EBITDA 360

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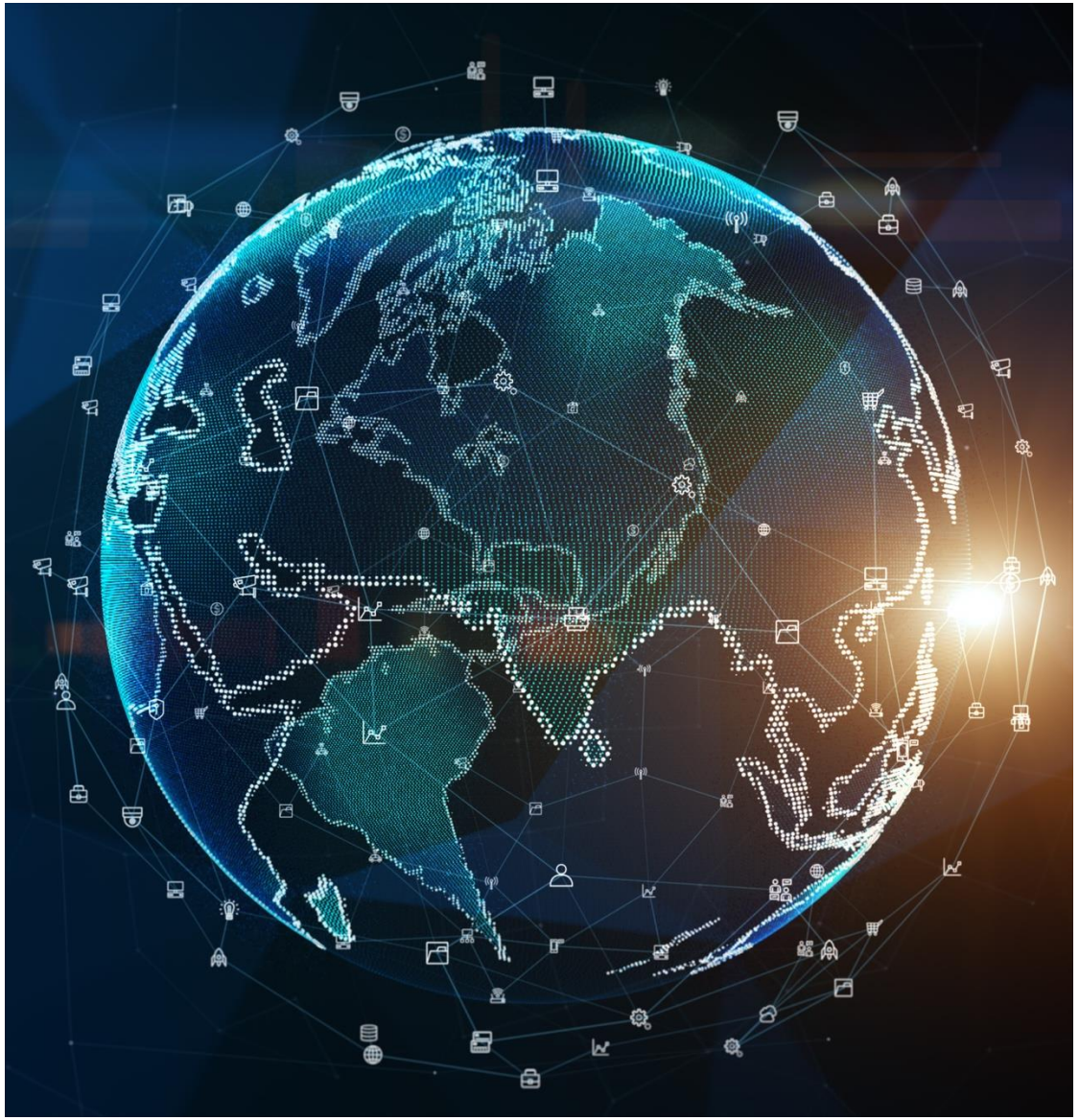

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1. Project Overview

Project Overview (1/2)

❑ Project Overview

The objective of this exercise is to develop a clear and transparent methodology to calculate **GS's daily and monthly EBITDA**, ensuring alignment across sales, cost, and margin elements, and enabling effective future tracking of profitability drivers.

❑ Current pain points

1. Manual & Fragmented Data Handling
Sales, procurement, and expense data are pulled from multiple sources (SAP, finance, procurement files).
Heavy reliance on manual spreadsheet entries increases the risk of errors and delays.

2. Delayed Visibility of Profitability
EBITDA is currently derived after multiple reconciliations.
Management often gets **lagged profitability insights**, limiting proactive decision-making.

3. Lack of Real-Time View
No automated link between sales realization, raw material consumption, and margin impact.
Teams cannot see **day-to-day margin fluctuations** quickly.

Project Overview (2/2)

4. Limited Product-Level Insights
Profitability is tracked at an aggregate level in Excel.
Difficult to drill down into **product-wise, SKU-wise EBITDA drivers**.

5. Cumbersome Month-End Closing
Effort-intensive reconciliations between sales, procurement, and finance slow down month-end closing.
Increases pressure on finance teams and delays reporting to leadership

2. Our Understanding of the Scope

Understanding of Scope (1/3)

Module	Brief Understanding	Logic	Outcome	Dependency, if any
Sales and Realization	▪ Tracks domestic, export, waste/by-product sales. ▪ Adjusts for discounts, freight, commission, and S&D expenses. ▪ Provides Net Sales visibility at product, and SKU levels.	**Total Sales** = Sales Value Domestic + Sales Value Export + Waste Sale/Others **Sales and Distribution Expenses** = Outward Freight + Ocean Freight + Commission + Cash Discount + Rate Discount + Internal Freight + Warehouse charges	**Net Sales** = Total Sales – Sales and Distribution expenses	Availability of Sales Qty Domestic, Sales Value Domestic, Sales Qty Export, Sales Value Export, Waste Sale data in SAP at a daily/ nearly daily basis is a pre-requisite.
Raw Material & Melt	▪ Captures PTA, MEG, other raw material procurement costs ▪ Calculates Melt = Total Raw Material consumption cost	**Melt** = PTA + MEG/ Other Raw Materials cost ~~including Conversion cost~~ (Procured RM (Chips, spandex- Other than PTA & MEG))	**Gross Margin** = Net Sales - Melt	BOM for consumption mapping along with last cost price for all raw material will be available in SAP.

- **Since RM other than PTA & MEG also considered here, same should not be considered again in Variable Conversion Cost.**
- **By Melt Cost we mean PTA & MEG consumption only. It does not include any other raw material nor any conversion cost.**

Understanding of Scope (2/3)

Module	Brief Understanding	Logic	Outcome	Dependency, if any
Variable Conversion Cost (VCC)	▪ Tracks variable production costs: power, heating, chemicals, packaging, consumables, etc. ▪ Links to operational metrics (e.g., energy per MT, packaging per MT). ▪ Enables variance analysis against benchmarks.	**VCC** = Power + Heating + Antimony + Additives & chemicals + Packing materials + ~~Procured RM (Chips, spandex- Other than PTA & MEG))~~ + NRV+ Inventory Cost + Other VCC	**Contribution** = Gross Margin – Variable Conversion Cost	Power factor and Merge factor to be available Plant-wise and SKU-wise in SAP for computation of power and heat. Additives, chemicals and packing material to be present in BOM consumption mapping along with rate in SAP.
Factory Conversion Cost (FC)	▪ Captures fixed and semi-variable manufacturing overheads: Manpower, maintenance, spares, consumables, etc. ▪ Allocates costs across products and SKUs, wherever applicable, based on defined drivers ▪ Provides insights into plant-level efficiency and cost allocation	**FC** = Stores & repairs + Manpower (Payroll) + Contract Manpower + Insurance + Overheads The highlighted portion is required to be deleted as it has been taken in slide no. 7	**Margin at Jolwa** = Contribution - FC	Stores and repairs – Daily consumption to be available in SAP. Manpower (Payroll and Contract) , Overheads will be based on monthly average data from SAP. COGS (Cost of Goods Sold) and COGM (Cost of Goods Manufactured) will be derived from SAP.

Understanding of Scope (3/3)

Module	Brief Understanding	Logic	Outcome	Dependency, if any
Corporate Expense	▪ Integrates payroll, admin, and overhead expenses. ▪ Includes corporate income adjustments. ▪ Provides transparency in allocation methodology (last month avg, % of sales, etc.)	Corporate Expense = Corporate Expense Payroll + Corporate Expense Income + Corporate Expense for Others	**EBITDA** = Margin at Jolwa – Corporate Expense	Previous month's Corporate expense to be fetched from SAP for all components of Corporate expense

- EBITDA calculation will provide an End-to-end view of Gross Margin → Contribution → Margin (Jolwa) → EBITDA
- It will provide per kg profitability (Sales/kg, Contribution/kg, Margin/kg, EBITDA/kg)
- The application will provide Product-wise, SKU-wise profitability with drill-down, wherever applicable.

Module 1 : Sales and Realization

Total Sales : Represents the **gross revenue** generated from sales before deducting any selling or distribution-related expenses.
It includes:

- **Sales Quantity (Domestic & Export)** – measured in MT (metric tons).
- **Sales Value (Domestic & Export)** – measured in ₹ Crore.

Data Source: Primarily **SAP**.
Breakdown: Sales are segregated by product categories such as **Chips, POY, FDY, DTY, ACY, ATY, DW, SZ, Mono, Others**.
Key Insight: Total Sales gives the **top-line revenue**, without considering logistics, freight, commission, or trade-related costs.

Net Sales: Refers to Total Sales after deducting direct selling and distribution expenses.
Key deductions identified in the sheet include:

- **Outward Freight** (logistics for domestic movement).
- **Ocean Freight** (for exports).
- **Commission** (distributor/agent commission, invoice-linked).

Data Source: Mix of **SAP, TBS, and Manual Inputs**.
Formula Logic:
Net Sales=Total Sales−(Outward Freight + Ocean Freight + Commission + Cash Discount + Rate Discount + Internal Freight* + Warehouse charges)
Key Insight: Net Sales represents the **realized revenue** post deductions, and is a more accurate measure of effective sales contribution to profitability.

***internal freight is freight between Jolwa, Karala and Hazira**

Module 2 : Raw Material and Melt

Raw Material : Key Inputs -> PTA (Purified Terephthalic Acid) , MEG (Mono Ethylene Glycol)
Measurement: Cost is captured in **₹ Crore**.
Source: Entered manually (not automated from SAP).
Role: These are the **primary feedstocks** for polyester manufacturing. Their cost fluctuations directly impact the profitability model.

Melt : Melt represents the **combined cost of PTA + MEG**.
Formula: Melt=PTA+MEG
Unit: ₹ Crore.
Significance:

Forms the **base raw material cost pool** used to calculate production cost for downstream products (Chips, POY, FDY, DTY, ACY, ATY, etc.).
It is the **largest cost driver** in polyester production.

Gross Margin: Gross Margin reflects the **profitability after subtracting raw material costs (Melt) from Net Sales**.
Formula (conceptual): Gross Margin=Net Sales−Melt Cost
Breakdown:

Calculated across different product categories.
Expressed both in **absolute value (₹ Crore)** and potentially in **percentage terms** (% of sales).

Purpose:

Helps assess **how much value addition is being generated** over the cost of raw materials.

Module 3 : Variable Conversion Cost and Contribution

Variable Conversion Cost (VCC) : Variable Conversion Cost represents the processing cost incurred to convert Melt (PTA + MEG) into finished products such as Chips, POY, FDY, DTY, ACY, ATY, etc.

Nature of Cost:

These are **variable costs**, meaning they **increase or decrease with production volume**.

Typical inclusions could be:

- Power & fuel consumption ; Catalysts, chemicals, packaging materials ; Direct labor linked to output ; Plant-level processing overheads that vary with throughput. Also, to be included are NRV and Inventory Cost : NRV is defined as the ~~estimated~~ gross selling price of a SKU in the ordinary course of business, less the ~~expected costs necessary to complete and sell the asset~~ S&D expenses

NRV=~~Estimated~~ Gross Selling Price ~~– Costs to Produce~~ –. S&D expenses~~ Costs to Sell~~ Inventory Cost will be calculated for EBITDA

**NRV is the net selling price of finished goods of the next two days of the reporting date as the reporting day would take place on T+2. If NRV is lower than COGS of an SKU, we need to make provision for NRV Loss (NRV – COGS) in the Daily EBITDA for that SKU. Next day, the same loss is required to be reversed in the Daily EBITDA calculation and further new provision to be made (if any) in the similar way.*

Source in File: Likely derived from SAP or plant cost reports, depending on expense type.

Role in Profitability Chain:

Applied **after Melt cost**, to reflect the **true cost of producing finished goods**.

Essential for evaluating process efficiency and cost optimization at the manufacturing stage.

Contribution : Contribution is the margin left after deducting both Raw Material (Melt) cost and Variable Conversion Cost from Net Sales.

Formula (Conceptual): Contribution=Gross Margin − (Variable Conversion Cost)

Breakdown:

Calculated product-wise across categories (Chips, POY, FDY, DTY, etc.).

Expressed in **absolute value (₹ Cr.)** and **percentage terms (% of sales)**.

Purpose:

Provides a **clear measure of profitability contribution** from each product line after accounting for both feedstock cost and conversion expenses.

Module 4 : Factory Conversion Cost and Margin at Jolwa

Factory Conversion Cost (FC Cost) : Factory Conversion Cost represents the fixed and semi-variable costs incurred at the plant to convert raw material (Melt) into finished goods. Unlike Variable Conversion Cost (VCC), these costs are more plant overhead-driven and less sensitive to production volume in the short term.

Components (based on typical scope of FC costs in polyester manufacturing):

- Plant-level utilities and overheads.
- Salaries & wages of plant operations staff.
- Maintenance & repairs of equipment.
- Depreciation and insurance for plant machinery.
- Other factory-related indirect costs.

Data Source in File: Drawn from SAP, manual inputs, or TBS (in SAP)

Purpose:

Provides visibility into **factory efficiency** and cost absorption at the Jolwa plant.

Margin at Jolwa: Margin at Jolwa refers to the profitability derived after considering Net Sales, Raw Material (Melt), Variable Conversion Cost, and Factory Conversion Cost specific to the Jolwa plant.

Formula : Margin at Jolwa=Net Sales−(Melt Cost+ Variable Conversion Cost+ Factory Conversion Cost)

Breakdown:

Calculated at the **product-level** (Chips, POY, FDY, DTY, ACY, ATY, etc.) but consolidated to reflect Jolwa plant performance.

Expressed in absolute value (₹ Crore) and percentage terms (% of Net Sales).

Significance:

- Provides a plant-specific lens for Jolwa.
- Helps identify whether Jolwa operations are generating adequate returns after covering both **variable and fixed factory expenses**.

Module 5 : Corporate Expense

Corporate Expense: Corporate Expenses represent the overheads and indirect costs incurred at the corporate/head office level that are not directly linked to a specific plant or product line but are necessary for running the business.
Components: Corporate Expense Payroll, Corporate Expense Others, Corporate Income.
Data Source in File:

Likely based on SAP or manual entries, consolidated at the corporate level.

Purpose:

These expenses are fixed in nature and must be absorbed from the margins generated at the factory level (Jolwa).

EBITDA: EBITDA stands for Earnings Before Interest, Taxes, Depreciation, and Amortization.
It measures the operational profitability of the business, excluding non-operating and non-cash expenses.
Formula :

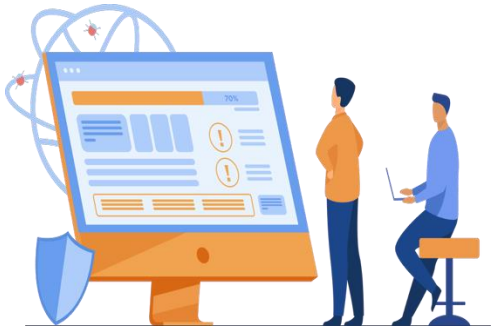
EBITDA=Margin at Plant Level (Jolwa)−Corporate Expenses

Purpose:

Shows the **true operating performance** of the company.

3. Value Proposition

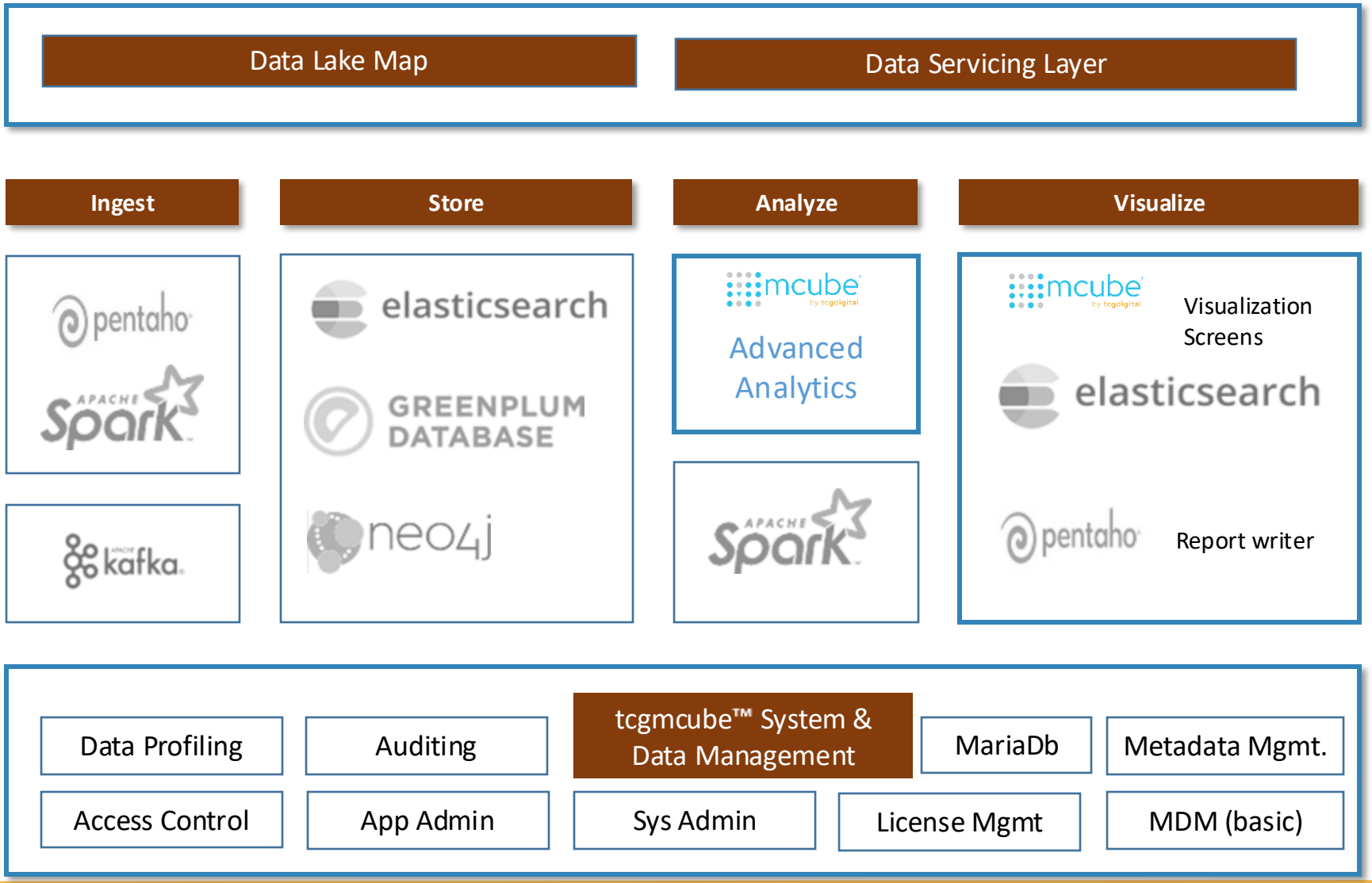
Value Proposition



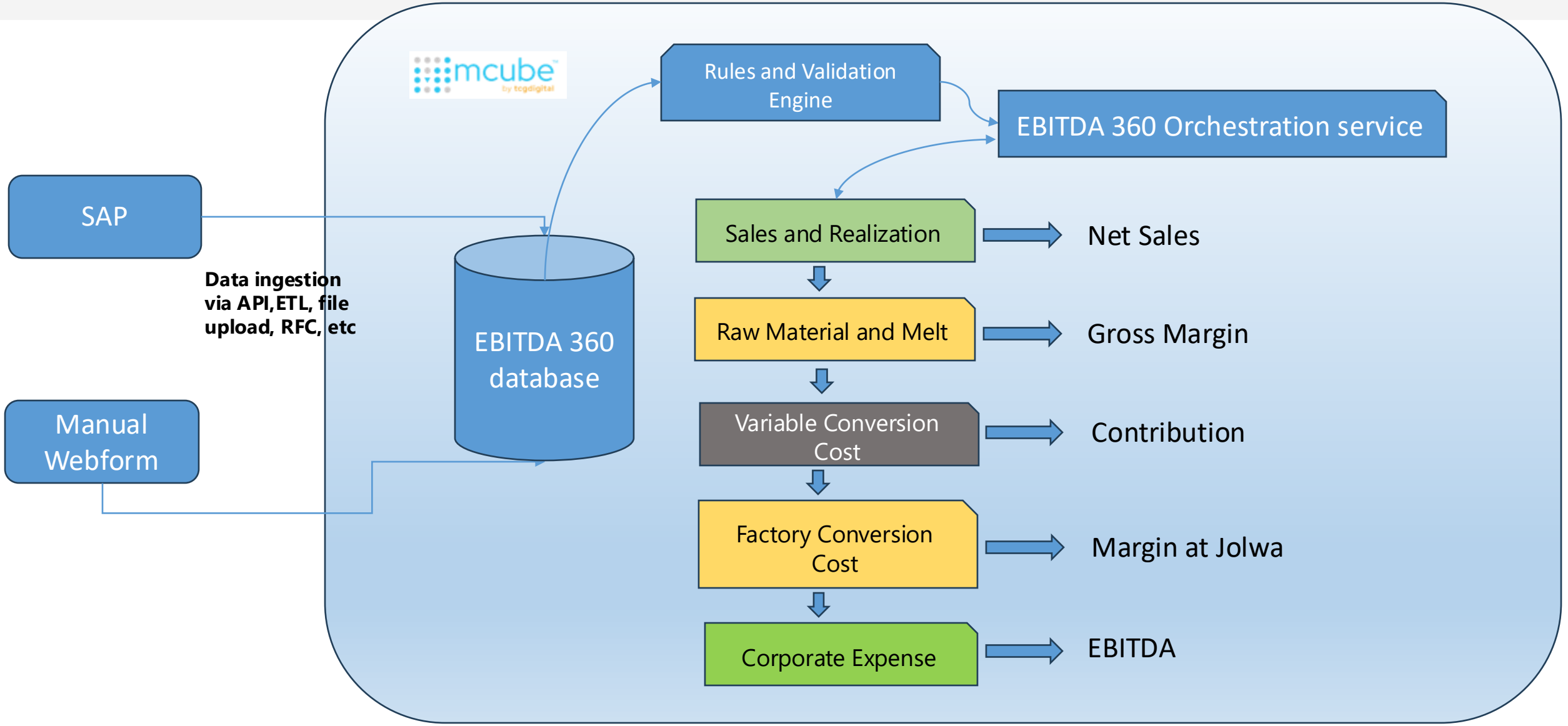
- **Single Source of Truth for EBITDA :** Consolidates data from SAP, and manual inputs into one integrated platform.
- **Near Real-Time Visibility :** Provides daily and monthly EBITDA views at product/category/plant levels. Enables management to spot deviations early (like rising freight cost, raw material impact)
- **Accuracy and Transparency** : Automates calculation rules (Net Sales → Gross Margin → Contribution → EBITDA). Reduces human error, manual overrides, and inconsistent formula usage.
- **Efficient and Time Savings** : Cuts down manual data preparation effort for Finance and Business Controllers
- **Decision Support** : CXOs get actionable insights for pricing, cost optimization, and sales strategies.

4. Technical Approach

Solution Architecture



High Level Flow diagram



Landing Screen - Illustrative

GSMPL daily EBITDA												
Sr No.	Particulars	UOM	Chips	POY	FDY	DTY	ACY	ATY	DW	SZ	Mono	Others
1	*Sales Qty Domestic*	*MT*										
2	Sales Value Domestic	Rs.Cr.										
3	*Sales Qty Export*	*MT*										
4	Sales Value Export	Rs.Cr.										
	Waste Sale/Others	Rs.Cr.										
A	Sales Total Value(2+4)	Rs.Cr.										
5	Outward Freight	Rs.Cr.										
6	Ocean Freight	Rs.Cr.										
7	Commission	Rs.Cr.										
8	Cash Discount	Rs.Cr.										
9	Rate Discount	Rs.Cr.										
10	Internal Freight	Rs.Cr.										
11	Warehouse charges	Rs.Cr.										
B	Sales & Distribution Expenses (5+6+7+8+9+10+11)	Rs.Cr.										
C	Net Sales (A-B)	Rs.Cr.										
12	PTA	Rs.Cr.										
13	MEG	Rs.Cr.										
D	Melt (12+13)	Rs.Cr.										
E	Gross Margin/spread (C-D)	Rs.Cr.										

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J	Subtotal corporate (27+28-29)	Rs.Cr.										
K	EBITDA (I-J)	Rs.Cr.										
	Sales per kg (C/Sales Qty)	Rs/Kg										
	Contribution per kg (G/Sales Qty)	Rs/Kg										
	Margin per kg (I/Sales Qty)	Rs/Kg										
	EBITDA per kg (K/Sales Qty)	Rs/Kg										

The Landing page (L0) will give a daily view of all components catering to the EBITDA for all products categories like Chips, POY, FDY, DTY, ACY, ATY, DW, SZ, Mono, Others.

On click of any particulars for a Product Category, a detailed screen (L1) will be available to give details for the particular like Sales Qty Domestic for all SKUs within that Product Category.

5. Assumption, Dependencies and Exclusions

Assumptions

- **Data Availability :** All required inputs (Sales, Freight, Raw Material Costs, Corporate Expenses, etc.) will be available in structured digital format. The EBITDA calculation will be shown at Current Date – 2 basis.
- **Business Rules:** Standard EBITDA and related calculation logic is agreed and will not change frequently.
- **System Integration :** Integration with SAP and other systems like S&OP will be done via API, RFC function. GS IT team will be owners of development within the SAP system. TCG Digital will integrate with the corresponding RFC functions to fetch data from SAP.
- **Data fetch from SAP :** Data to be fetched based on creation date in SAP but reporting will be on Posting date.
- **COGS and COGM :** COGS will be calculated from COGM available in SAP + current cost of manufacturing of specific SKU.
- The EBITDA application will fetch required information from S&OP application and will calculate the projected EBITDA. So, the projected feature will be delivered post Go-Live of S&OP module.
- One EBITDA Dashboard will be provided, including a drill-down page at SKU level with excel download option.
- Two training sessions have been considered during UAT stage.

COGS = Opening Inventory value + Current cost of manufacturing of specific SKU i.e. Opening Inventory + COGM

Dependencies

- **Data Flow :** Timely extraction and upload of raw material cost, VCC, FC Conversion, and Corporate Expenses
- **Human Input:** Manual updates (e.g. Ocean Freight, Corporate Expenses) need to be validated and approved before final EBITDA computation.
- **Source System:** SAP will be the primary source of data. Manual webform will be provided where SAP is not updated as per expectation.

Exclusions

- SAP write back is not in scope.
- The solution focuses on actual and daily/monthly reporting; Demand forecasting or scenario modeling is excluded.
- Cleaning or correcting legacy ERP/Excel data is not included; only provided inputs are assumed correct.
- Warranty Support is excluded for the application.
- Performance testing has been excluded, as this a reporting-only solution.
- VAPT has not been considered, as this is for intranet usage only.

ABOUT TCG DIGITAL

TCG Digital is the digital & AI arm of The Chatterjee Group (TCG), a multi-billion dollar conglomerate with a diverse portfolio in Pharmaceuticals, Biotech, Petrochemicals, and Real Estate across the US, EU, and South Asia. Our umbrella includes companies such as LabVantage, Lummus Technology, and TCG LifeSciences. At TCG Digital, we are driven by our mantra of delivering "Velocity to Value", helping enterprises transform faster and smarter. Our AI Analytics platform tcgmcube is at the heart of these transformations. We enable organizations unlock the full potential of their data, and by seamlessly integrating AI/ML capabilities into their business processes, we empower businesses to accelerate their digital transformation journey, enhancing agility and driving impactful results.

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