Data Migration/Conversion to SAP from Legacy systems - Our Strategy

Project Implementation Team

SAP Consulting Services - Implementation, Deployments & Support for your business needs

Contact us at BDM@101ERPTEAM.COM to know more about our ERP Implementation services.

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Introduction:

This white paper will give an overview to our medium and small business customers on how we plan & execute a data migration/conversion project.

As a customer you know that when SAP ECC system goes live, it should have necessary master & transactional data so that the business users can start using the system for their normal transactions. Loading data into ECC system is not a quick process, it by itself needs to be a project carried out in parallel with your Functional implementation.

During an SAP implementation process, data migration/conversion (DM/C) is a very critical step. In this step data is planned, prepared and loaded into SAP from legacy system during this process.

What is DM/C?

Data conversion is a translation process where data from one format is translated to another so that it can be used in SAP system.

For example: In legacy system you might have a field for materials/items that is 15 numeric digits but in SAP the field length for material master is 18 Alpha numeric characters. It is important to analyze and understand how this field will be converted and ensure the integrity of the data when it is loaded into SAP.

Data Migration is the process of loading the data from legacy system into SAP system thru several load programs/jobs.

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Types of Conversions & Data:

Based on the requirements we identify what type of data conversion process is required for our customers, typically they fall into two categories: Manual & Automated

Manual Data load process:

If there are data that are very complex in nature, or requires special handling or the amount of data is very trivial by volume and where spending effort and time doesn't justify an automated process can be considered for a manual load. The manual loads are performed by manual data loaders using pre-built or standard screens in SAP or other interfaces.

Automated Data load process:

This is a standard process where we address huge volumes of data and wherever manual data load is not performed. In this process the data from the legacy system is extracted from the legacy system , translated, and using a load programs, its loaded into SAP – traditionally using LSMW, BAPI's ,IDOCs or sometimes using custom data load programs developed in ABAP language in SAP. If required third party tools can also be utilized for the data load process.

In SAP there are two important types of data used in manual and automated process:

SAP Master Data:

This is the data that does not change often, but does get changed and transactions depend on this SAP Master data. Without proper master data in SAP many transactions does not post/executed correctly.

For example: General Ledger in FICO module, Vendor master from MM module, Customer Master from SD module, Asset Master from FICO module etc.

Typically we suggest that we convert and load the master data first into the SAP system before we load transactional data.

Transactional data:

This data cannot be changed; this data is created in SAP as a result of a business user completing a business transaction such as creating a Purchase Order (MM), creating a Process Order (PP), creating a GL journal entry (FI) etc. This type of data can be reversed or cancelled but usually not changeable. Transactional data depends on master data. Before a transactional data is executed in SAP, proper master data validations are carried out in the background. This type of data is loaded into SAP just before going live in SAP. What transactional data needs to be converted into SAP is determined case by case basis.

Typically customers does not require transactions that are too old (historical data) and recent transactions might need to be loaded into SAP. We suggest the customers not to convert historical data as it's a time consuming process and value added is insignificant. We always advise customers to keep the historical data archived or made available in the legacy system, in case if needed for audit purposes or for need basis.

Key Decision Making:

Typical key decisions part - 1 questions that we ask our customers before a DM/C projects. The below list of initial key decisions part 1 questions will be followed up with a part 2 questions. Part 1 and Part 2 questions and answers workshop sessions typically help us understand what our customers' needs are to the best possible on a very high level.

KD1#	Key decision questions & Answers – Part I
1Q	Are you migrating data from non-SAP system into a SAP system?
2Q	Are you migrating data from SAP to SAP system?
3Q	What SAP system should the data be migrated into - For example: ECC 6.0 or BI 7 etc?
4Q	If ECC system, which module within ECC data migration is applicable - For example: MM, WM, FI, SD etc, if other systems please specify?
5Q	Do you have any non-SAP data migration tool that you own - for example: Back office etc?
6Q	Is it a one-time data load or more than once from the legacy system into SAP?
7Q	The data that will be loaded into SAP will be Master data or Transactional data or both- For example: Master data: GL, Vendors, Customers, Materials and Transactional data: GL Journal Entry, Vendor Payments, Purchase Order Creation, Open transactions etc
8Q	Do you require to migrate historical data into SAP or just current?
9Q	Estimate the volume of data that needs to be migrated in terms or MB?
10Q	The legacy system data is always in English language, if not specify?
11Q	Is the SAP live already where the data needs to be migrated to?
12Q	Will there be a requirement for SAP outage during the migration process ?

Project Plan:

101ERP-DM/C Key Decision workshops

Complete Key decisions Part 1, Part 2 & Part 3

101ERP-DM/C Project Preparation

**Evaluation,
High-level planning, Data auditing & Prep.
Data Migration workshops with functional teams
Data Migration scope & Legacy Data identification**

101ERP-DM/C Project Blueprint

**Identifying Fields and structures relevant for DM/C
Translation & Extraction analysis
Profiling and analysis of legacy system data to meet data migration requirements
SAP Landscape analysis
Identify/Build Load programs/objects/processes
Infrastructure Setup execution
Training the project team**

101ERP-DM/C Project Realization

**Finalizing & refining data migration scope
Full migration extracting Legacy Data
Transformation process to convert to SAP data
Cleansing process
Data mapping process
Execute programs/jobs/process to populate data in DEV
Prepare cut over process documents
Coordination with functional, basis and other teams.
Unit Testing**

101ERP-DM/C final Preparation

**Full load test in QA environments
Load mocks in the production environment
Validating data and fixing mapping errors for Mock ups
Business users team training
Go-Live readiness check**

101ERP-DM/C GOLIVE

**24/7 Extreme Support mode Initiation
Cut over execution and start of data loading to production.
Validate data and functional sign offs
Release system**

101ERP-DM/C Extreme 24/7 GOLIVE support

**24/7 support team in place
Fixing issues based on priority**

101ERP-DM/C Handing off to Normal support team & Signing off

Transition from implementation team to Customers support team

Data Migration Landscape:

As a good practice we recommend our customers to have at least three environments for the DM/C project to be executed successfully:

SAP Development environment – Most of the tasks associated with 101ERP-DM/C Project Realization is carried out and then migrated to QA environment for further task execution as per project plan.

SAP QA environment – Some of the tasks associated with 101ERP-DM/C final Preparation is carried out in this environment before production activities are done.

SAP production environment – where Load Mocks and 101ERP-DM/C GO LIVE is carried out in this environment. This is the system that will be used by the business users. Supporting this system during the Extreme 24/7 support phase happens in this system.

DEVELOPMENT   QA   PRODUCTION

Documentation Practices:

One of most important rule of thumb that our project team follows is to document every single thing! We don't want to create a situation where 10 yrs down the line, you as a customer did not know what exactly we did on a project, this is typically one of the mistakes that every implementation team does. We are not willing to do that. One of our documentation specialists will be onboard with the project team who will be overseeing good documentations. Some of the important documents used in a DM/C project are as follows.

- Key decision documentation:
- Workshop documentation:
- Functional Specifications:
- Technical Specifications:
- Data mapping documents:
- Test plan document:
- Unit & Load test script documents:
- Training documents:
- Cutover plan document:
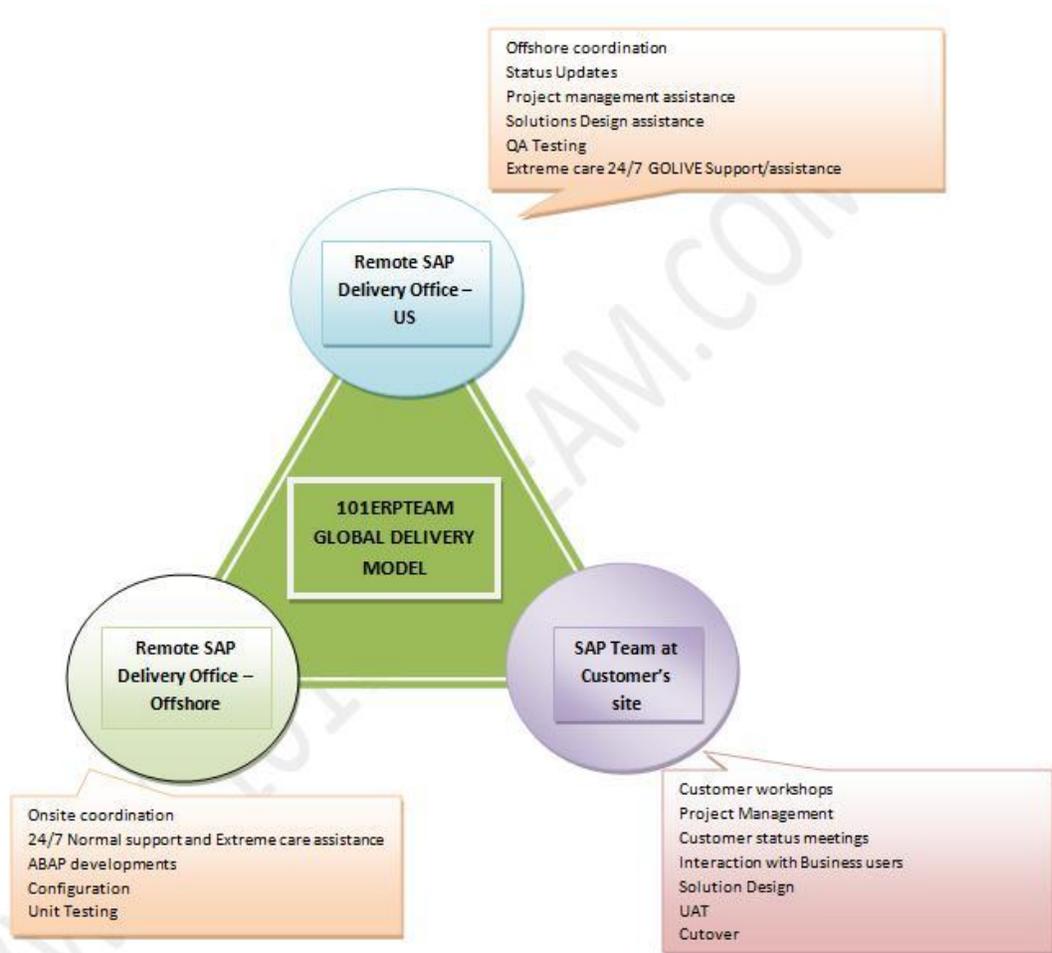- Defect tracking document:

Our Project team:

Customizable based on requirements

101ERP-DM/C Project Manager	On a day to day basis, aids the Customer Project Manager on project scope, objectives and deliverables of the complete project and provides methodology support for the project team, assists in the resolution of issues as necessary and helps PMO, Project team, Business users, external consultants, functional teams and other greater ERP team in carrying out any tasks.
101ERP-DM/C Project Lead	Owns the approach of the DM/C project and scopes the project, manages relationships with stakeholders and reports progress to customers project team. Develops and maintains the project plan
101ERP-DM/C Data Migration Architect	Architects the Data Migration solution based on the requirements and lead the data assessment and mapping between source and target systems also provides technical leadership.
101ERP-DM/C Functional Specialists	Functional consultants who are specialists in SAP modules where data migration is required such as FICO, MM, SD, WM etc. They are highly knowledgeable in master and transactional data in SAP. Other consultants from the team will work with the Functional specialists to understand the target data structures and source data.
101ERP-DM/C Migration & Landscape technical architect	Provides technical leadership and assistance to the team on hardware/software Requirements for migration/conversions/archiving, aids in Installation, and setup of automated migration software and architects and sizes the migration technical environment. Ensuring landscape availability for the project team
101ERP-DM/C Technical & Functional Data mapping Analyst	Designs and implements the process around data governance and structures, helps in data mapping process and does gap analysis between source and target data. Developers necessary jobs/programs based on project needs and make recommendation. Keeps up with best practices. Uses ABAP programs if necessary to develop - BAPI, IDOC, LSMW etc

Global Delivery Model:

Offshore coordination
Status Updates
Project management assistance
Solutions Design assistance
QA Testing
Extreme care 24/7 GOLIVE Support/assistance

Remote SAP Delivery Office – US

101ERPTEAM GLOBAL DELIVERY MODEL

Remote SAP Delivery Office – Offshore

SAP Team at Customer's site

Onsite coordination
24/7 Normal support and Extreme care assistance
ABAP developments
Configuration
Unit Testing

Customer workshops
Project Management
Customer status meetings
Interaction with Business users
Solution Design
UAT
Cutover

Conclusion:

Planning and executing a DM/C project is a critical step in your SAP implementation. As a customer you rely on good data for good business. Medium & Small businesses can take advantage of our Robust & cost effective migration & Support solutions. Our solutions are based on recent trends in technologies, home grown templates and excellent ERP team that can deliver what was promised to our customers.