

CASE STUDY

AUTOMOTIVE COMPONENTS



Designing Industrial Power

How we helped a 50-year-old automotive components manufacturer build a connected data foundation for workforce, productivity and cost intelligence.



FROM FRAGMENTED
REPORTS



TO A CONNECTED
INTELLIGENCE LAYER



BUILT FOR
A STRONGER TOMORROW

CASE STUDY

Building an AI Workforce Productivity Command Center for a 50-Year-Old Automotive Components Manufacturer

We helped a large manufacturing business move from fragmented Excel and WhatsApp reporting to a company-specific intelligence layer for workforce, productivity, cost, and operational decision-making.

PEOPLE
DATA
INSIGHTS
IMPACT

Turning operational complexity into confident decisions.

The business behind the problem

When we partnered with the client, we stepped into a manufacturing operation with five decades of established processes. Founded in Ludhiana in 1975, the company produces precision automotive components for passenger cars, commercial vehicles, agricultural equipment, defense vehicles, and earth movers. Operating in an engineered-to-order environment supported by multi-year customer arrangements, the business has built an international presence across the Middle East, Southeast Asia, and the Americas.



Founded in Ludhiana in
1975



Five decades
of manufacturing experience



Two plants
with a third coming online



Over **2,000**
employees



Operations across a
40-acre facility



Precision automotive components
for passenger cars, commercial vehicles, agricultural equipment, defense vehicles, and earth movers



International presence across
the Middle East, Southeast Asia,
and the Americas



MULTIPLE SOURCES.
REAL OPERATIONS.
A BIGGER PICTURE.

The problem was fragmented information

The company had already invested in enterprise technology, implementing SAP around three years earlier, primarily for the finance function. A significant portion of workforce and production reporting still happened outside the enterprise system, relying heavily on Excel. A production line manager was expected to prepare a daily report and send it to the CEO by 9 PM, typically through WhatsApp.

This process depended entirely on people preparing the information accurately, completing it on time, interpreting the data consistently, and ensuring anything requiring attention was actually noticed. Reports could be delayed, manual errors could enter the process, and different teams often approached similar reporting requirements in their own ways. Leadership had to interpret information coming from several disconnected sources.



“When he was not physically present at the plant, he had limited visibility into ground-level realities.”

CEO PERSPECTIVE

The real gap was between information and decisions

As we spoke with various teams, a clear pattern emerged. The CEO wanted to understand the overall operating picture. HR needed visibility into workforce availability and utilization. Finance needed to understand workforce economics and cost movement. Production needed to evaluate output, efficiency, and workforce contribution.

Each function had its own data and established reporting practices, making the challenge one of connecting those isolated pieces. A production report could tell leadership what had happened in production, attendance data could show workforce availability, and finance could provide cost information. The missing piece was the connection between them.

The business needed to understand what was happening, where exceptions were emerging, what factors were contributing to those changes, and which stakeholders needed to respond. This realization formed the foundation of our approach.

“We had plenty of information, but no single view to make the right decisions.”

STAKEHOLDER FEEDBACK

Different data. Different questions. No single view.



We started with the business, not the technology

The first phase deliberately focused on understanding how the organization actually operated. We began with the CEO and progressively brought department heads and functional stakeholders into the process. We conducted individual stakeholder interviews, reviewed existing Excel-based reports, examined historical reporting, mapped data sources and information flows, and audited the KPIs currently in use.

We also looked closely at the decisions being made from those reports, identifying areas involving manual repetition, conflicting definitions across teams, and opportunities for automation to reduce repetitive work. We mapped out information visibility requirements and role-based access needs. This discovery process gave us a view of the operating model extending well beyond the reporting structure. The objective was to understand how information moved through the organization and how management used that information to make decisions.

The resulting blueprint formalized KPI definitions, data mappings, governance requirements, architecture, and the delivery roadmap.

“We began by understanding the business. Technology came later.”

OUR APPROACH

Our discovery and design process



THE SOLUTION

From fragmented files to a connected data foundation

We designed a robust data ingestion and integration layer to bring together information from multiple sources, starting with Excel.

The solution automates the collection, processing, and validation of data before storing it in a central data lake, creating a single source of truth for the business.

This foundation enables consistent, reliable, and timely data to flow into a semantic and KPI layer, powering dashboards, analytics, and monitoring for different stakeholders across the organization.



Multiple sources

Bring together data from across plants, functions, and systems



Automated processing

Reduce manual work and ensure consistency



Validated data

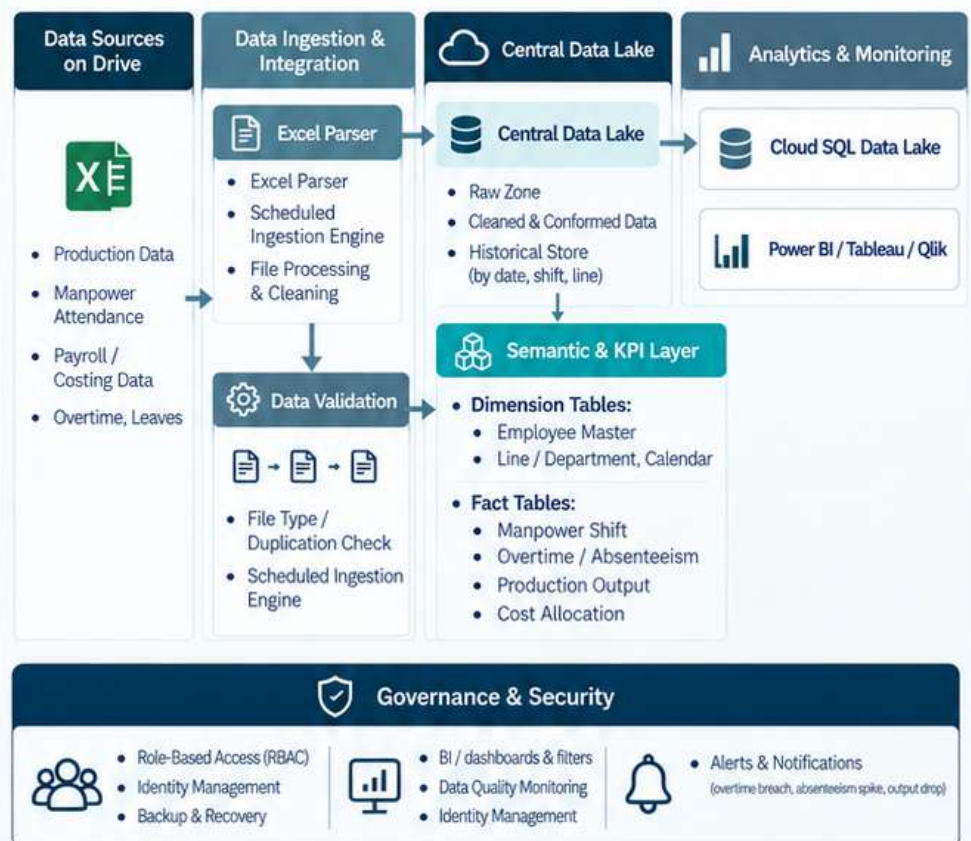
Built-in checks for accuracy and completeness



Foundation for insights

Reliable data to power better decisions

Technical Architecture for Excel Processing



How the data flow works



Semantic & KPI layer

We build a semantic layer that translates integrated data into business-relevant insights. This includes standardized dimension tables and fact tables, enabling consistent KPI definitions and easier analysis across functions.



Dimension Tables

- Employee Master
- Line / Department, Calendar



Fact Tables

- Manpower Shift
- Overtime / Absenteeism
- Production Output
- Cost Allocation

THE RESULT

A single, reliable data foundation turns scattered reports into clear, actionable insights.



Connected data across functions



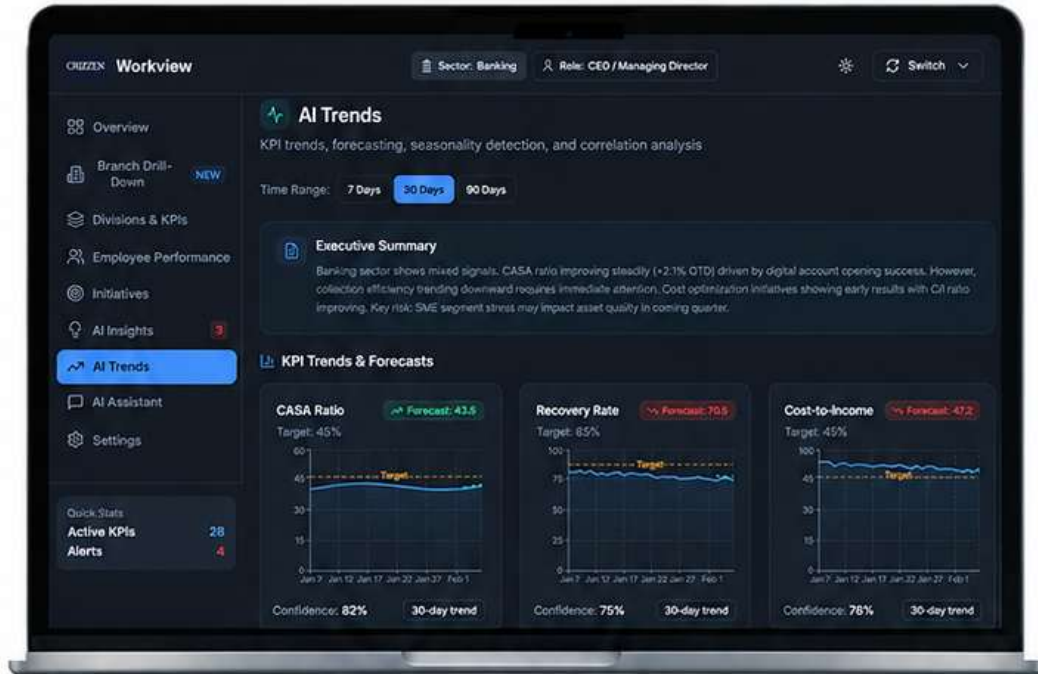
Greater visibility for leadership



Faster, more informed decisions

From data to decisions

The integrated data foundation enables role-based dashboards, proactive monitoring, and clearer insights for different stakeholders across the organization. What was once a collection of disconnected reports is now a single, trusted view of people, productivity, costs and operations.



Insights for every stakeholder



CEO

- Overall operating picture
- Exception monitoring
- Faster decision support



HR

- Workforce availability
- Utilization trends
- Absenteeism analysis



Finance

- Workforce economics
- Cost movement
- Budget vs actuals



Production

- Output and efficiency
- Downtime and losses
- Workforce contribution

Key impact

A more connected, transparent, and efficient operating model.



Timely insights

Daily visibility across people, productivity, costs and operations



Reduced manual effort

Automated data collection, processing and validation



Improved data quality

Clean, consistent and standardized information



Better collaboration

Aligned KPIs and a single source of truth across functions



Stronger decisions

From reactive reporting to proactive, fact-based decision making



What was once a manual, fragmented process is now a connected view of our operations. I can see what is happening across the business, even when I am not at the plant.

CEO PERSPECTIVE



A stronger, more resilient organization ready for what's next.

THE JOURNEY CONTINUES

From insights to greater possibilities.

We help manufacturing businesses turn their data into practical intelligence — and their operations into a stronger tomorrow.

Let's build what's next →