

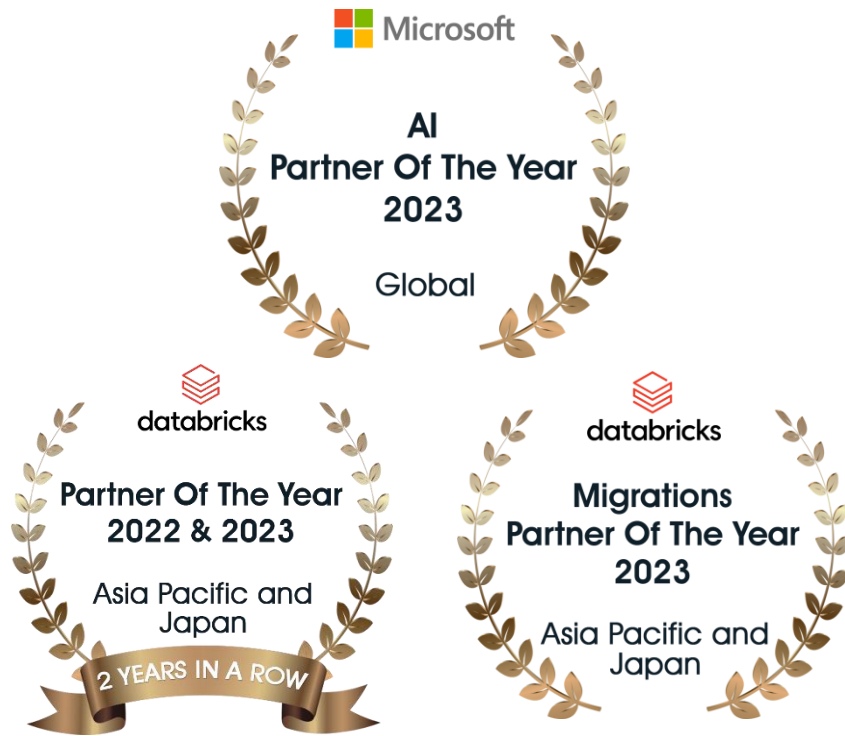


Automated Industry Data Model Health Care Insurance



Infrastructure (Azure)
Data & AI (Azure)
Digital & App Innovation (Azure)
Security
Biz Applications

Celebal Specialization and Strength



Partnerships



Advanced Specialization



- AI & Machine Learning
- Analytics
- Infra and Database Migration
- Kubernetes
- Cloud Security
- Low Code No Code
- Intelligent Automation



INDIA | USA | CANADA | APJ | MIDDLE EAST | AUS

2800+
Employees

800+
AI experienced
professionals

500+
AI Certifications



Industries We Serve



Manufacturing



Retail & CPG



Financial
Services



Energy &
Sustainability

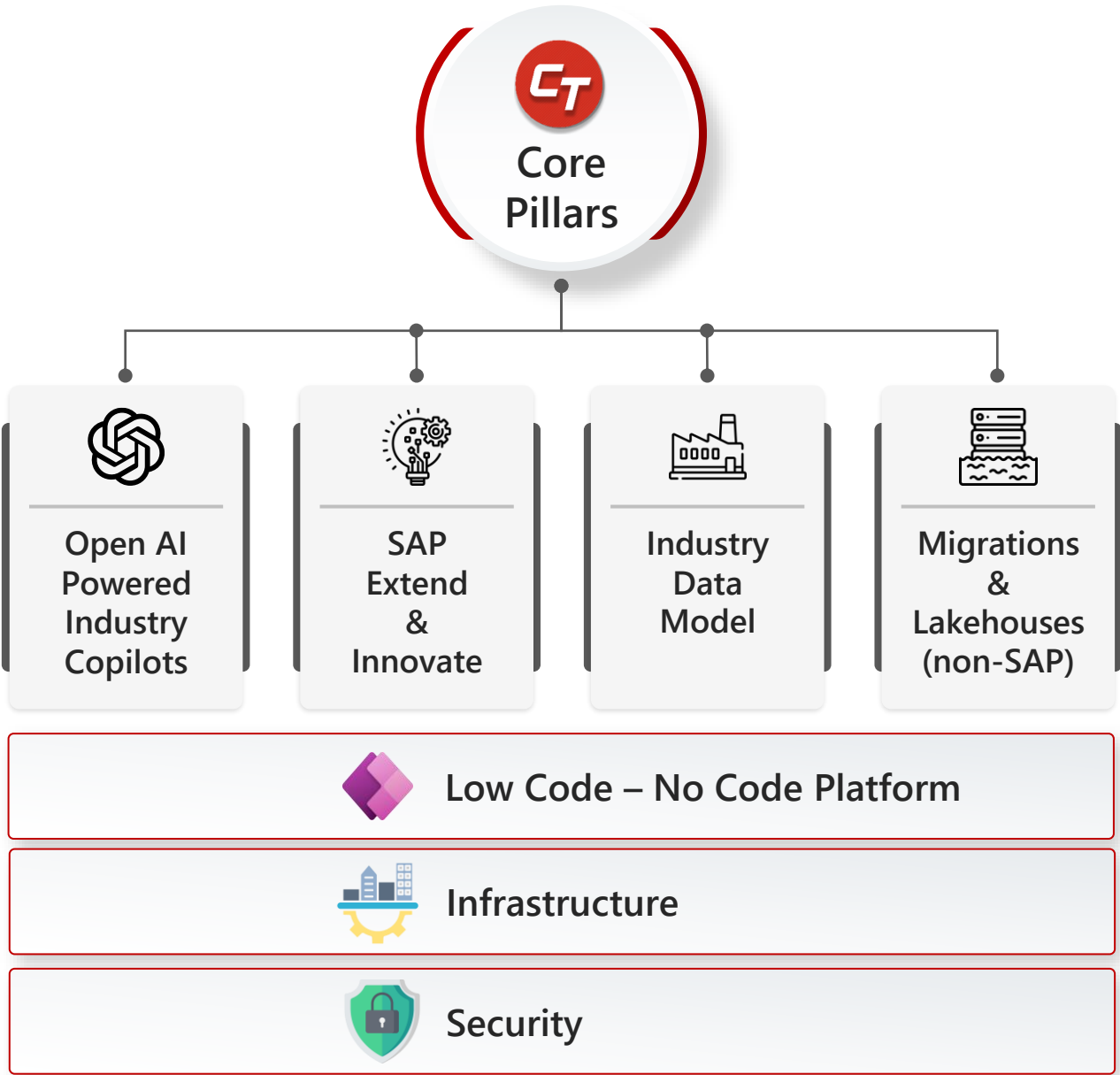


Healthcare &
Life Sciences



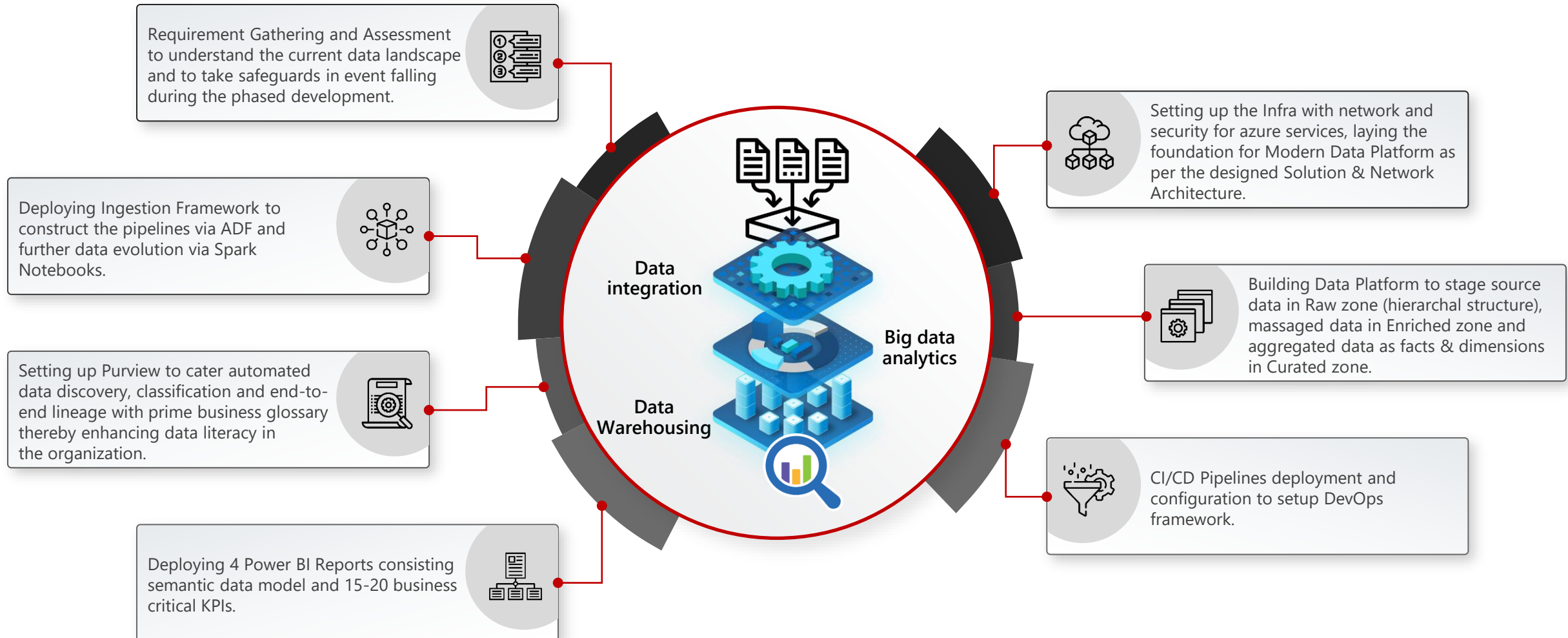
Media &
Entertainment

Celebal Core Pillars



Scope and Objectives

Theme: To construct and automate the different Data Lake solution that can be **versatile** with hybrid necessities, **apparent** with regards to data governance and lineage, **adaptable** concerning the immense size and variety of data and able to carry out the state-of-the-art advance analytics. In preference to give a logical approach to business choices, modern data fabric (enable controlled, secure and self-service economy) to deliver data model with business critical KPIs for subdomains.



Data Management Lifecycle

Data Lifecycle

Ingest

Classify

Transform

Curate

Consume

Distribute

Archive

Data Types

Streams Messages

Logs

Batch

Structured

Unstructured Media & Text

Data management & Processing

OLTP

OLAP

Columnar

Graph

Document

Index

Time

In-Memory

File System

Data Storage

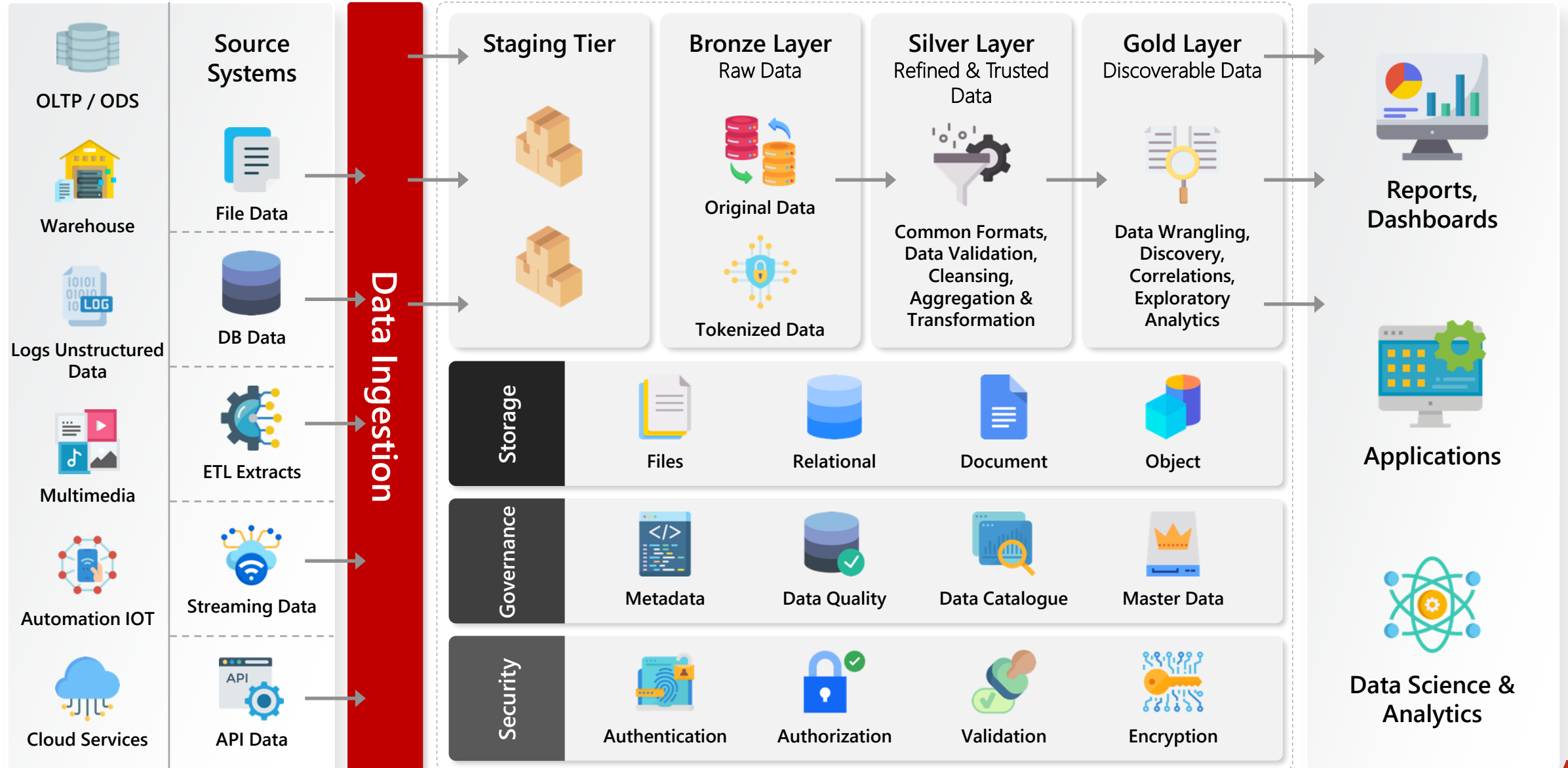
Block Storage

Object Storage

Data Security

Data Governance

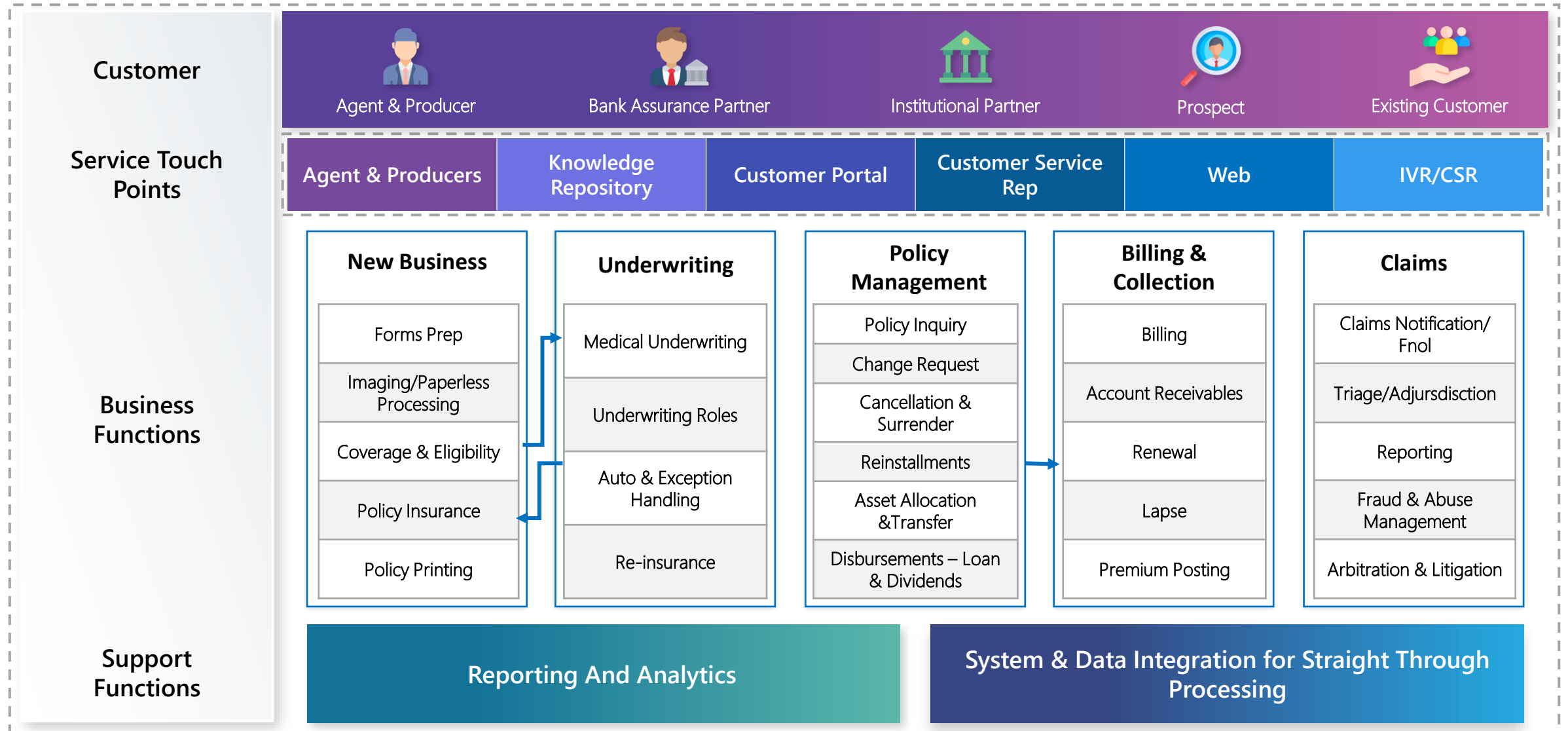
Reference Data Architecture



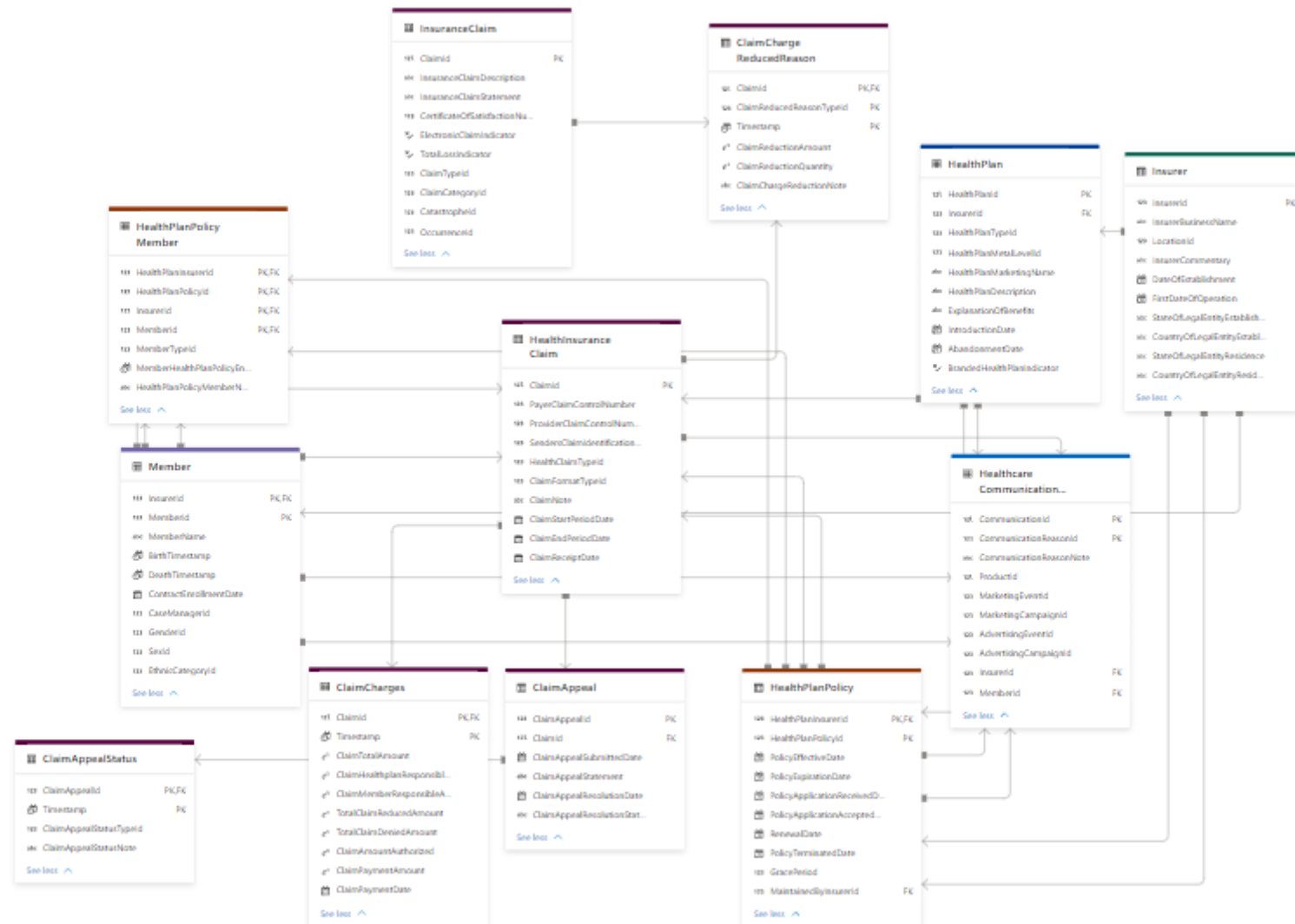
Source Mappings to be provided by Client

Source_Table_Name	Source_Column_Name	Source_Column_Type	Sink_Table_Name	Source_Column_Name	Source_Column_Type
Employee	EmployeeId	string	Employee	EmployeeId	integer
Employee	EmployeeName	string	Employee	EmployeeName	string
Employee_Name	DateOfBirth	string	Employee	DateOfBirth	date
Employee_Name	DateOfDeath	string	Employee	DateOfDeath	date
Employee_Name	EmployeeStandardCostAmount	string	Employee	EmployeeStandardCostAmount	decimal
Employee_Name	EmployeeOvertimeCostAmount	string	Employee	EmployeeOvertimeCostAmount	decimal
Employee_Name	EmployeeHireDate	string	Employee	EmployeeHireDate	date
Employee_Name	HighlyCompensatedEmployeeIndicator	string	Employee	HighlyCompensatedEmployeeIndicator	boolean
Employee_Name	KeyEmployeeIndicator	string	Employee	KeyEmployeeIndicator	boolean
Employee_Name	ExemptEmployeeIndicator	string	Employee	ExemptEmployeeIndicator	boolean
Employee_Name	NonexemptEmployeeIndicator	string	Employee	NonexemptEmployeeIndicator	boolean
Employee_Name	AlienStatusId	string	Employee	AlienStatusId	integer
Employee	SexId	string	Employee	SexId	integer
Employee	GenderId	string	Employee	GenderId	integer
Employee_Name	RacialCategoryId	string	Employee	RacialCategoryId	integer
Employee_Name	EthnicCategoryId	string	Employee	EthnicCategoryId	integer
Employee_Name	EmploymentLeadSourceId	string	Employee	EmploymentLeadSourceId	integer
Employee_Name	SecurityClearanceId	string	Employee	SecurityClearanceId	integer
Employee_Name	SecurityLevelId	string	Employee	SecurityLevelId	integer
Employee_Name	PartyId	string	Employee	PartyId	long

Process Cycle – Health Insurance



Standard Data Model – Health Insurance



Standard Data Model – Health Insurance



Customer Key Facts



Industry : Health Insurance



Time to Market : 6 Weeks



ACR : \$3500/Monthly

Dashboards



Health Insurance Dashboard



Equity, Liabilities & Assets Performance



Profit & Loss Analysis

Challenges & Solution



- ✓ Overall Dashboard with Equity, Liability and Profit & Loss Analysis.
- ✓ Automated Data Model are built by consolidating organization's Claims data, Profits and settlement data from hospital records, prescription drugs, pre- and post-hospitalization benefits, sum assured, deductibles, etc.

Impacts



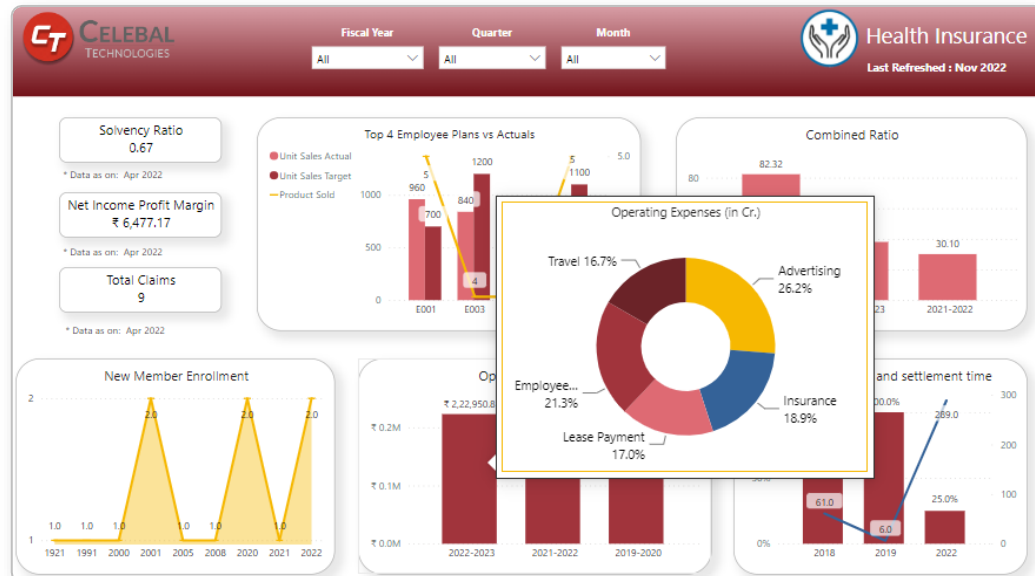
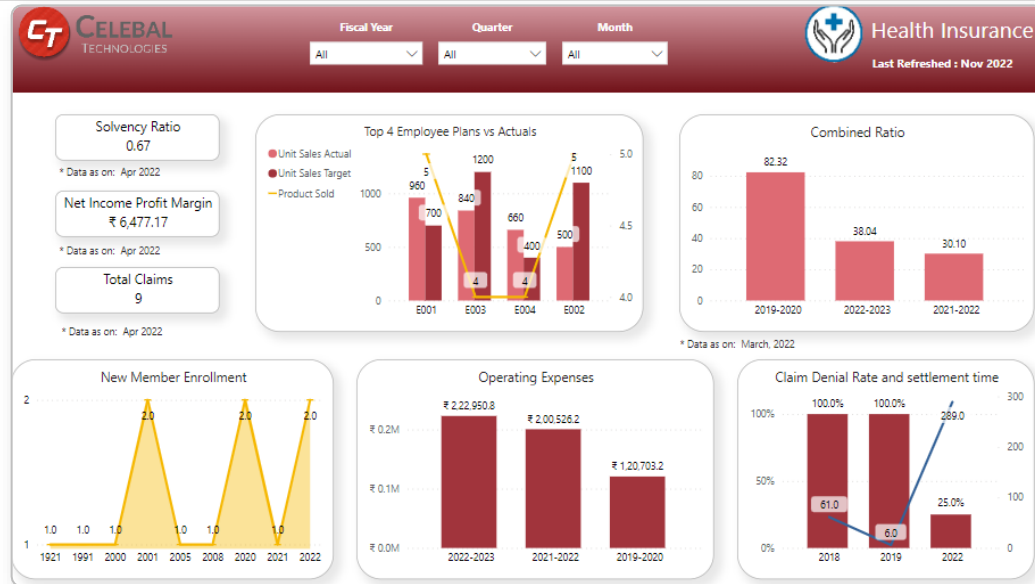
- ✓ The implemented solution optimized the settlement times and the in-depth P&L Analysis helped in increasing the Net Profit Margin by 8-10%

KPIs



- | | | |
|-----------------------------|-----------------------------------|------------------------------|
| 1. Solvency Ratio | 6. Combined Ratio | 11. Assets CY & LY |
| 2. Net Income Profit Margin | 7. Operating Expenses | 12. Profit CY, LY, Variance |
| 3. Total Claims | 8. Claim Denial Rate | 13. Loss CY, LY, Variance |
| 4. Member Enrollment | 9. Claim Settlement Time | 14. Profit vs Loss |
| 5. Employee Plan vs Actual | 10. Equity & Liabilities CY vs PY | 15. Net Profit, EBITDA, EBDT |
| | | 16. And few more... |

Report Snapshots



CT CELEBAL TECHNOLOGIES Health Insurance
Last Refreshed : Nov 2022

Balance Sheet					
Description	Actual YTD	PY	Budget	ΔPY	ΔBudget
Equity & Liabilities					
Shareholders Funds	1,235	494	0	150.02%	
Life Insurance policyholders Fund	1,000	699		43.08%	
Trade Payables	361	197		83.88%	
Provisions and Liabilities	374	295		26.50%	
Total	2,970	1,685	0	76.28%	
Assets					
Fixed Assets	149	131		13.23%	
Investments	2,687	1,370		96.04%	
Cash and Bank Balance	14	101		-86.23%	
Loans and Advances	73	52		42.44%	
Other Assets	47	30		56.83%	
Total	2,970	1,685	0	76.28%	

Profit & Loss					
Description	Actual YTD	PY	Budget	ΔPY	ΔBudget
Net Revenue	1,377	851	0	61.87%	
Other Income	0	0	0	-69.67%	
Total Income	1,377	851	0	61.82%	
Manpower Cost	3	2	0	16.84%	
Other Expenses	1,181	792	0	49.08%	
Marketing & Selling expenses	0	0	0		
Total Cost	1,548	1,104	0	40.24%	
EBITDA	-171	-253	0	-32.40%	
Finance Cost	0	0	0		
EBDT	-128	-168	0	-23.87%	
Depreciation and Amortisation	0	0	0		
Exceptional (Gain)/Loss	0	0			
EBT	-171	-253	0	-32.40%	
Tax Expenses	0	0			
Net Profit	-171	-253	0	-32.40%	

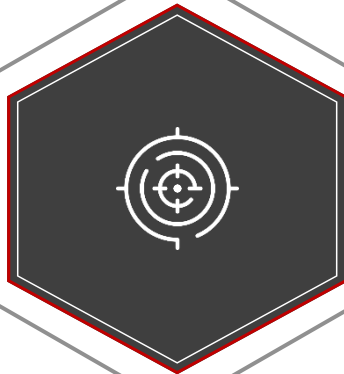
- ✓ Use SAP GUI to connect to the SAP System.
- ✓ Go to **System -> Status**.
- ✓ Check the release of the SAP_BASIS, ensure it is equal to or larger than 701.



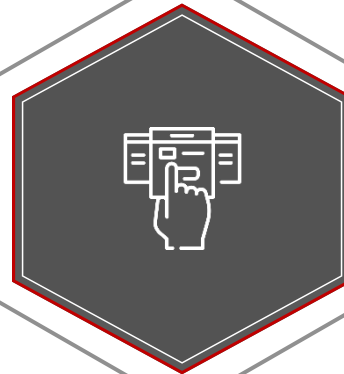
Software Comp.	Release	Level	High
SAP_BASIS	730	0008	SAP



Access approvals & Data Sources Integration will be dealt with high priority requiring Client SPOC from Infra, Security, CloudOps Team & Solution Architect.



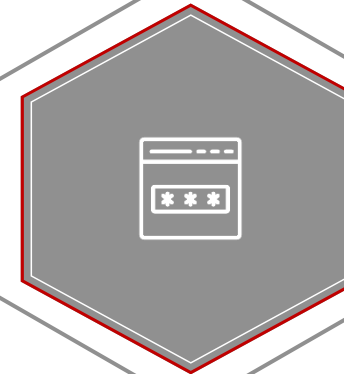
Source field mapping as per the target objects to be provided by the client.



Power BI License to be purchased by Client for developers to deploy BI Reports/Dashboards as per the timelines.



All stakeholders (responsible for report matrices) shall give a sign-off on metrics before Celebal Tech creates the reports.



Access to Azure subscription & Remote database/data sources will be made available for Celebal Tech team



During UAT phase, dedicated SPOC or business user from Client side would be required till Sign-Off, to avoid any delays, cater any issues or revisions which will help expedite solution deployment & delivery.



Assumptions

- ✓ 1 fiscal year data from Data Sources would be considered for loading into Data platform.
- ✓ Source mapping would be provided by client.



Deliverables

- ✓ 4 Power BI reports/dashboards with 15-20 business critical KPIs.
- ✓ Landscape for in-scope Source Systems with ingestion framework and Data Layers.
- ✓ Documentations.



Features

- ✓ Power BI model is defined re-usable way for features like Q&A, communication between multiple users via comment. etc.
- ✓ Self-service features. Multiple data layers can be managed as per the use-cases and user groups.
- ✓ Integrable with other sources like Data streaming, unstructured data, AI&ML capabilities using Data platform.

Data Management

Lakehouse Architecture enabling multiple data layers to serve different use-cases.



Source Integration

Consolidation of multiple Data Sources.



Modern solution-built

Fully customizable to address specific business needs.



Deployment

Improving customer experience and business outcomes by 20% with Reducing cost by 20%.



Access Management

Easier access to source data for reporting and analysis.



BI Report

Readily usable KPIs and BI Reports enhancing Analysis and Productivity.



Design Customization

Simpler, customizable, and collaborative end-user interfaces.



Self-Service BI

Instant Decision making with Slide & Dice capability.



The cost for one solution implementation is \$12,500



Assumptions

- ✓ Total data volume to be copy from Source to Staging Layer is ≤ 1 TB(for historical data load and < 10 GB for daily incremental) covering 1 fiscal year data
- ✓ Total number of Source tables considered in scope is between 20-30 covering master and transactions
- ✓ Total 4 Power BI Reports/Dashboards with around 15-20 business critical KPIs.



CELEBAL
TECHNOLOGIES

Thank You