

IMPROVING DATA QUALITY AND INTEGRITY

AUTOMOTIVE CASE STUDY

ZURA ENABLES A GLOBAL LEADER IN IMPROVING DATA QUALITY AND DATA INTEGRITY BY 95%



About the Client

In today's competitive marketing landscape, turning data into actionable insights is crucial to making better business decisions. An automotive components and systems manufacturing client, who is a global leader in extruded rubber products and sealing systems, was looking for a solution to transform their existing manufacturing plant data into insight and knowledge. The client's main objective was to make the consolidated data available to the top-level management for better decision-making, and to save production costs.

The Challenge

Integrating data from all the plants into a single unit for evaluation

The client collects large volume of data daily from multiple plants located across multiple regions in North America and Central America for all the three shifts. Each manufacturing plant has multiple work-units, where they perform operations like body sealing, rubber extruding, etc. These working units are categorized into two different categories, Automated and Manual.

Operators enter Count Point Paper Work (CPPW) as they manufacture parts and submit it to supervisors. Supervisors besides monitoring have the responsibility to enter all data entered in CPPW in to the "production line report" for each shift (i.e., an excel file, which has large number of spreadsheets and of sizes above 20MB). These spreadsheets store operational level data for both the automated and manual working units.

Made consolidated data available to the top-level management for better decision-making, and to save production costs.

HOW WE SOLVED?





What we Found

The data was captured manually which led to lot of data quality and integrity issues. The spreadsheet format used by each plant varied making it difficult to extract the data. The client has 100 such working units across all the plants, with each unit being operational for three shifts a day. The large amounts of data being created made the task of analyzing the data a very tedious process if not impossible for the client.

Integrating the data from all the different plants, into a single standard for evaluating the **Direct Cost to Production**(DCP) efficiency with respect to **Plant efficiency** is a challenge. Fragmented data captured in excel spreadsheet in different formats across all the plants made it a challenge to draw required insights which would help improve operational efficiency and reduce scrap.

Our Solution





Design executive dashboard for senior management to present operational information that they can act on, with the ability to drill-down to the specific working unit's operation-level information.



Identify complications and breakdown of multiple working units at each plant.



Track performance of working unit to set stretch goals.



Streamline of the production line reports, which can be accessed by mid-management.



Track underperforming working units on monthly and daily basis.



Track Direct Cost to Production (DCP) for each working unit.

To address their challenge, Zura Labs integrated the data available from all the plants to develop a Business Intelligence solution

KEY OUTCOMES



Zura Labs helped the client develop a hosted BI solution using Cognos product, which can be customized to meet senior management's needs to view their operations across multiple plants. This solution helped the client gain timely insightful information enabling.



This was gained by providing a log of data issues found in the spreadsheets to the supervisor enabling him/her to easily find and fix the inaccuracies.

improvement in data quality and data integrity



reduction of scrap generated and improvement in operational efficiency



access to
visually
compelling
operational
dashboards
and reports
that are iPad
and mobile
compatible



improvement in Direct Cost to Production efficiency



CONTACT OUS







