Abstract
Infosys pioneered the adoption of industrialized solutions and created a digital platform with the help of a specialized approach led by master data management (MDM) domain experts. This platform ensured the conversion of legacy data from multiple existing systems to a high quality data output for migrating to the client’s new source systems.

The MDM program of the client required consolidating supplier master data across various locations lying in multiple legacy systems and then migrating enriched data to a new SAP system. Read on to know how did Infosys propose, design, and implement the MDM approach which involved leveraging IDSS (Infosys data services suite) as a platform, to ensure data standardization, completeness, and a speedy migration.
The client landscape

The client is a global industrial group of companies that manufactures industrial tools and equipment, and is one of the global leaders in compressors, construction and mining equipment, power tools, and assembly systems.

The client wanted to standardize its master data process as they faced several challenges in governing its master data, the key ones being:

- The legacy data migration process from existing source systems (BPCS, ISIS, CTP etc.) into the future to-be target application such as SAP was slow and cumbersome
- Business analysts had to manually look at the data and check for the rules after each iteration
- Needed to ensure migrating only unique data to the SAP system as multiple applications provided multiple views of the same data which often led to conflicts

The journey towards effective governance of master data

The client partnered with Infosys with a view to standardize its master data processes including its various phased activities involved in the data migration process to ensure that they only migrate high quality data to the new system. This included a series of steps including data profiling, data cleansing, data de-duplication, and harmonization which were necessary to be performed before uploading the data to SAP. This also included data enrichment process which supported generation of ‘golden record’ or the ‘single version of the truth’.

The Infosys scope of work included supporting the SAP roll-out and data mastering for production and the subsequent inventory management.

The Infosys team applied a four-pronged approach to manage the process:

1. Identifying the schema
2. Analyzing and initiating data transfer to SAP compatible templates
3. Rectifying the data errors (or gaps)
4. Validating the transformed data

Since the process involved managing huge volumes of data, it required a technical solution which had the ability to make the process faster, smoother, and more streamlined. Infosys proposed implementing its proprietary IDSS (Infosys Data Services Suite) framework as an accelerator and to improve data quality.

IDSS provides an end-to-end data services solution that addresses different data quality aspects including data cleansing and data enrichment, and also provides an easier data migration process to the target systems.

The IDSS portal is a web based solution that efficiently governs and manages the client’s master data. It also has separate modules for data quality, MDM and migration and contains artefacts, checklists, and toolsets to accelerate these.

![Diagram of the IDSS process](image-url)
The source data contains Excel files from the legacy system and the target is the Excel files in SAP input format, whereas the SQL server enterprise acts as the staging or target database.

The process involves extracting the source data from the legacy system into the staging area. It is followed by data cleansing after being processed in IDSS and then loaded to the target.

### IDSS enabled process flow

1. **Data Extraction**
2. **Identifying Business Rules**
3. **Data Quality Analysis (Web Enabled)**
4. **Is Data Profile Report OK?**
5. **Data Cleansing & Standardization**
6. **Data Enrichment**
7. **Data Uploading Reporting**

### IDSS enabled approach

- **Existing Data Sources**
- **Reference data model & data dictionary**
- **Data Quality Analyst**
- **Data Analysis**
- **Data Steward**

#### Data Extraction
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### Business value delivered

With IDSS framework, the Infosys team delivered substantial benefits to the client. These benefits can be termed as:

1. **Process related improvements:**
   - Eliminated various intermediate steps and established a seamless platform for managing all master data entities
   - Made UI usage flexible for searching, reviewing, and modifying the master data as required
   - Automated match process with the client data providing flexibility to the end user
   - Provided one single view of the complete hierarchy for the client data

2. **Data related improvements:**
   - Uniqueness: 98%+ unique entities with the help of de-duplication post duplicate analysis

3. **Comprehensive reporting and visibility:** enabled significant improvements on management reporting with the help of a dashboard which provided a global view of data migration for client. All these eventually led to some key tangible benefits such as:
   - **Manual effort was reduced by 75%**
   - **Increased productivity by 20%**
   - **Reduced cost of quality**
   - **Order completion cycle time reduced by 75%**

4. **Data related improvements:**
   - **Accuracy**: 98%+ cleansed and correct entities post business rules' usage
   - **Consistency/completeness**: 99%+ of source data present in output data set (excluding any in process profiling activities)