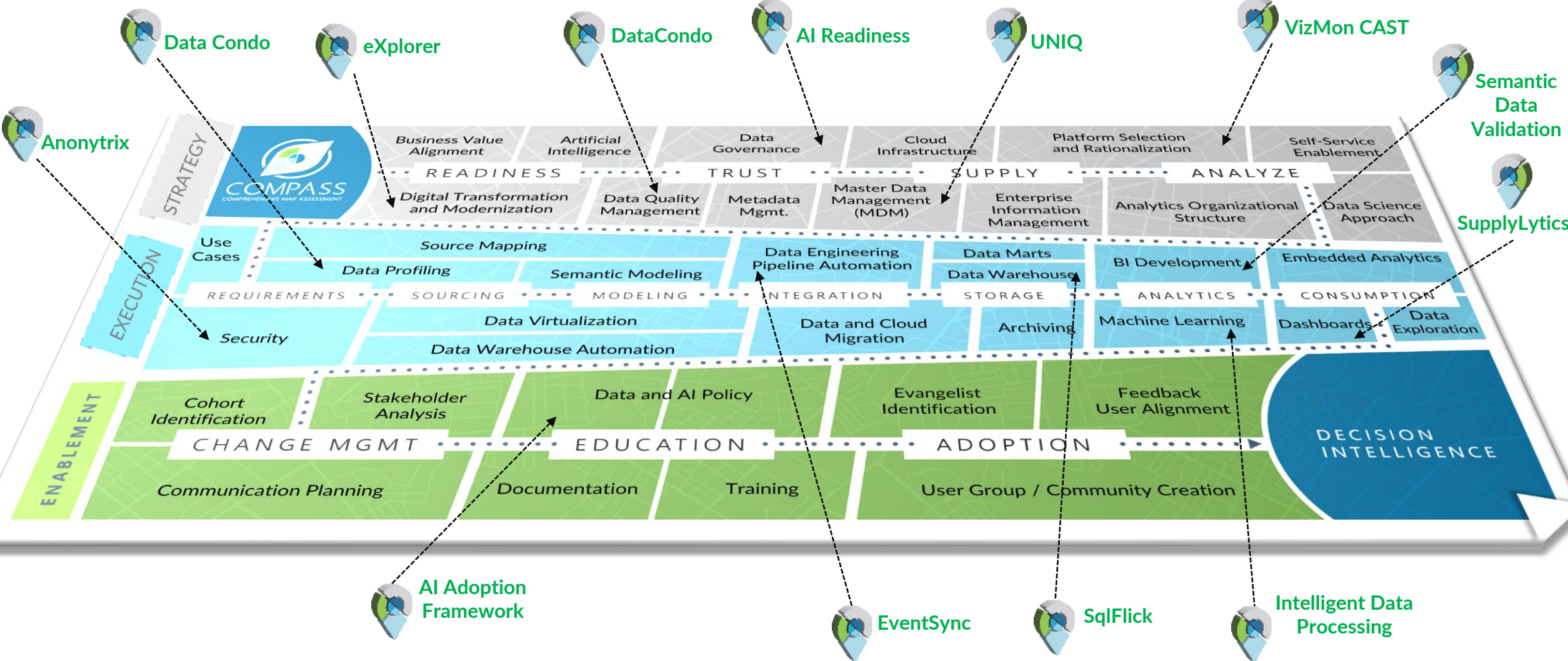
COMPREHENSIVE MAP ASSESSMENT



We developed MAP to be a flexible framework that COMPASS uses to **provide that clear path to get you started on your unique journey**. With these tools, we can meet your organizational needs at any level, **taking you from where you are to becoming a data-driven force that leverages decision intelligence**. COMPASS' comprehensive assessment process includes gathering input from all stakeholders in your organization, performing a full inventory of your current data and technology stack, and building a custom MAP that visually lays out where you are and the steps to take you where you need to go.



MAP Accelerators





Powered by an Ecosystem of Market-leading Partnerships





AI

Comprehensive Approach to AI

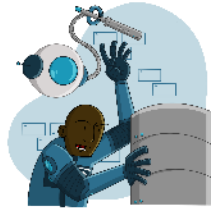


With nearly two decades of experience in data, analytics, and machine learning, stands at the forefront of AI readiness and enablement, we help you navigate the complex landscape of AI including Gen AI, AI operationalization, Ethical AI and more ensuring that you effectively leverage AI's potential.



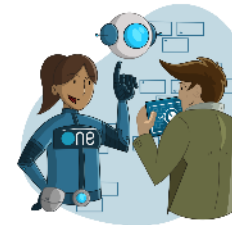
AI Readiness

Our proprietary data-driven AI maturity model assessment helps enterprise organizations understand their respective state of AI maturity.



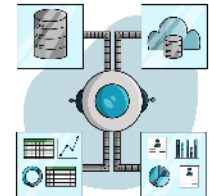
AI Development

Our “quick start” incremental approach allows organizations to experiment and identify the specific areas where AI can provide the most benefits.



AI Literacy

Whether it's using your own AI solutions or integrating available AI solutions into your business process and workflow, we can “train the trainers” in your team.



Operationalizing AI

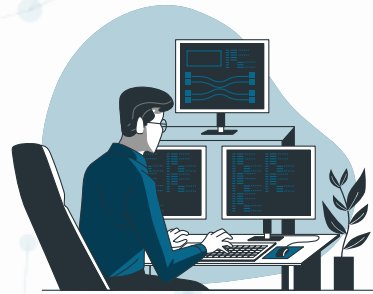
We have the talent and skills in-house to build your AI “Center of Excellence” and develop custom AI models and solutions tailored for your specific needs.

AI Maturity Scale



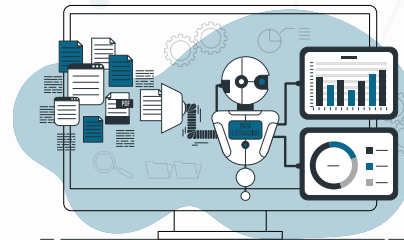
Level 1: Exploring

Learn what AI is and the potential value it can bring to the organization. The organization does not yet have any AI model/solution in place.



Level 2: Experimenting

Identifying business use cases and experimenting with PoCs/MVP Pilots.



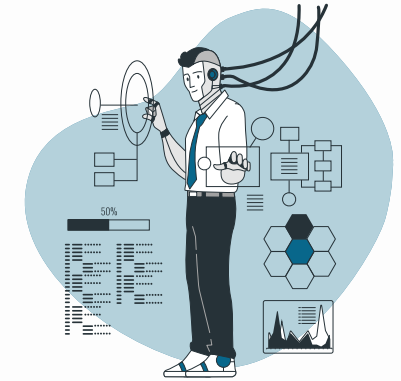
Level 3: Formalizing

Formalize the AI discipline by moving from experimental PoCs/Pilots to the deployment of AI solutions in production (i.e. AI is developing roots across internal business units and sub-functions).



Level 4: Scaling

As the number of AI models and AI products/services increase and the organization needs to optimize the AI solution deployments for scaling.



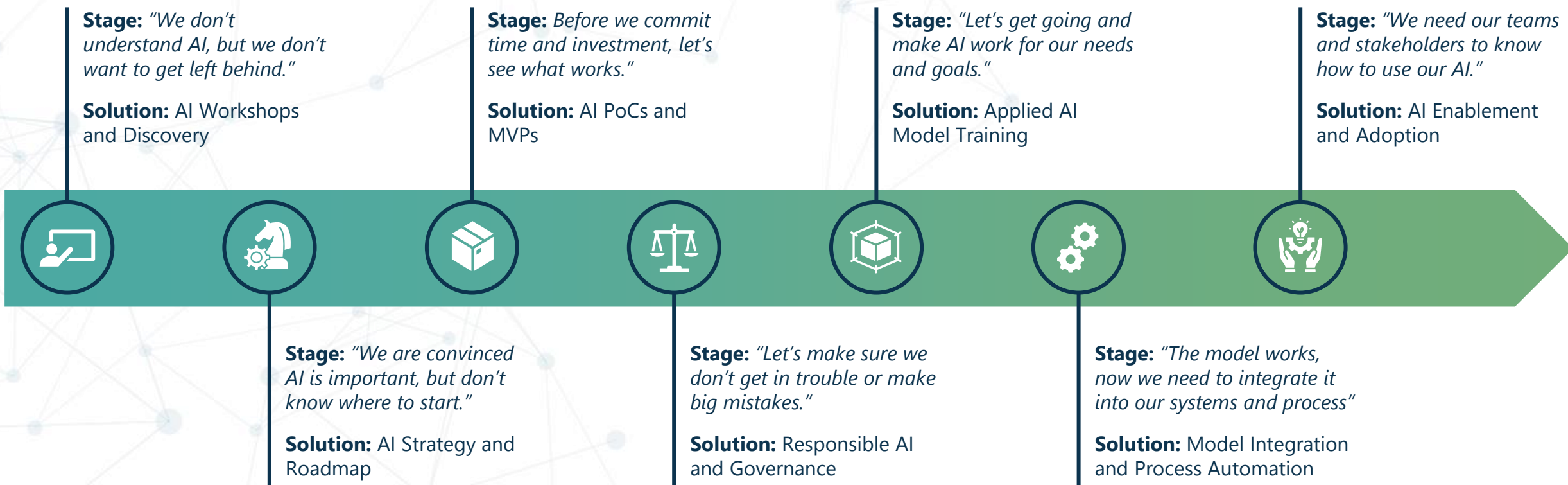
Level 5: Transforming

AI is matured into the corporate culture & identity. The organization uses AI across BU and sub-functions as a strategic business differentiation and competitive advantage.



AI Services Demand and Customer Journey

Organizational Maturity



Unique Conditions

"We have a very unique problem that will require a special model."

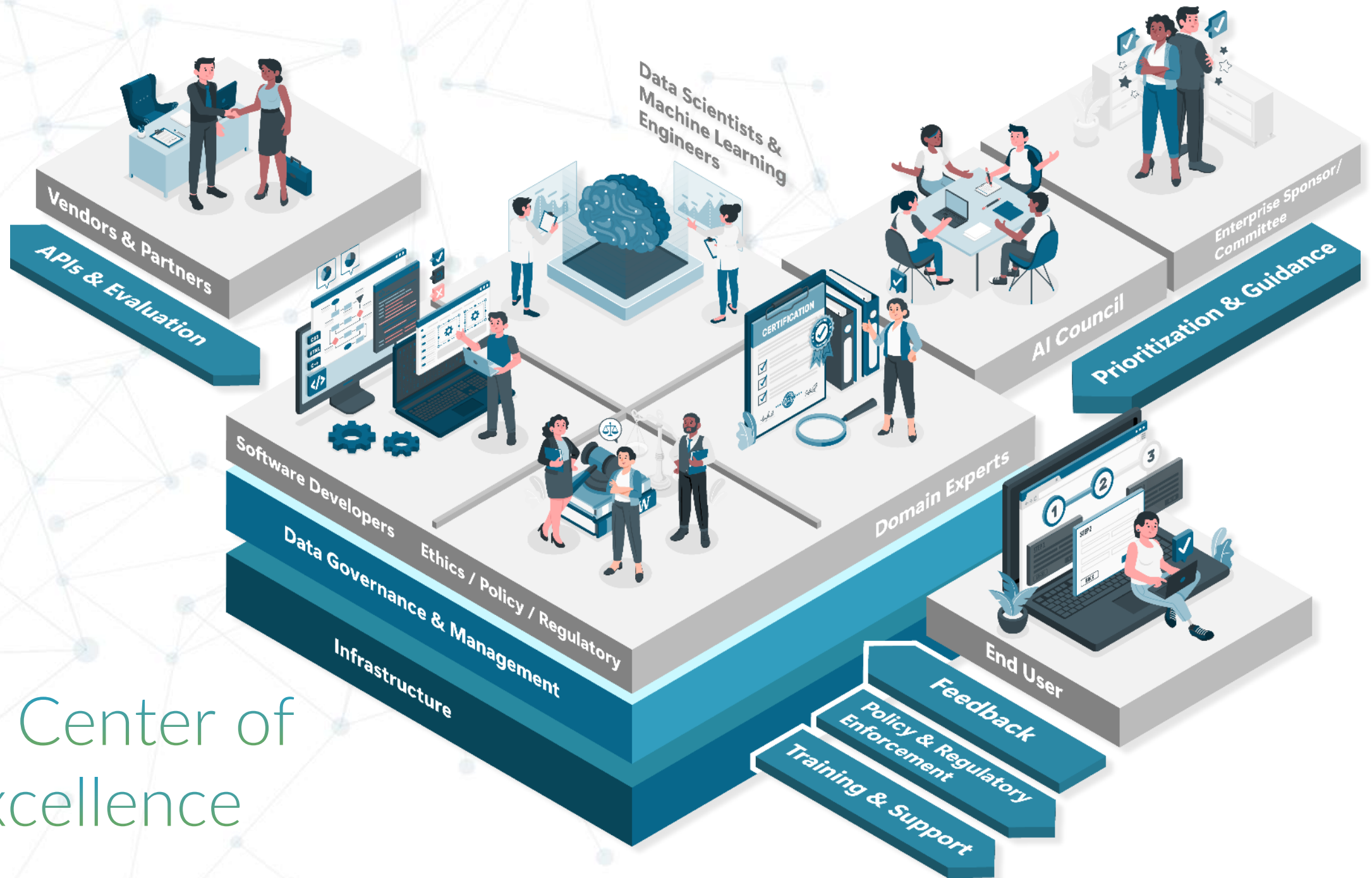


AI Model Development

"AI just isn't ready for us yet, but we want to stay ahead of the curve."



AI R&D



AI Center of Excellence



Demonstrated Expertise in Healthcare and Life Sciences



Marlabs Life Sciences Landscape

For over 20 years, we have served the largest life sciences and pharma organizations in the US. Through the acquisition of **Onebridge**, our services have expanded to improve patient well-being with data at the core.

Who we've served:



25+ Healthcare and Life-Science Clients

250+ Successful Engagements

1000+ Consultants and Engineers



Crafting Tailored Data Solutions for Life Sciences



Drug Discovery



Supply Chain Management



Sales & Forecasting



Regulatory Compliance



Market Access And Pricing



Fraud Detection And Pharmacovigilance

- **Predictive Modeling:** Analyzing biological data to predict the efficacy and safety of potential drug candidates.
- **Clinical Trial Optimization:** Optimizing trial design, patient recruitment, and monitoring through data analysis to accelerate the drug development process
- **Demand Forecasting:** Using analytics to predict demand for pharmaceutical products, optimizing inventory levels, and reducing wastage.
- **Supply Chain Visibility:** Monitoring and analyzing the entire supply chain to enhance transparency, traceability, and efficiency.
- **Customer Segmentation:** Employing analytics to identify and target specific customer groups for more effective marketing strategies.
- **Sales Forecasting:** Predicting sales trends and optimizing marketing campaigns based on data analysis
- **Data Integrity and Compliance Monitoring:** Employing analytics to ensure data integrity, track compliance with regulatory requirements, and facilitate timely reporting.
- **Market Access Strategy:** Using analytics to assess market dynamics, payer behaviors, and pricing strategies.
- **Health Economics Outcomes Research (HEOR):** Analyzing economic and clinical outcomes to demonstrate the value of pharmaceutical products.
- **Anomaly Detection:** Identifying unusual patterns in healthcare data to detect potential fraud or abuse.
- **Pharmacovigilance Analytics:** Monitoring and analyzing adverse drug reactions and ensuring drug safety.

Our Strengths – Life Sciences Analytics Solutions & AI





Case Studies

Case Study: AI CoE Built For IU Health



Client

IU Health is the largest network of physicians in Indiana.

Company Size

One of the largest integrated health systems and clinician networks in the Midwest. It includes dozens of facilities, 2,000+ staffed beds, 35,000+ team members, coupled with extensive research and academic efforts.

Location

Indiana

Technologies

- Microsoft Fabric
- Microsoft Co-Pilot
- Microsoft Azure
- Microsoft Power BI

Services

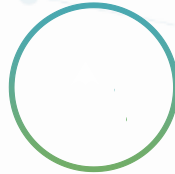
- AI Center of Excellence
- Machine Learning
- Data Modeling/Training
- Data Management
- Data Warehousing

Team Members

- AI Solutions Architects
- Data Scientists
- ML Engineers



Indiana University Health



CHALLENGE: IU Health realized the impact AI has, across the healthcare industry and wanted to put a strategy in place to keep up with innovation. They wanted to explore the applications of AI across the entire organization, from nurse scheduling, to patient discharging, to clinical research & operations.



SOLUTION: IU Health engaged Onebridge to help them build their own Center of Excellence (CoE). Onebridge executed a comprehensive assessment of IU Health's internal team capabilities, current state of IT, and potential opportunities and use cases for the application of AI discovery and development to create an initial roadmap for proof-of-concepts and MVPs. In less than 60 days, Onebridge helped IUH fully staff AI&ML CoE (a team of 13 niche skilled resources).



OUTCOMES: The AI&ML CoE has developed AI/ML docker images for developers and citizen data scientists to rapidly design, develop, train, test, and deploy cloud-agnostic scalable AI solutions. This team has also identified over 6 healthcare AI products for internal use and two of them are in execution state with an estimated ROI of over \$50MM.

Case Study: Machine Learning for Clinical Trials



Client

Eli Lilly is an American pharmaceutical company with offices in 18 countries.

Company Size

34,000+ Employees

Location

Global

Technologies

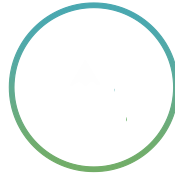
- AWS Serverless Lambda
- PostgreSQL
- Python

Team Members

- AWS Developer
- ML Engineer
- ElasticSearch Dev
- Developer
- Technical Advisors

Services

- Machine Learning
- Data Cloud Migration
- AWS Cloud Application Development
- Data Integration
- Data Cleansing and Quality
- Data Enablement
- UI/UX Design



CHALLENGE: Lilly's pharmaceutical team aimed to accelerate and streamline product trials. With Onebridge's help, they chose an analytics-driven Design Hub powered by machine learning (ML) to optimize trial parameters, yielding enhanced insights from internal and external data. This approach shortened trial timelines and reduced costs through quicker design decisions on country allocation and site selection.



SOLUTION: Onebridge collaborated with Lilly IT and Clinical Labs data scientists to build AWS-based analytics with Python. They integrated existing and new data sources for speed and quality, ingesting four sources into AWS. Their experts created a streamlined ML model for oncology trial site selection, predicting grant costs pre-planning. They also mapped out the Design Hub's future workflow and provided user-focused training for cross-functional adoption.



OUTCOMES: The Design Hub has provided the client with real-time data access, cost savings, process optimization, and automation across various domains, enhancing clinical trial efficiency and ultimately benefiting patient health and well-being

Case Study: Machine Learning for Microscopy



Client

Alimentiv - a Global Lifesciences Company based in London Ontario

Company Size

500+ Employees

Location

Global

Technologies

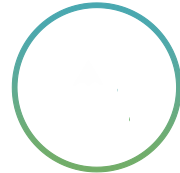
- Machine Learning
- Python

Team Members

- Data Scientists
- Scala Developers
- Client Success Manager

Services

- Machine Learning Consulting
- RPA
- Data Science Advisory



CHALLENGE: A global medical research organization initially hired an external consultant to develop an ML model for improving GI clinical trials but was dissatisfied with their progress. Unfinished work aimed to classify diseases in video frames and assign severity levels. Alimentiv, lacking in-house data scientists, turned to Onebridge, seeking data and ML expertise. Onebridge was tasked with evaluating the prior work and providing recommendations for the next steps.



SOLUTION: Data scientists often lack rigorous assessment unless publishing in scientific journals. Onebridge leveraged its expertise in machine learning, data science, and Python to conduct an extensive project evaluation. This entailed reviewing existing ML code and project documents to identify improvements, process gaps, and model readiness. Onebridge also consulted with Alimentiv's customer for context. The result was a 90-page, comprehensive assessment report with recommendations for the project's future.



OUTCOMES: Alimentiv now possesses a clear understanding of the prior consultant's work and a strategic path forward. Their team is well-informed about the project's options and is now empowered to make informed decisions to successfully conclude the project.

MAP Success Story: Streamlined for Global Manufacturing Leader



CLIENT: Hillenbrand, a global leader in highly engineered processing equipment across diverse applications like durable plastics, food production, and recycling.

CHALLENGE: With its multiple operating companies and systems, **the client lacked a unified data strategy.** This hindered reliable reporting, forecasting, and overall data governance.

SOLUTION: Onebridge leveraged its **MAP** framework and **COMPASS** assessment process to **create a comprehensive data strategy** for the client. This included assessing their current state, identifying technology gaps, and collaboratively planning a future state with a centralized data product catalog and modernized architecture. Onebridge further supported the client with:



Data Governance Development: Implementing robust data governance practices for consistent data management across the organization.

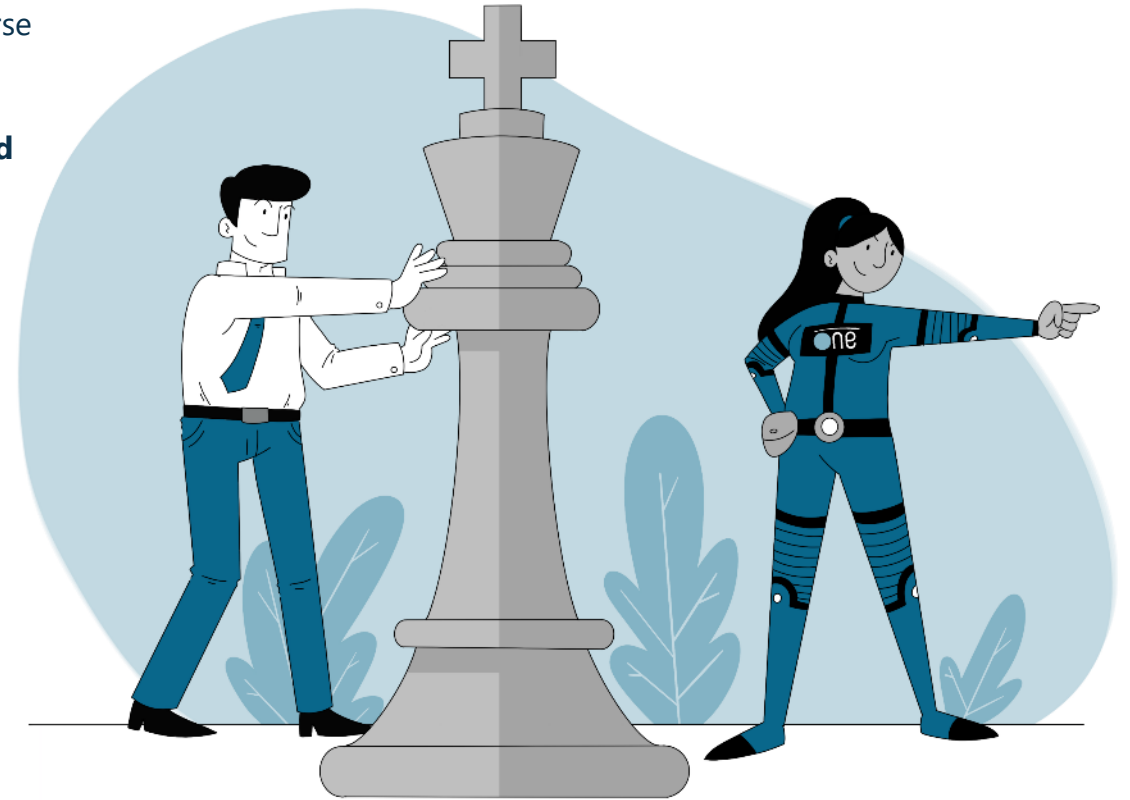


BI Factory Creation: Establishing a streamlined process for converting and migrating reports to Power BI, fostering self-service analytics.



Modernized Architecture Design: Collaborating on designing a modernized data architecture to facilitate efficient data integration and utilization.

OUTCOME: **Within nine months and on budget, Onebridge delivered a transformative first phase of data modernization for Hillenbrand.** They achieved a unified data strategy, enhanced data governance, improved data accessibility through Power BI, and a foundation for a modern data architecture. This successful collaboration positioned the client for continued data-driven success, leading them to rely on Onebridge for ongoing projects.





How We Enabled a Telecom Giant Reduce Churn and Drive Better Outcomes

Challenges

- Urgent need to have an effective campaign management system to ensure personalization of messaging
- Drive customer engagement by targeting the right customers, at the right time, with the right message

What we did

- Created a micro-batch processing pipeline using AWS Services and Spark to quickly make data available to the campaign team
- Leveraged AWS Kinesis and EMR to build a real-time data processing framework for the attributes that were required for analysis
- Implemented business logic to derive datasets that identify the best offers and actions to be sent to customers
- Implemented a custom solution that stores PII data as masked in external warehouses and unmasked dynamically during data read



Impact

- **10% reduction in customer churn** for the carrier due to improved personalization
- By targeting customers with tailored offers, there was an increase in revenue by improving sales and upselling
- **Reduced manual intervention** as most of the campaign was now automated thereby improving operational efficiency
- Measured increase in customer satisfaction



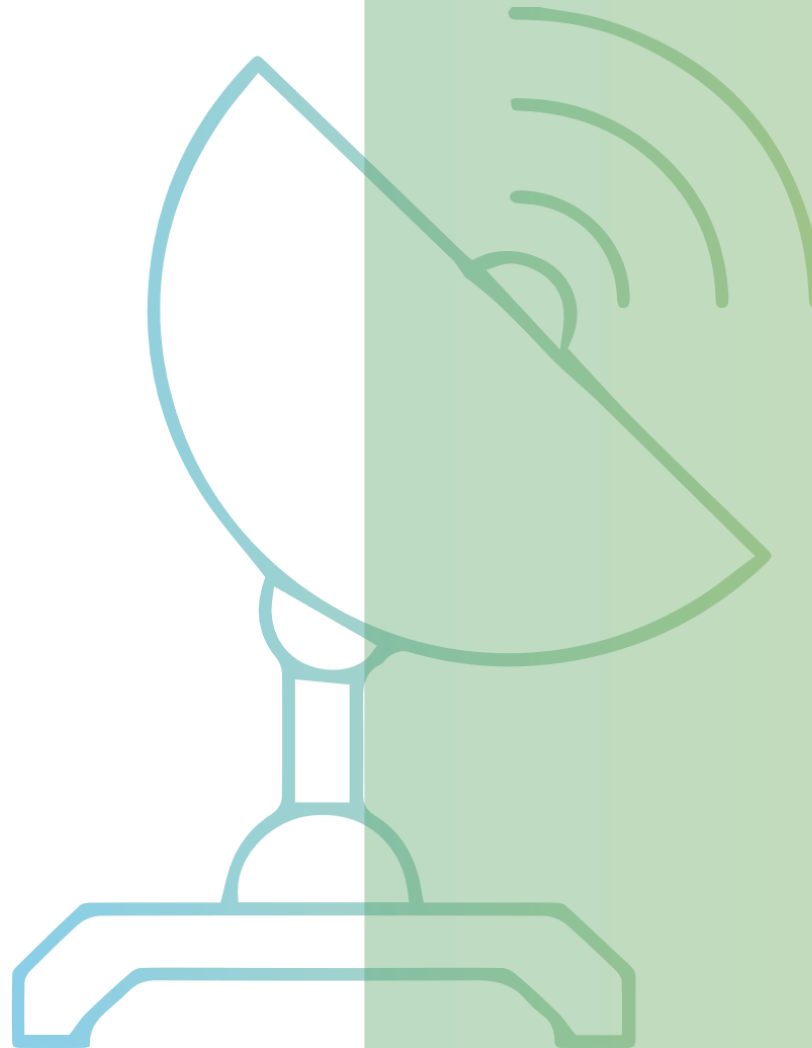
Case Study: How We Empowered a **Global Broadcasting Company** Win Over Customers

Challenges

- Increasing conversion from free to paid subscriptions
- Facing intense competition in the market
- Inefficient customer support affecting subscription renewals
- Complex service billing with mobile operators

What we did

- Boosted conversion from free trials to paid subscriptions
- Optimized programming to improve subscriber retention
- Enhanced customer support and increased renewal rates with a Python-based solution
- Reduced costs and improved decision-making with an efficient billing solution.



Impact

- **7-10% improvement** in subscriber retention
- **40%** of data ingestions moved to near-real-time
- **600% increase** in cost savings
- **Integrated** customer engagement platform
- Empowered **near-real-time data analysis** with SingleStore and PySpark-based solution
- Developed **reusable API pipelines**, saving 40% effort



Q&A



Thank You

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