



Automated Industry Data Model CPG



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

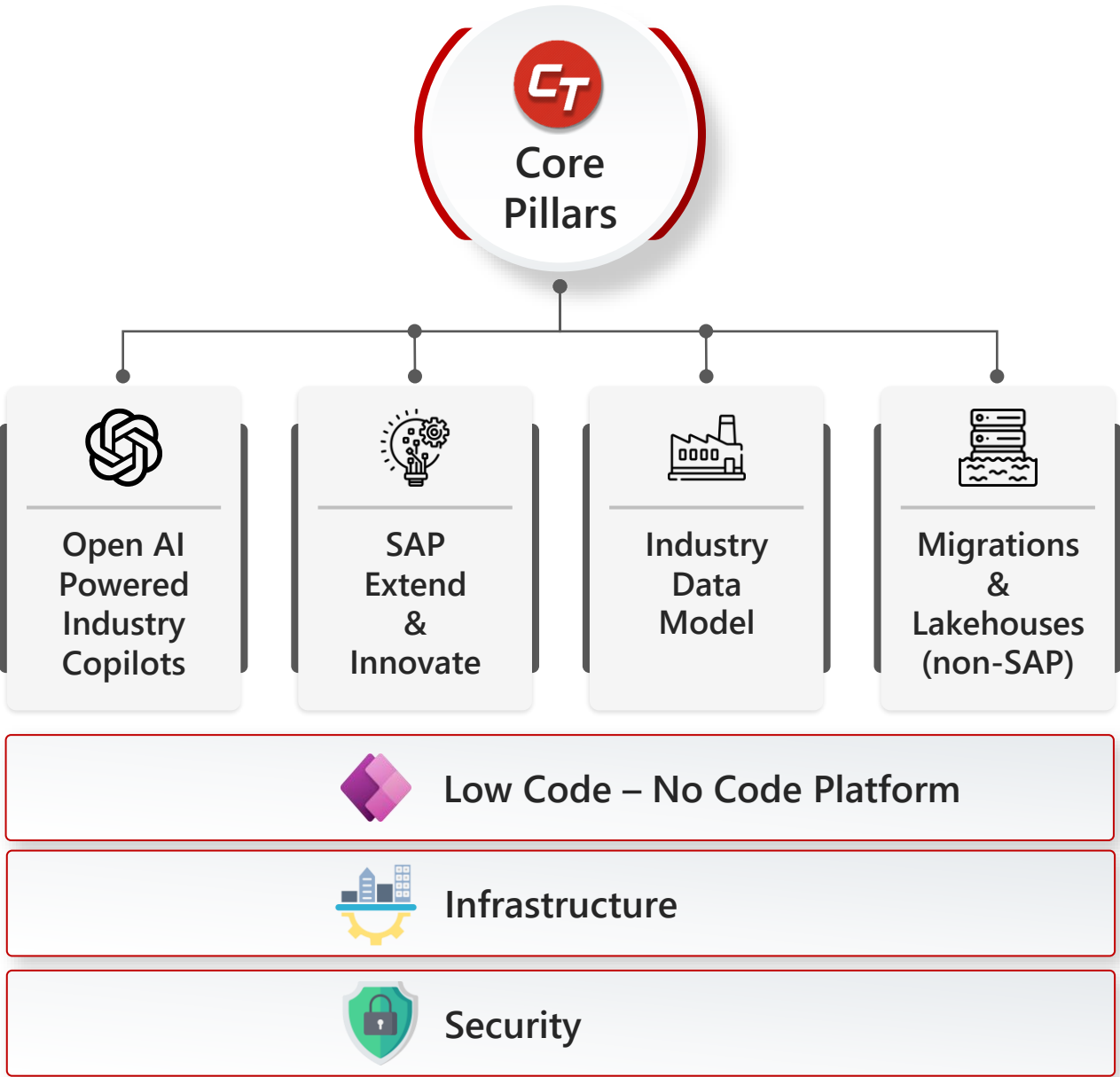


Healthcare &
Life Sciences



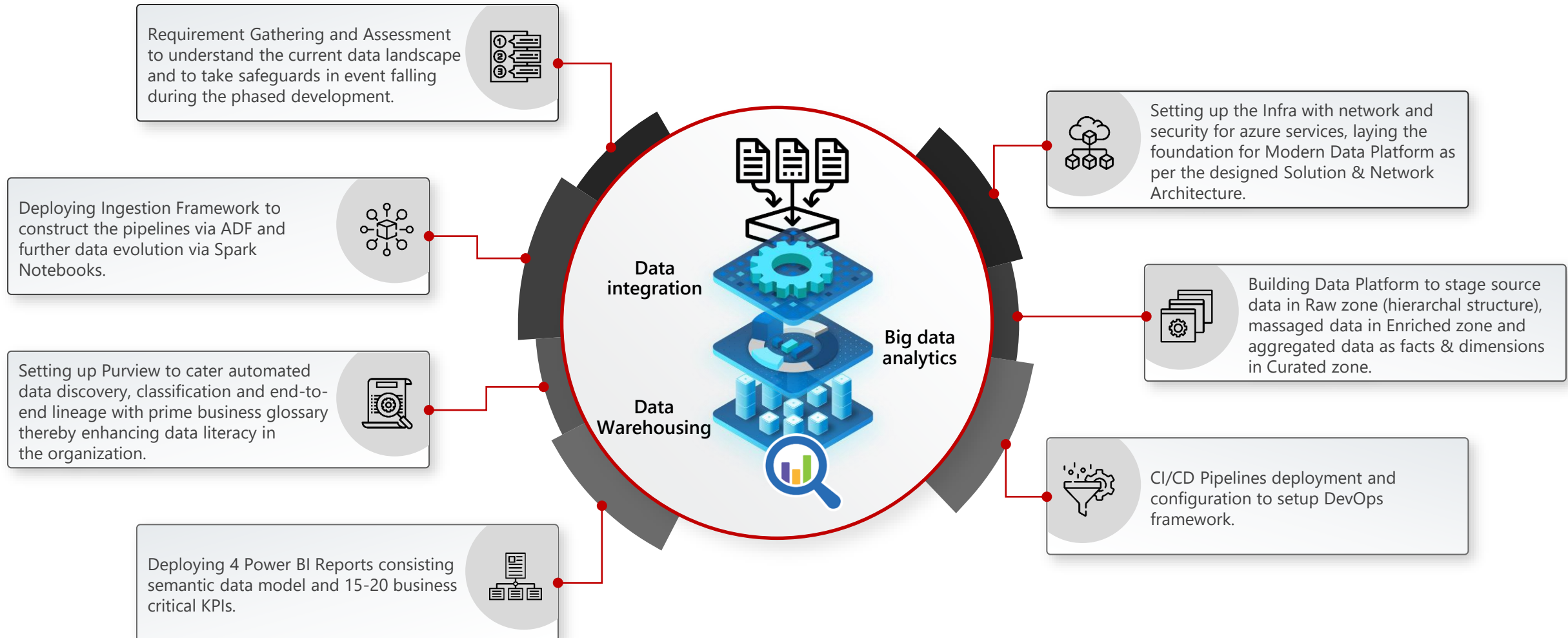
Media &
Entertainment

Celebal Core Pillars



Scope and Objectives

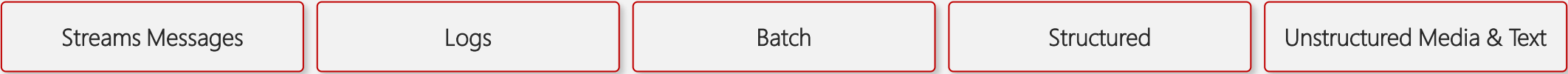
Theme: To construct and automate the different Data Lake solution that can be **versatile** with hybrid necessities, **apparent** with regards to data governance and lineage, **adaptable** concerning the immense size and variety of data and able to carry out the state-of-the-art advance analytics. In 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.



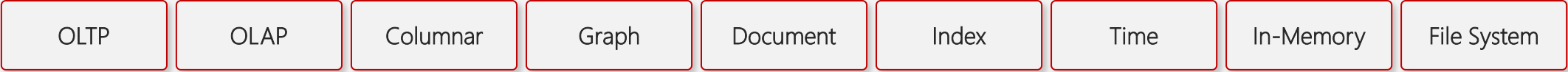
Data Lifecycle



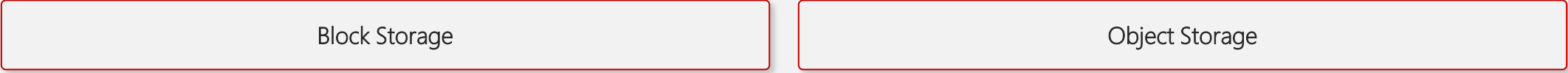
Data Types



Data management & Processing



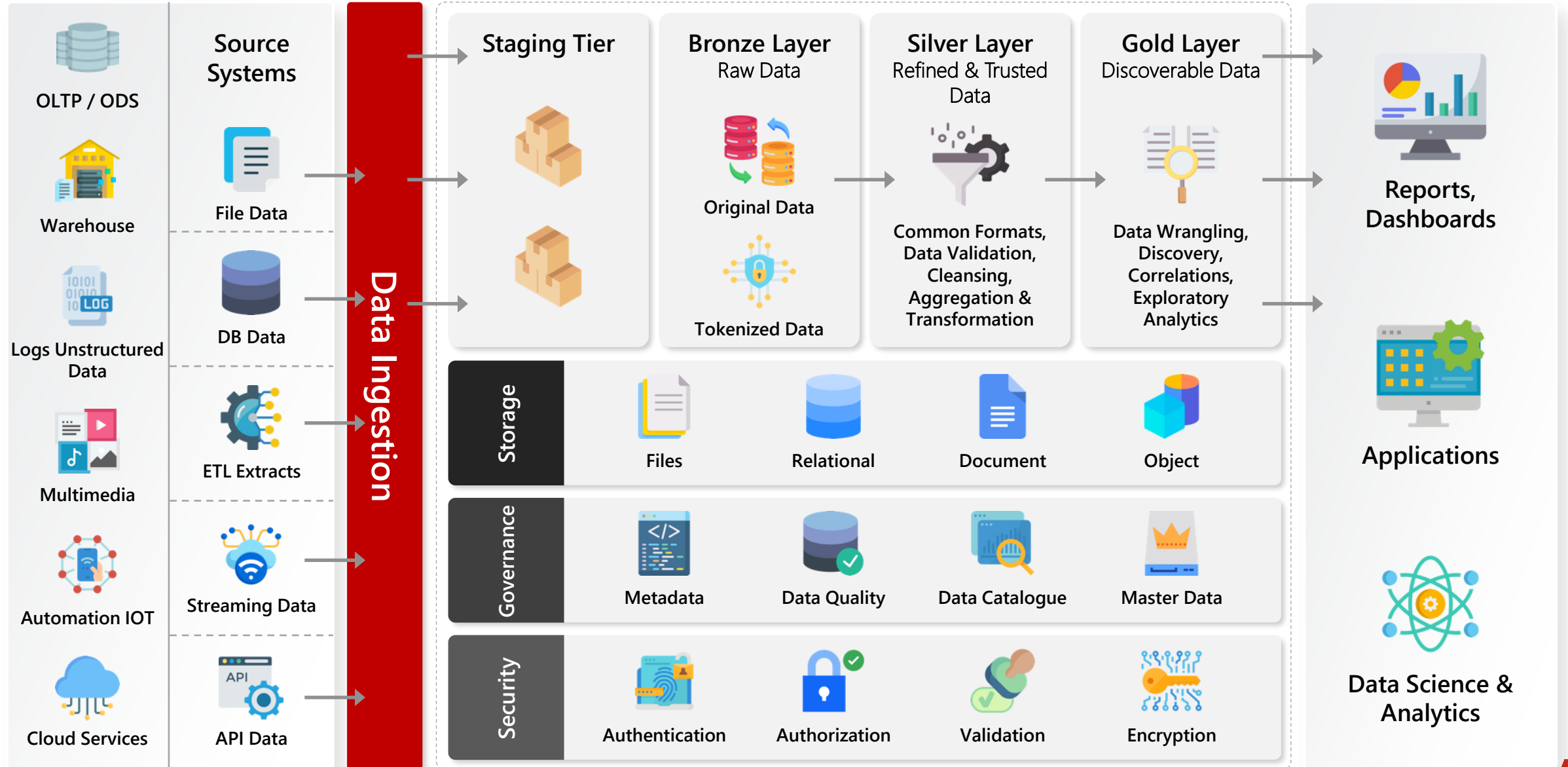
Data Storage



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

Lakehouse for CPG Customers



Digitally Empower Your Workforce

Integrate ERP/CRM on Teams



Physical Inventory on Teams (FLW)

Target Vs Achievement



Market Basket Analysis

Tailoring Customer Interactions



Approval Automation

Process Document Automation



Know Your Customers

Customer Insights



Loyalty & Rewards

Pricing & Offer Analytics



Trade Promotions

Customer Preferences



Shopper Analytics

Customer Data Management



Create More Resilient Supply Chains

Intelligent Demand Sensing



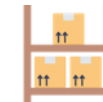
Forecasting and Replenishment

Inventory Management & Optimization



Store Management

Shelf Management



Click-and-reserve & Click-and-collect



Reimagine Retail

Customer Modelling and Simulations



Touchless shopping capabilities à la grab-and-go

Conversational IVR



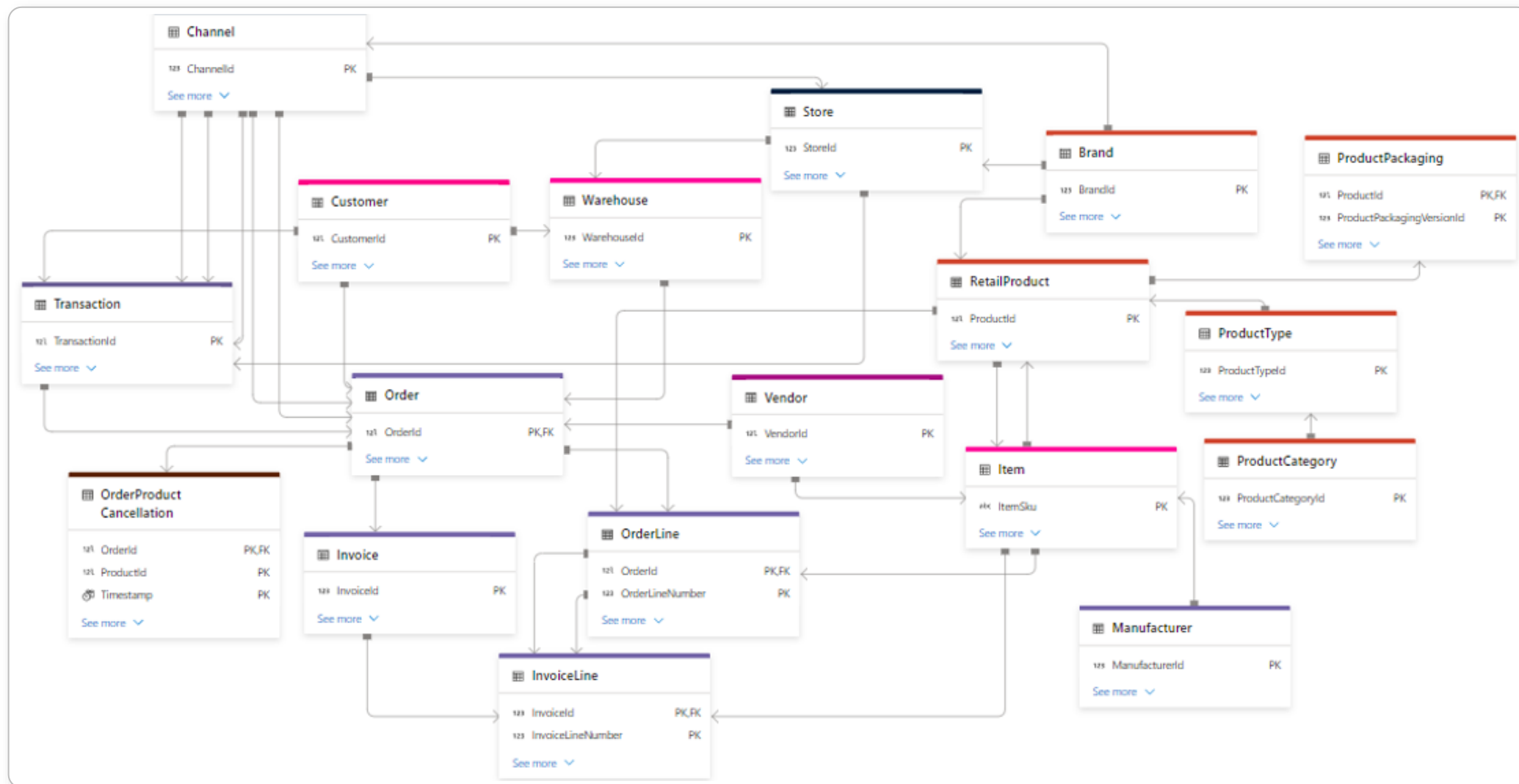
Agile Check-out

Price Optimization



Pre-built Content for Analytics & Integration





Customer Key Facts



Industry : CPG



Time to Market : 6 Weeks



ACR : \$12500/Monthly

Dashboards



CEO Summary



Finance & Operation
Analysis



ADT & AT Trends

Challenges & Solution



- ✓ Analyze Overall Performance, Sales and Transaction data across Products and Geographies.
- ✓ Automated Data Model are built by consolidating organization's Performance, Sales & Revenue from SAP ERP, POS and non-SAP / legacy applications.

Impacts



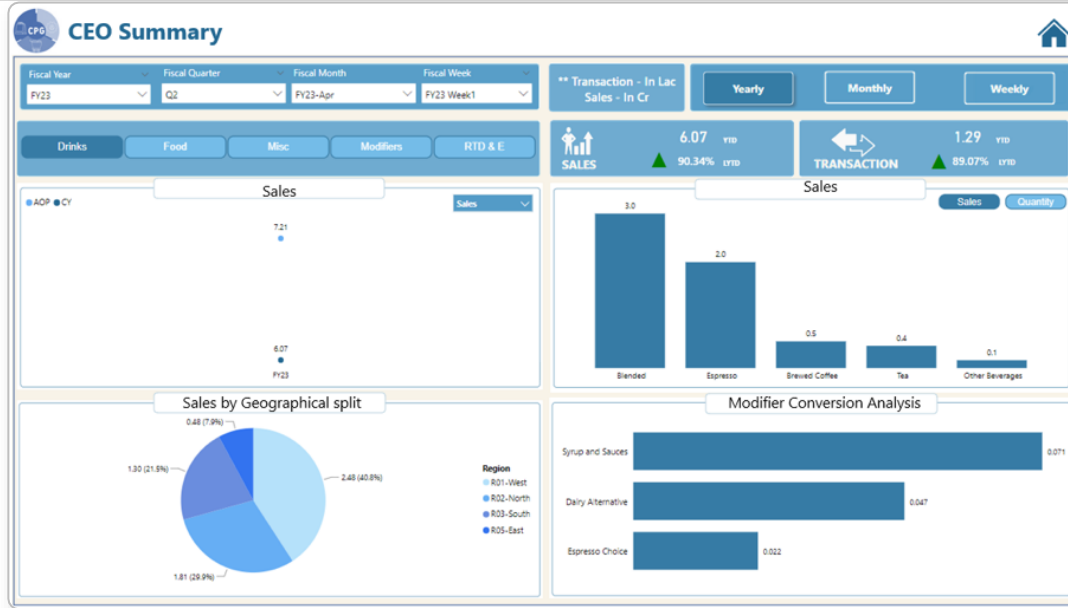
- ✓ The implemented solution enhanced organization's analytical capabilities to measure their performance and increase their Sales and overall Revenue by 10-12%; Refactoring their business campaigns, approaches while resolving the outliers.

KPIs



- | | | |
|-------------------------------------|-----------------------------|-----------------------------------|
| 1. Item Per Transaction (IPT) | 6. Sales, Sales %Variance | 11. Average Price Realization |
| 2. Average Daily Transactions (ADT) | 7. Profit, Profit %Variance | 12. Hourly Transaction |
| 3. Average Transactions (AT) | 8. Suppliers Performance | 13. Peak period Occurrences |
| 4. Basic P&L Analysis | 9. Store Revenue Analysis | 14. Max Hourly ADT |
| 5. Expense Analysis | 10. ADT, LH, AT (CY, PY) | 15. Point Of Sales (POS Analysis) |
| | | 16. And few more... |

Report Snapshots - CPG



Basic P & L Analysis

Last Refreshed Date: 12/1/2022 7:07:10 AM

Fiscal Year

FY23

Fiscal Month

Current Month

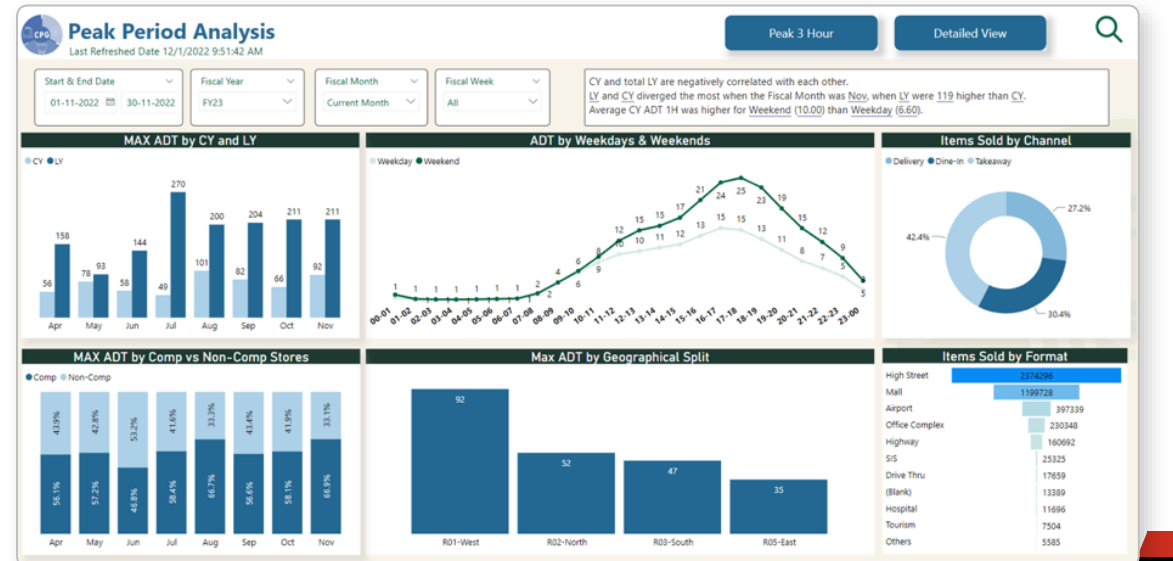
Fiscal Quarter

All

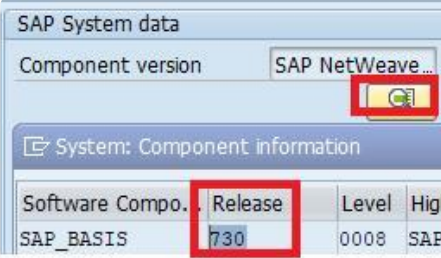
Fiscal Week

All

FSV Level 5	FSV Level 6	FSV Level 7	FSV Account	Fiscal Year FSV Name	CY Actuals	% CY Actuals	FY23 PY Actuals
Sales	Sales - Beverage	Sales - Beverage	60000002	Sales Account - Blended Coffee			40,40,084.67
			60000003	Sales Account - Tea			5,36,451.84
			60000004	Sales Account - Espresso			68,32,462.69
			60000005	Sales Account-Brewed Coffee			5,39,000.31
			60000006	Sales Account- Other Beverages			7,11,330.47
			Total				1,26,59,329.98
	Sales - Food	Sales - Food	60000015	Sales - Food Cakes			8,96,927.22
			60000016	Sales - Food Non-Veg			12,97,306.82
			60000018	Sales - Food Bars & Brownies			1,500.00
			60000019	Sales - Food Breads & Bagels			68,522.47
			60000020	Sales - Cookies			2,19,820.43
			60000021	Sales - Food Muffins			1,20,489.63
			60000022	Sales - Food Salads & Muesli			23,369.33
			60000023	Sales - Food Veg			9,84,358.06
			60000024	Sales # Prepared Food			80,709.45
			Total				36,93,003.41
	Sales - Modifiers	Sales - Modifiers	60000012	Sales Account - Modifiers			3,66,509.16
		Total				3,66,509.16	
	Sales - Other Merchandise	Sales - Other Merchandise	60000010	Sales Account - Merchandize Others			8,39,281.83
		Total				8,39,281.83	
	Sales - Others	Packaging/Churned/Deliveries	60000027	Deliveries/Promotion/Discount			70,03,403.67



- ✓ 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.

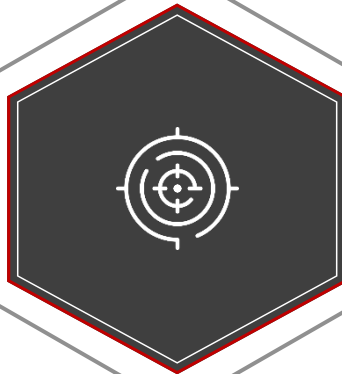


The screenshot shows the 'SAP System data' window. The 'Component version' field displays 'SAP NetWeave...'. Below this, the 'System: Component information' section contains a table with the following data:

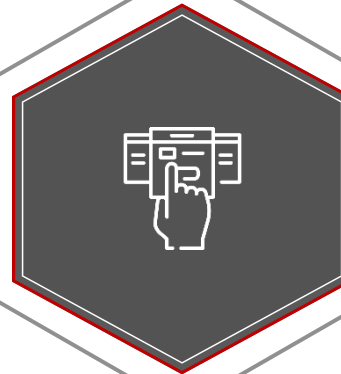
Software Comp.	Release	Level	High
SAP_BASIS	730	0008	SAP



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



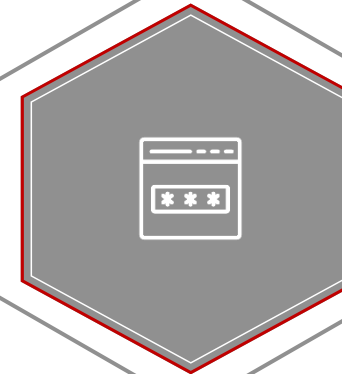
Source field mapping as per the target objects to be provided by the client.



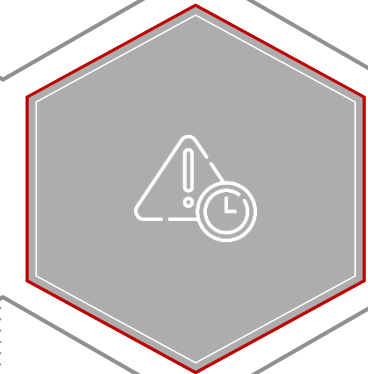
Power BI License to be purchased by Client for developers to deploy BI Reports/Dashboards as per the timelines.



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