

Establishing Enterprise-Wide Data Governance and Master Data Quality Control

ABOUT THE CLIENT

A leading Indian specialty chemicals and manufacturing company with operations across multiple plants, business divisions, and international markets was facing growing challenges in managing enterprise master data.

With a portfolio of over 35,000 SKUs spanning raw materials, intermediates, packaging materials, and finished products, the organization relied on decentralized data creation processes that had evolved independently across plants and business units over time.



Industry

Manufacturing

Region

India

Products Deployed

Ark SaaS; a comprehensive Master Data Governance and Quality Management framework

BUSINESS CHALLENGES

Despite significant investments in digital transformation initiatives, the organization continued to face persistent master data management challenges that impacted operational efficiency across procurement, manufacturing, engineering, and supply chain functions.

Key challenges included:

- **Lack of a centralized data governance framework** across plants and business units
- **Inconsistent part naming** conventions, classifications, and documentation standards
- Duplicate and **conflicting records** across manufacturing locations
- **Data quality issues** caused by missing attributes, inconsistent specifications, and redundant part numbers
- **Limited visibility into materials and components** across plants
- **Absence of standardized workflows** and accountability for New Part Requests (NPRs)
- **Difficulty searching, reporting, and reusing** data due to inconsistent taxonomy structures

These challenges created inefficiencies across procurement, production planning, engineering operations, and new product introduction processes, limiting the organization's ability to scale data management effectively.

EXISTING LIMITATIONS

The organisation relied on decentralised master data management processes that varied across plants, functions, and product categories.

These limitations introduced several operational risks:

- Duplicate material and part creation across facilities
- Delayed New Part Request approvals and onboarding processes

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- Increased manual effort for data validation and quality reviews
- Limited cross-plant visibility and material standardization
- Reduced confidence in enterprise reporting and analytics
- Inconsistent governance and ownership of critical master data

Additionally, data quality management depended heavily on manual reviews and individual expertise, making the process difficult to scale across a rapidly growing enterprise.

THE KEYUSH SOLUTION

To establish enterprise-wide data governance and improve data quality, the organization implemented Ark SaaS as the foundation of a comprehensive Master Data Governance and Quality Management framework.

The solution was designed to create a standardized, controlled, and scalable environment for managing material, product, and engineering master data across all participating plants and business units.

SOLUTION HIGHLIGHTS

- Multi-level New Part Request (NPR) approval workflows
- Role-based access controls and governance responsibilities
- Enterprise-wide data taxonomy and classification framework
- Standardized naming conventions and attribute structures
- Automated data quality validation and duplicate detection
- Real-time governance dashboards and audit visibility
- Defined data stewardship and ownership framework
- Continuous monitoring and exception management capabilities

IMPLEMENTATION APPROACH

Keyush worked closely with business, engineering, procurement, and master data teams to design and deploy a sustainable governance model aligned with enterprise objectives.

The implementation included:

- Governance framework design and standardization
- NPR workflow automation and approval controls
- Enterprise taxonomy development and rollout
- Data stewardship and ownership model definition
- Automated validation rule configuration
- Duplicate detection and quality monitoring implementation
- Governance dashboards and KPI tracking enablement
- Audit and compliance process integration

KEY OUTCOMES

- Approximately **90% reduction in duplicate part creation**
- Standardized **NPR processes adopted** across participating plants and categories
- Improved **enterprise-wide visibility** and **consistency of master data**
- **Faster procurement, engineering,** and material onboarding cycles
- **NPR turnaround times reduced** from days to hours
- **Clear ownership and accountability** across the data lifecycle
- **Reduced manual effort** for data validation and governance activities
- Scalable **framework supporting future** plant onboarding and business expansion

The implementation established a reliable foundation for enterprise data governance, enabling the organization to improve operational efficiency while supporting future growth initiatives.

CONCLUSION

By implementing a centralized data governance and quality management framework, the organization successfully transformed fragmented master data processes into a standardized, enterprise-wide governance model.

The initiative improved data accuracy, strengthened accountability, accelerated business processes, and created a scalable foundation for future expansion.

Keyush's implementation of Ark SaaS helped establish a sustainable governance framework that supports operational excellence, regulatory compliance, and long-term digital transformation objectives.