

# **Clevertronics Case Study**

Role: Business Intelligence Developer

The Business & Industry: As Clevertronics expanded rapidly, new departments were formed, and each began adopting its own specialised software for daily operations. Over time, this created disconnected systems, inconsistent reporting, and data silos across the business. The Sales department in particular which is the largest department in Clevertronics, struggled to get a single, accurate view of performance, making it difficult to align teams and make informed decisions.

The Problem: Clevertronics' rapid expansion and expansion of led to fragmented systems, inconsistent reporting, and communication gaps between departments. The Melbourne Head Office struggled to obtain a clear, reliable view of sales and operations, as each region generated its own figures and reports. This lack of alignment made it difficult for leadership to track performance accurately and make timely business decisions.

# Part-1 – Power BI reporting project.

Primary Stakeholder: Head of Sales, CCO

Tools: Power BI, Outlook, Dynamics 365 CRM, SSMS, Power BI Service (Fabrics)

Goal: Deliver a unified Power BI reporting system for Sales KPI tracking

Timeline: December 2024 - March 2025

The business originally used **Infor Syteline ERP** to align Product Engineering, Manufacturing, Sales, and Finance.

Due to **Syteline's CRM limitations**, Dynamics 365 CRM was introduced in 2018 to manage sales pipeline better.

This created a **split sales pipeline**:

- Dynamics 365 handled → Site/Lead generation → Opportunity tracking → Quoting
   → Closing Quotes (Win/Loss).
- Syteline handled → Sales Order → Order Processing → Order Fulfilment →
   Shipping & Delivery → Invoicing → Revenue Recognition → RMA.

 Sales team members manually entered winning Quote IDs from Dynamics into Syteline → prone to errors and misalignment.

Other departments adopted **specialised software** (budgeting, product management, customer service, HR), adding further fragmentation.

# Key issues caused by fragmentation:

- Hard to identify true performance of sales team members.
- Sales-to-revenue mismatches of up to \$2 million.
- Product-level sales data was unreliable because of rapid product changes.
- Manager-level reports often didn't match figures reported by their sales reps.
- Significant **manual effort** was required for report regeneration and summarisation across the hierarchy.
- Time was wasted trying to identify the **right metrics** and establish an accurate high-level sales picture.

**Solution**: The business wanted to centralize sales reporting in Power BI to close gaps caused by fragmented systems. I was tasked with delivering **29 reports** (to understand what type of reports look at **Figure 1**) along with a monthly subscription system, all within three months—timed before a major sales conference.

To achieve this, I built an interim solution (Figure 2) that stitched together multiple data sources. Since proper data management and analytics tools were lacking, I had to rely on a "make-do" architecture. Dynamics CRM data was connected, but all other sales-related data was manually emailed to me at month-end or on an ad-hoc basis. I cleaned and standardized this data using Excel formulas & "Power Query" and did manual quality checks, then pushed it into Power BI.

Reports were refreshed through a personal gateway and shared via the Power BI Service, where users could either access them directly or subscribe to receive dashboards as **PDF snapshots** via email. I also helped the whole sales team of over 120+ members onboard with **Power BI Pro** licenses and was responsible for managing them co-ordinating with a **System Administrator** and **external IT partner**.

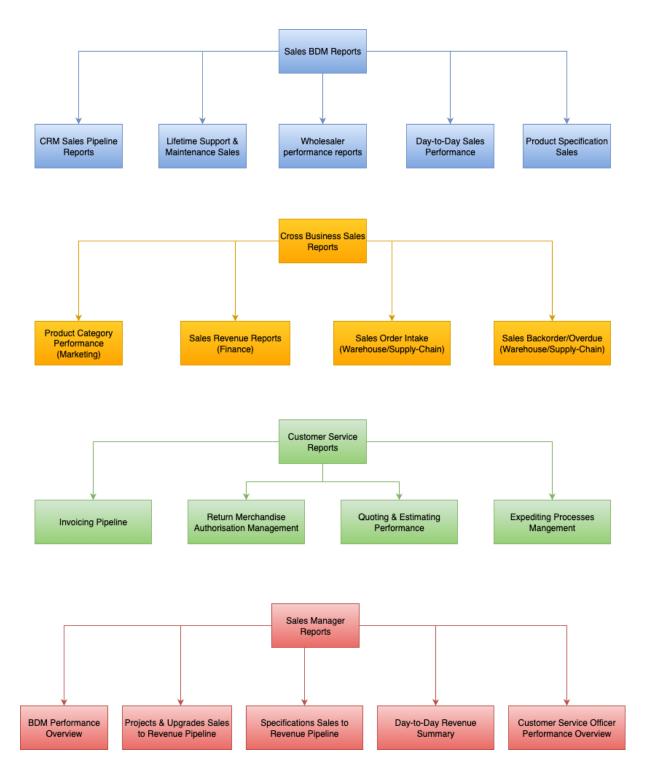


Fig-1: Clevertronics Power BI Reporting Categorisation

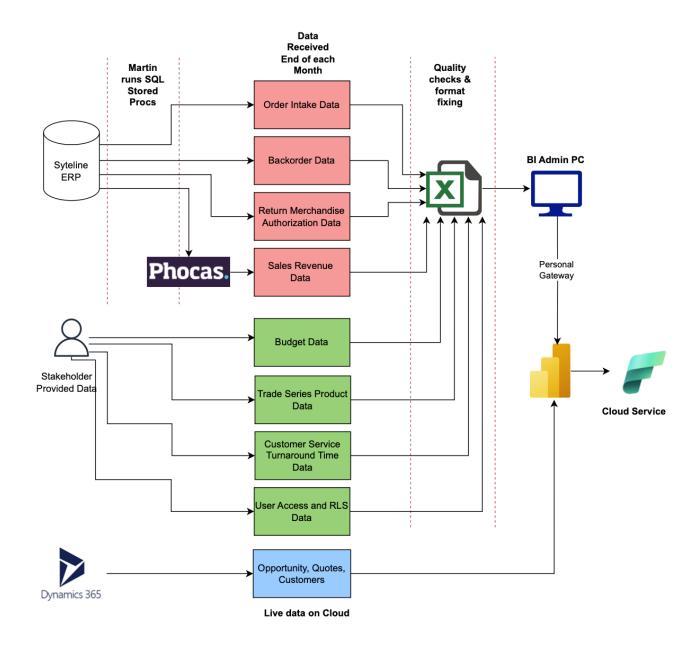


Fig-2: Clevertronics Power BI Reporting Categorisation

# **Problems This Interim Solution Solved**

# 1. Fragmented data collection

- Before: Sales and finance data lived across Syteline ERP, ad-hoc spreadsheets, emailed extracts, and CRM.
- After: All data was consolidated into one **Power BI environment**, even if partially manual.

# 2. No single source of truth

- o Before: Leaders depended on inconsistent Excel files and siloed systems.
- o After: Power BI reports created a **centralized view** of sales performance.

# 3. Delayed insights

- o Before: Reports required manual Excel consolidation, often taking weeks.
- After: Even though manual inputs remained, updates flowed faster via Power Query and Power BI refreshes.

# 4. Limited visibility for stakeholders

- Before: Only individuals who built Excel reports could see pipeline or revenue metrics.
- After: 120+ users could securely access reports with Row-Level Security (RLS) or via automated PDF subscriptions.

#### 5. Inconsistent data quality

- Before: Manual reports often contained errors and formatting inconsistencies.
- After: Quality checks and formatting scripts standardized inputs before reporting.

# Part-2 – Data Warehouse, NetSuite ERP & Celigo ETL tool adoption.

Primary Stakeholder: Head of Sales, CCO, Head of Business Transformations

Tools: Power BI, SharePoint, Dynamics 365 CRM, SSMS, Power BI Service (Fabrics),

Celigo, NetSuite

Goal: To

Timeline: December 2024 - March 2025

#### **Post–NetSuite Go-Live Solution**

- To eliminate system fragmentation and centralize all business functions, the NetSuite ERP project was initiated at the end of 2022.
- By April 2024, most integrations were completed, and all sales and cross-departmental data that was previously emailed to me was now available in the **NetSuite cloud database** and was only needed to located and pulled out.
- I built **Saved Searches** in NetSuite (similar to SQL Stored Procedures) to replicate the Syteline & Excel maintained data sources.
- Using Celigo (ETL tool), I created 8 automated data pipelines to extract key datasets — including Product Updates, Finance, Sales Pipeline, and Supply Chain — into the SQL Data Warehouse (staging layer).
- The data was then cleaned and moved through Silver → Gold layers using SSIS, which Power BI connected to directly.
- This reduced the need for complex Power Query transformations and DAX calculations, making reports faster and easier to maintain.
- A few Excel-based inputs remained, so I migrated them to SharePoint Cloud for owners to update directly, ensuring data accuracy and reducing my manual work.
- I also replaced my **personal gateway** with a **standard on-premises gateway**, enabling automatic refreshes 24/7 from the data warehouse.

 With these processes automated and centralized, reporting became fully cloudbased, scalable, and no longer dependent on manual refreshes or individual ownership.

# Post NetSuite Go-Live BI Solution

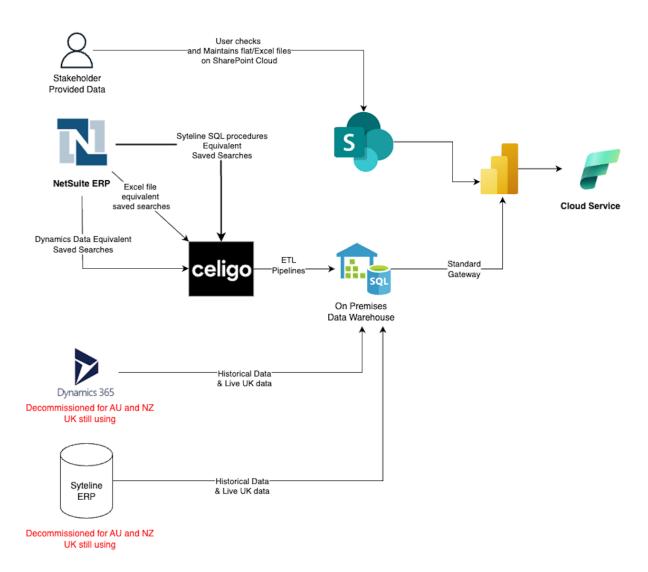


Fig3-: Clevertronics Post NetSuite Go-Live Reporting simplification and optimisation