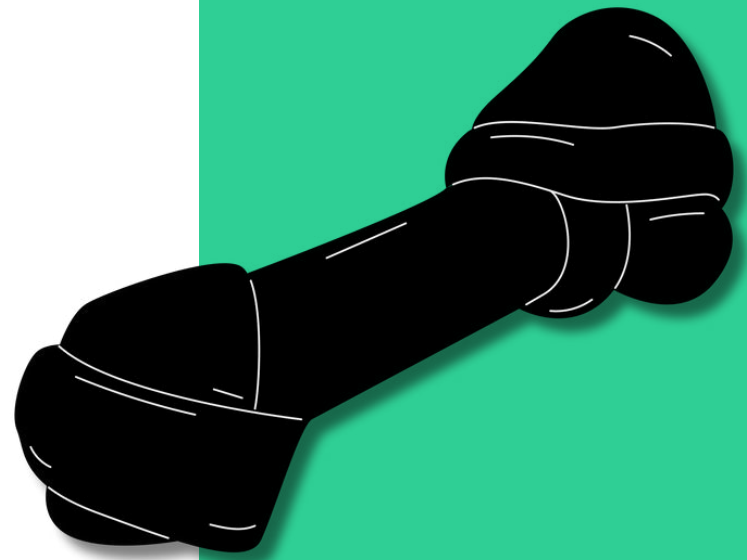# COVENANT TECHNOLOGY PARTNERS CASE STUDY

Factory Cost Analysis for Pet Food and Supplies Manufacturer

Data and AI

BUSINESS PROBLEM

The pet food and supplies manufacturer faced significant challenges in managing and analyzing data related to their factory operations. The factory was specifically designed to manufacture machine parts utilized in other machines for pet food production. The company needed insights into various aspects of the factory's operations, but the data was being pulled out of SAP Business Object Cubes. Given the unique nature of the factory creating parts for other factories, they did not have a Business Object Cube that suited their reporting needs. This caused them to constantly stitch together various data sources manually.

The needed insights included:
- Information related to Completed Work Orders such as the part associated, posting dates, labor hours, cost, quantity, etc.
- Insights into Labor Planned Hours against Actual Hours.
- Net Savings, including Year-Over-Year analysis, associated with these jobs.

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OUR OBJECTIVE

The primary objective was to design and implement a Factory Cost Analysis solution that would automate the process of data extraction, transformation, and reporting. This solution aimed to provide the team with accurate, up-to-date, and insightful reports and dashboards that would enable them to make informed decisions. The project was to be implemented over 4-5 weekly sprints with regular interactive review sessions throughout the project.

OUR SOLUTION

Covenant Technology Partners collaborated with subject matter experts to design a set of reports and dashboards for the new Factory Cost Analysis dashboard. We pulled data primarily from SAP DW and supplemented it with other miscellaneous data sets. We designed and created data structures to hold the cleansed data, which was pulled from data sources on an automated schedule to ensure reports represented accurate up-to-date data. Using Power BI, we developed models, visualizations, reports, and dashboards to address the stated business needs. Approximately 4-5 reports were created to capture the most impactful KPIs and insights. We created workspaces to organize and secure all content, and established data flows to allow Report Developers to create new reports. All technical deliverables were created with DevOps in mind, ensuring automated build and deployment methods could be used. We implemented Azure DevOps build and release mechanisms, and ensured all entities had a clearly defined and properly implemented security strategy in line with all Nestlé IT guidelines.

THE RESULTS

The Factory Cost Analysis solution provided the team with automated, accurate, and insightful reports and dashboards. They could see information related to Completed Work Orders, such as the part associated, posting dates, labor hours, cost, quantity, etc. The reports also allowed the team to get insights into their Labor Planned Hours against Actual Hours and any Net Savings, including Year-Over-Year analysis, associated with these jobs. By connecting Power BI directly to the SAP Business Object Cubes and mashing them up, the process of getting the numbers where they needed them was automated, eliminating the need to manually stitch together various data sources. This resulted in significant time savings and improved decision-making capabilities for the pet food and supplies manufacturer.