Data Conversion Strategy

- Must address all required data objects necessary to initialize the databases
- Data objects are the tables and fields
  - Master data (e.g., materials, vendors)
  - Transactional data (e.g., orders, purchase requisitions)
Data Conversion Plan

- Business process teams identify data sources
- Identify data objects to initialize in ERP
- Identify data objects used by ERP but not controlled by ERP. Establish agreements with owners of these data objects
- Create a Data Migration Register for all data objects that serves as a central point of information for data conversion
- Create and finalize any program specifications for each data conversion
- Map legacy data to ERP
- Identify data gaps
- Identify data migration method for every data object to ready data for cleansing
- Identify data object owner and develop a reconciliation and balancing process to assure data quality in ERP
- Organize and prioritize data transfer to ERP
- Archive untouched legacy data
- Test the data migration method to convert the legacy data into intermediate databases. This test should be a repetitive process until both legacy and ERP Data Conversion Teams are satisfied the data objects will load into the ERP. Testing and retesting is a critical and best practice to assure quality and integrity of data loaded into the Production ERP
- Identify the time required to execute each data migration method. These timings are critical for the go-live planning

Data Migration Process

Legacy Data → Conversion (automated or manual) → Interim Staging Data → Cleanse Data → Direct Load → ERP Data
Possible Failures

- A missing source file
- A system failure
- Inadequate metadata
- Poor mapping information
- Inadequate storage planning
- A source structural change
- No contingency plan
- Inadequate data validation
- Incorrect data conversion process

The Need for Cleansing Data

- Accurate, e.g., no missing records
- Correct, e.g., data entry standardization
- High quality data
- With thoroughly cleaned data users have greater confidence in roll-out

Data Checking

- Completeness
- Comprehensibility
- Correctness
- Consistency
- Business Rules
Data Migration Register

- Create during Blueprint phase
- Serves as a central point of information for data conversions
- **Data Migration Register** lists all data objects detailing:
  - Upload reference to tie to business process
  - Priority of the data
  - Name
  - Owner responsible for data
  - Type of data (master or transaction)
  - Prerequisites for loading
  - Data volume
  - Upload procedure and reference
  - Clean-up, mapping and conversion responsibilities and status’s (percentage completed)
  - QA status
  - Cut-over timings, dependencies and sequence for transferring the data to the production ERP
  - Additional comments such as changes required after go-live

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Example Mapping of Data Elements

**Legacy ➔ PantherSoft**

- **Classification ➔ Career/Level**
- **Schools & Colleges ➔ Academic Groups**
- **Academic Depts ➔ Academic Organizations**
- **Major ➔ Plan**
- **Tracks/Concentrations ➔ Sub-Plan**
- **Reference Number ➔ Class Number**
- **Course Prefix ➔ Subject**
- **Course Number ➔ Catalog Number**
Example Mapping of Data Elements

- **Term = CYYT**
  - C = Century (last digit of century)
  - YY = Year (last two digits of the year)
  - T = Term Code (single digit to represent Fall, Spring and Summer)
- **Term examples:**
  - 1031 – Spring 2003
  - 1035 – Summer 2003
  - 1038 – Fall 2003

Success Factors

- Correct mapping of legacy data elements to ERP data elements
- Identify and manage any field attribute changes before production start
- Identify early in the development life cycle the amount of data to be transferred and its timing
- Produce an audit trail
- Focus on quality and consistency of data provided and cleansed
- Testing and retesting prior to production loading