

Business Intelligence Dashboard for Sesame International

What Problem was I trying to solve?

The core problem I identified was that **Sesame International**, a company with structured financial and operational data, lacked a **visually intuitive and easy-to-consume summary** of its overall business performance. The client mentioned that they were **new to Power BI**, and found traditional Excel-based reports overwhelming. So I wanted to create a report that's clean, easy to follow, but still packed with value — basically, **a powerful but non-intimidating dashboard**.

My Thought Process:

I had one core goal in mind: **“Less clutter, more clarity.”**

Instead of dumping everything on a single Power BI page, I consciously chose to break the report into **four minimalistic yet rich pages**, each with a clear theme. This way, the user can **digest one business pillar at a time** without feeling lost. Each page is like a chapter in the story of Sesame International.

ELT (Extract, Load, Transform):

I began with a **cleaned dataset** containing financial and operational KPIs such as Sales, Assets, Liabilities, Capacity, Net Worth, etc. Here's what I did:

1. **Extracted** the data into Power BI Desktop.
2. Applied **basic transformations** using Power Query to ensure column types were accurate and values were clean.
3. **Loaded** the data into the Power BI model with a clean star schema in mind (Fact + Dimension format).

DAX Measures:

To make the visuals truly smart and dynamic, I created a bunch of custom **DAX measures** instead of relying only on raw columns. Some examples:

- Total Net Worth = `CALCULATE(SUM(Financials[Amount]), Financials[Line] = "NET WORTH")`
- Utilisation % = `DIVIDE(SUM(Financials[Actual Production]), SUM(Financials[Total Capacity]))`

- Max Utilisation Year = CALCULATE(MAX(Financials[Year]), FILTER(ALL(Financials), [Utilisation %] = MAXX(ALL(Financials), [Utilisation %])))

Each card and chart in the report is backed by **solid logic using these DAX measures**, ensuring the report updates accurately even if new data is added later.

Final Report Breakdown (4 Pages)

Page 1 – Financial Overview

- Focus: Sales, Raw Material Costs, Total Assets, and Net Worth.
- Featured: Net Worth trend + Utilisation % by year.
- Narrative: I included a smart summary that explains the highest/lowest Net Worth and why it matters.

Page 2 – Operational Performance

- Focus: Total Production, Capacity, Utilisation, and WIP (Work In Progress).
- Charts: Actual vs Capacity trends, WIP over time, Utilisation trends.
- Bonus: Used Year slicers + Line filter for dynamic exploration.
- Highlight: Wrote a narrative that clearly shows production dips/recoveries.

Page 3 – Strategic Investments

- Focus: Assets like Gross Block, Net Fixed Assets, Total Assets, Capital Reserves.
- Drilldowns: CapEx component-wise breakdown + trendlines.
- Design: Kept only CapEx-related items for the visual to avoid confusion.
- Added: Tooltip slicers and insightful comparisons between years.

Page 4 – Capital Structure & Liabilities

- Focus: Total Liabilities, Total Debt, Net Worth, Debt-to-Equity Ratio.
- Dual visual setup: One line chart for Debt vs Equity, another stacked column for component breakdown.
- Clear: Smart narrative helped users quickly grasp what debt was higher and when.

Design Philosophy:

I kept the entire report **lightweight, not flashy**. Backgrounds were consistent and subtle. All visuals are aligned neatly for visual flow. Titles are clear, no jargon.

Why I kept it 4 pages — instead of cramming everything in one:

Because the end client is new to Power BI, I wanted the experience to feel like walking through a simple presentation, **not like staring at a complex cockpit**.

Tools/Features I Used:

- **DAX** for calculated metrics
- **Smart Narrative** visual
- **Slicers with checkboxes** for Line and Year filtering
- **Cards, Line Charts, Clustered Columns, Bar Charts**
- **Formatting** for currency, percentages, and auto-scaling
- **Legend Filters** inside visuals (e.g., for CapEx-only views)

Final Outcome:

This BI report is more than just a data dump. It's a clean and insightful summary of how Sesame International is performing across different verticals, built to **tell a story at a glance**. Whether someone's from Finance, Ops, or Strategy, they can walk through this dashboard and understand the **“what,” “when,” and “why”** behind key metrics.