DMAG ™

Introduction

| DMAG Features	Functionalities
1 **Data Dialysis, Cleansing, Audit and ongoing Enrichment & Corrections**	An audit report for all the master data inconsistencies is generated based on custom client specific business & SAP Standard rules. Business Rules are maintained and executed to govern the master data on-going. The inconsistences are cleansed and corrected automatically.
2 **Data Migration, Transformation, and Conversion for Greenfield S/4 HANA implementation**	Data is migrated and converted from various source legacy systems such as Quick Books, Spreadsheets, Oracle, Microsoft, Great Plains, ECC & R/3 and transformed, mapped and converted into S/4 HANA format and load it rapidly into S/4 HANA target system for faster, business ready, and smooth go-live
3 **Data Carve Outs / Data Extractions for Mergers/ Divestitures/Acquisitions**	Data is carved out and sectioned into multiple SAP landscapes incase of divestures, and merged/consolidated from multiple ECC or S/4 HANA instances incase of mergers and acquisitions
4 **Data Retention & Archiving**	Allows huge lakes of unproductive data to be extracted and archived in a separate server for easy retrieval and display as needed including storage on DB2/ ZOS systems. It will provide compelling value of optimizing expensive HANA SAP resources. Data is archived using a patented technology and displayed as needed.
5 **Master Data Management (MDM) & Governance**	Allows external parties or internal team to maintain Customer / Vendor / Material/ other masters captured through web forms and populating SAP or S/4 HANA database including validations, duplication checks, & workflow and approvals for creation, maintenance and changes.

DAMG offers following MDM capabilities:

1) **An Excel Master Data(MD) Upload for Customers, Vendors and Materials**
   1) Material Numbers, Characteristics, and Validations etc.
   2) Name, PAN, Address, GSTN, Bank Details etc.
   3) Duplication Check, Semantic Recognition, Accuracy, Validness & Completeness
   4) Exception Processing

II) **Staging Area processing for MD - Customers, Vendors and Materials**
   1) Requestor reviews all the records and ensure they are scrubbed / cleansed
   2) Initiates a request for approvals
   3) Reminders for approvals
   4) Monitors Rejections and Reprocess

III) **Workflow with one or multiple approvers for approving the MD details before it gets created in system**
   1) Setting up Approval Hierarchy based on Material Type and Account Group
   2) Alternate Approvers & Delegate Approvers
   3) Approve the records to next level
   4) Reject the records to the requestor

IV) **Audit Trails, Workflows, and Automatic Creation of MD in the SAP system**

V) **Data Cleansing – One time Activity**

DMAG MDM Scope (overall)

- Customers and Vendors – Business Partners
- Materials Master & Quality – Products
- BOMs and Recipes
- PE, MRP, and APO Data
- Contracts and Pricing
- G/L, Profit Centers, and Cost Centers
- Fixed Assets
- Internal orders
- Lease Contracts
- Treasury & Risk Master
- Location Master

- Transactional Data Balances
  - Sales Orders
  - Purchase Orders
  - Inventory Balances
  - G/L Balances
  - A/R Balances
  - A/P Balances
  - Asset Balances

DMAG ™
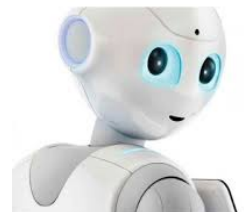
DMAG provides compelling value by automating Data inconsistencies in ECC and making the data error free, business ready, Complete, and compatible with Industry Standards

- ✓ *Portfolio of Inconsistencies: DMAG will identify the inconsistencies based on the Client Business rule set, Data Model integrity in ECC and based on Industry Best Practices.*

  - ❑ DMAG automates the master data inconsistencies by each object – inconsistencies with existing data based on the proven business rules, new data Model with Business Partners, and New fields introduced in Industry framework.

- ✓ *Business Rules are customized and Industry Driven - Easily Configurable and Scalable*

- ✓ *The resolution and remediation will be via four methods:*
  - ❑ **Business Rule Based Resolution** – E.G: for all external procured materials, procurement type is F

  - ❑ **Interactive Session** – Fixes will be resolved via Guided Master Data (GMD) process.

  - ❑ **Mass Updates -** Fixes will be resolved via download and upload process

  - ❑ **S/4 HANA Automation** – Map, Transform and Automate based on intelligence tool has ECC to S/4 HANA

- ✓ **DMAG is Perpetual -** It is an ongoing assessment and proactive Governance tool to make the data error free. The Data audit can be conducted daily or monthly based on frequency and volume of transactions. It will automate the Governance framework.

External User

Webdispatcher (secure layer)

DMAG™ Webforms (user interface leveraging SAP WebDynpro)

Webdynpro / SAP/ Excel Upload

Customer

Vendor

Material

BoM

Pricing

xxxxxx

xxxxx

xxxxx

DMAG Staging Area

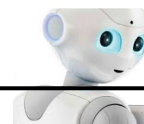**Business Application Layer**

DMAG
(*Business Process Validations, Governance, Audit trails, Approval flows*)

SAP ERP Layer

S/4 HANA (or) ECC

DMAG™ is a Robotic Data Management Tool that automates Master Data Management - Reduces the effort and time by 50% and Scalable for Roll Out

Roles

System	Initiator	Requestor	Approver	System

Steps

1 Excel MD Upload → **2** Error Processing → **3** Staging Process → **4** Approvals/ Rejections → **5** MD Creation in SAP

ECC EhpX

Data Management & Governance

Data Maintenance and Governance in ECC system

1. **Data Creation & Maintenance**
   - Excel Data Upload
   - Error Processing and Scrubbing
2. **Data Error Processing**
   - Data Scrubbing based on the Validation Rules
3. **Requestor is the Holy Grail of the data**
   - End to end Processing of Master Data
4. **Data Approvals & Rejections**
   - Approvals and Rejections based on Approval Hierarchy
5. **MD Creation in the System**
   - Creation of MD with 100% Quality Records
6. **Data Governance - Remediation** based on business rule sets
   - *Ongoing MD Governance based on the Business Rules Set*

Master Data Validations 4 <u>Customer Master </u>Proof of Concept and scalable for Roll out

Customer Master	Data Element	Reason for Exception	Error Message Display
1	Account Group	Account group shouldn't be blank	Enter valid Account Group
		Entered account group must be maintained in SAP	Enter valid Account Group
2	PAN Number	Pan number should have 5char/4Numeric/1char	'Enter Valid Pan No. In the format 5char/4Numeric/1char'.
		If any customer exist with same PAN number and suppose if try to use the same PAN number(i.e.).customer exist with same PAN number	PAN number exist in Database for customer
		use same PAN number but not created any customer number with this	PAN number 'exist in Staging Area for customer
		If PAN number is blank	Provide PAN No. for Domestic customer
3	GST Number	If any customer exist with same GST number and if try to use same GST number(i.e.). customer exist with same GST number	GST number exist in Database for Customer
		If GST number is duplicated at staging area in the sense suppose if try to use same GST number but not created any customer number with this PAN number	GST number exist in Staging Area for Customer
		Format of GST number	Enter Valid GST No. In the format 2Numeric/PAN/1Numeric/1char/1alphaNumeric
		Suppose if country is INDIA and length of GST should be 15 characters and PAN number should match with from 4th character and before last two characters of GST number	Enter Valid GST No. against PAN Number
		If GST Number is blank	Provide GST No. for Domestic customer
4	Postal code	Postal code check based on country key and region	Specify length with postal code '6'
5	Name	Check entered NAME1,NAME2 exist in SAP -ADRC in table	Same Customer name already exist in database
6	Street	Check if street 1, street 2 , street 3 against ADRC table in D/B	Same Customer address already exist in database
		Check if street 1, street 2 , street 3 against /VSDMAG/Zcus_hil table in D/B	Same Customer name already exist in Staging Area

Master Data Validations 4 <u>Vendor Master</u> Proof of Concept and scalable for Roll out

Vendor Master	Data Element	Reason for Exception	Error Message Display
1	Account Group	Account group shouldn't be blank	Enter valid Account Group
		Entered account group must be maintained in SAP Account group mast	Enter valid Account Group
2	Mobile Number	Enter Mobile No. for Domestic Vendor	Mobile number is mandatory
3	PAN Number	Pan number should have 5char/4Numeric/1char	'Enter Valid Pan No. In the format 5char/4Numeric/1char'.
		If any vendor exist with same PAN number and suppose if try to use the	PAN number exist in Database for Vendor
		If PAN number is duplicated at staging area in the sense suppose if try to	PAN number 'exist in Staging Area for Vendor
		If PAN number is blank	Provide PAN No. for Domestic Vendor
4	GST Number	If any vendor exist with same GST number and if try to use same GST nu	GST number exist in Database for Vendor
		If GST number is duplicated at staging area in the sense suppose if try to	GST number exist in Staging Area for Vendor
		Format of GST number	Enter Valid GST No. In the format 2Numeric/PAN/1Numeric/1char/1alphaNumeric
		Suppose if country is INDIA and length of GST should be 15 characters a	Enter Valid GST No. against PAN Number
		If GST Number is blank	Provide GST No. for Domestic Vendor
5	Bank Key	Entered bank key should exist in the BANK Master data	Bank key is not available in the system
6	Postal code	Postal code check based on country key and region	Specify length with postal code '6'
7	Name	Check entered NAME1,NAME2 exist in SAP -ADRC in table	Same Vendor name already exist in database
8	Street	Check if street 1, street 2 , street 3 against ADRC table in D/B	Same Vendor address already exist in database
		Check if street 1, street 2 , street 3 against /VSDMAG/Zven_hil table in D	Same Vendor name already exist in Staging Area

Master Data Validations 4 <u>Material Master</u> Proof of Concept and scalable for Roll out

Material Master	Data Element	Reason for Exception	Error Message Display
1	Material Type	Material Type shouldn't be blank	Enter a valid Material Type
		Entered Material Type must be maintained in SAP	Enter valid Material Type
2	Product Hierarchy Key	For Material Type FERT Product hier. Key is Mandatory	Please enter valid product hier. Key for Material type FERT
3	Profit Center	Profit center check with division	Please enter valid Profit Center for Division
		Profit center check with plant	Please enter valid Profit Center for Plant
4	Description	Semantics/ Spaces and Special Characters in the Description	Entered Description is already exist in Staging area
			Entered Description is already exist in SAP
5	Material	External Material Uniqueness check	Material Already exist in Staging area
			Material Already exist in SAP
6	Part Number	if Part number exist in Staging area and/or in SAP Need to display Error Message	Part number exist in Database for Material
			Part number exist in Staging Area for Material
7	Gross weight/Net weight/Volume	Gross weight/Net weight/Volume must be Maintained in SAP	Please enter valid Gross weight for Material
			Please enter valid Net weight for Material
			Please enter valid Volume for Material
8	Size / Dimensions	Size/Dimensions must be maintained in SAP	Please enter valid Size/Dimensions for Material
9	Material Group	Material Group must be maintained in SAP	Please enter valid Material Group
10	Old Material	Old Material Uniqueness check	Old Material Already exist in Staging area
			Old Material Already exist in SAP

DMAG™

Value Proposition

DMAG Value is demonstrated beyond MDM and Cleansing

Functionality	Value
1. Data Cleansing	• 100% Error Free Data and Secure Capture
2. *Data Audits and Diagnosis*	• Reliable and Scalable solution for additional Scenarios
3. *Web Interface for Data Capture (Customer, Vendor, Material, etc)*	• Digitization of MDM Process
4. Proactive Data Validations	• High quality Product Information Management (PIM)
5. Work Flow Approvals	• The effort and timeline reduced by HALF – Upto 50% overall effort reduction
6. Supports mapping, transformation & conversion while migrating from ECC or Non-SAP systems (MS/ Oracle / JD Edwards, etc.) to S/4 HANA	• Speed to Master Data Implementation by 50 - 60%
7. Data Inconsistencies report during migration between source and target S/4 HANA systems	• Optimizes Master Data Stewarts FTE – ON GOING - 60% FTE Synergy Savings
8. Ongoing Data Quality Metrics & Data Governance Framework	• Data Carve outs for Non-Productive data

<u>Note</u>: DMAG is Perpetual - can be used in SAP ECC or S/4 HANA all Versions

#	Requirement Types	Requirements in Detail	Possible Y / N	Demo
1	Vendor Creation	A Web form for new vendors to enter their details (Name, PAN, Address, GSTN, Bank Details etc.)	Yes	Y
		Create Vendor credentials for the Web form for him to login & fill his details	Yes	N
		Ability for the vendors to edit certain details in future e.g. Bank account No	Yes	N
		Ability for the vendor to attach multiple docs in the web form	Yes	N
		A unique identification no. for each Web-form filled & submitted by the Vendor	Yes	Y
		Ability to check automatically with the govt. database PAN, TIN & GSTN details	Yes	N
		Workflow with one or multiple approvers for approving the Vendor details before it gets created in system	Yes	N
		Auto reminders to approvers in case of pending approvals	Yes	N
		Ability for the approvers to add certain data to the Web-form (e.g. Payment Terms)	Yes	N
		Ability for the approvers to return the form to the previous stage	Yes	N
		Duplicate Checks against the existing SAP database (e.g. Name, Mob No, PAN, GSTN etc.)	Yes	N
		Interface with SAP to push new/amended Vendor data for automatic Vendor creation in ERP	Yes	Y
		Interface from SAP to the Web form for updating ERP Vendor Id	Yes	Y
		Auto Notification to the Vendor/Requestor after Vendor creation/ updation in ERP	via mail	N
		Ability to define & build new Business Logics	Yes	N

#	Requirement Types	Requirements in Detail	Possible Y / N	Demo
2	Customer Creation	A Web form for new Customers to enter their details (Name, PAN, Address, GSTN, Bank Details etc.)	Yes	Y
		Create Customer credentials for the Web form for them to login & fill their details	Yes	N
		Ability for the Customers to edit certain details in future e.g. Mob No, Email Id	yes	N
		Ability for the Customer to attach multiple docs in the web form	yes	N
		A unique identification no. for each Web-form filled & submitted by the Customer	yes	Y
		Ability to check automatically with the govt. database PAN & GSTN details		N
		Workflow with one or multiple approvers for approving the Customer details before it gets created in system	yes	N
		Auto reminders to approvers in case of pending approvals	yes	N
		Ability for the approvers to add certain data to the Web-form (e.g. Credit limits, Business Unit)	yes	N
		Ability for the approvers to return the form to the previous stage	yes	N
		Duplicate Checks against the existing SAP database (e.g. Name, Mob No, PAN, GSTN etc.)	yes	N
		Interface with SAP to push new/amended Customer data for automatic Customer creation in ERP	Yes	Y
		Interface from SAP to the Web form for updating ERP Customer Id	yes	Y
		Auto Notification to the Customer/Requestor after Customer creation/ updation in ERP	via mail	N
		Ability to define & build new Business Logics	yes	N

#	Requirement Types	Requirements in Detail	Possible Y / N	Demo
3	Material Master	Web based Material Master creation form	yes	Y
		Ability of the system to propose existing Material (from ERP) while entering details of Material during its creation	yes	N
		Duplicity check of existing Material with the Materials which exist in the current ERP while creating Material	yes	N
		Semantic based recognition/duplicacy checks (e.g. 5 cm vs 50 mm, minor variation in desc with & without dot)	yes	N
		Workflow with one or multiple approvers for approving the Material details before it gets created in system	yes	N
		Auto reminders to approvers in case of pending approvals	yes	N
		Interface with SAP to push new/amended Material data for automatic Material creation in ERP	Yes	N
		Interface from SAP to the Web form for updating ERP Material Id	yes	N
		Auto Notification to the Requestor after Material creation/ updation in ERP	yes	N
		Ability to define & build new Business Logics	yes	N

#	Requirement Types	Requirements in Detail	Possible Y / N	Demo
4	Data Quality Workbench (For existing Data)	Pre-defined logics & models to check, de-duplication, accuracy, validness & completeness of the information of the Master records	Exists in DMAG	Y
		Ability to define & build new Business Logics	-----do-----	Y
		Workbench/Interface for users to quickly correct/update the Master records	-----do-----	Y
		Ability to pull certain transactional data related to the Master data record (e.g. for Vendor open balance, for existing Inventory etc.) onto the Workbench to enable the ease of decision making. E.g. ((i) If there is an open amount in Vendor Account, it cannot be directly closed without an action in ERP. (ii) If there are 2 duplicate Material Items, the record cannot be merged without Inventory movement))	-----do-----	Y
5	Additional Features	Audit trail for creation & edit in Master Data	-----do-----	Y
		Ability to interface/connect with 3rd party applications	In principle yes	
		Inbuilt functionality of Email Verification, Mobile No verification in the tool	No	
6	Workflows for other Masters	Ability to create Customized Workflows for creation of additional Masters (e.g. BOM, Pricing etc.)	Yes	N
7	Data Cleansing	One time "Data cleansing" activity	Yes	DMAG built-in feature