



CHECKLIST

DATA CONVERSION

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Document Purpose

This checklist is a brief document listing the items to be noted, checked, remembered, and delivered when completing the accompanying template and/or project management practice.

Activities Checklist

While Data Conversion is a one time activity this high-level checklist spans the full life cycle in preparation for data conversion. It should be noted that this list while attempting to be comprehensive is not all-inclusive.

	Have all potential project risks related to data conversion been identified as early in the project life cycle as possible?
	Have all risks identified related to data conversion been documented in the project charter?
	Have all risks related to the data conversion and their potential consequences been clearly communicated to project sponsors and stakeholders?
	Is the data conversion planned carefully?
	Has every detail, and step, of the planned migration/conversion process been effectively communicated to prevent confusion and/or misinterpretation?
	Are the business owners and other relevant stakeholders involved and participating in the data conversion/migration process?
	Have system backups been taken that allow the project team to revert back incrementally to any point in the system's life?
	Have test conversions/migrations been performed with a sampling of the data before attempting to apply the solution to the entire system?
	Has a controlled, full-volume, "dress rehearsal" test, of the activities required when converting data to the target system been performed? This is an end-to-end test of the entire data conversion process and the data on the new system. It includes testing the processes and procedures planned for the conversion, the new system data, business rules, technology, etc. This may be less important in small low-risk project but is especially important in large high-risk projects where many users may be impacted by unforeseen events resulting from the migration.
	Have conversion/reconciliation results been validate/reconciled to determine that the converted data is accurate and complete?
	Have the system(s) and supporting components been inventoried to understand what it is that the project team will be working with as they transition the data?
	Have the data and data types being converted to understand information such as: the amount, type, and quality of data; the original and target sources and formats and any cross-reference complexities?
	What is the experience level of the project team? Will they be able to successfully perform the data migration/conversion? It may be necessary to hire additional resources or outsource some, if not all, of the work if the appropriate skill set is not available in-house.
	Has the criticality of the data been identified? This may impact the approach taken to convert/migrate the data as well as the amount and type of resources required to successfully perform the effort.
	What is the most appropriate, low risk, approach? Should the data migration be performed in-house or outsourced or a combination of the two? Each option has its own advantages and disadvantages. Some advantages of performing this effort in-house may include control and security of data, schedule and resource flexibility, and possible cost savings. Outsourcing such efforts will cost money but often brings a level of expertise not always available in-house. Outsourcing also allows for internal resources to be allocated towards other efforts and priorities.
	Is there a requirement to run parallel system? Determine if there will be a one time cut-over to the new system, archive the old system or keep it running, etc?
	What are the costs, schedules, software needs, and any required human intervention for the conversion/migration process?

	Has a high-level mapping occurred to determine which data elements in the existing system will be converted or migrated to the new system? Decide which data will be transferred, converted, which is redundant, etc.
	Have business rules been developed that outline how items will be handled? Items such as blank records, new codes, inappropriate entries, etc.
	Have conversion scripts, as needed been developed? Conversion scripts are used for extracting data from the source, transforming the data as needed, and loading the data into the target.
	Has the best human and/or software approach been developed to maximize quality and minimize expense?
	Has a schedule been developed that maps out exactly how the conversion/migration is expected to happen?
	Has a specification document been developed that maps out exactly how the converted data will look?
	Has planning taken into consideration items such as communication, education, data normalization, quality assurance, and validation of data accuracy and completeness.
	Has a backup of all data been generated prior to any manipulation or migration? This backup represents the system baseline prior to any human and/or software interaction with the system or system data outside of the normal operating processes. If needed, this backup can be used to restore the system. System backups should be taken incrementally while stepping through the process of preparing, moving, and manipulating data. This is done to allow the project team to revert back to any point throughout the process that they identify as correct if for some reason they run into issues during later steps.
	Has test data been extracted from the legacy system?
	Has the test data been normalized? Often one of the main goals of performing a data conversion/migration is to combine multiple data sources into one standardized format. This is referred to as normalizing data. Data is often normalized by structuring database tables logically so that they contain information related only to the items within that table and then linking/joining tables appropriately in order to build the functionality desired by the database user. This is done to minimize unnecessary redundancy and increase data efficiencies.
	Has a test conversion of a sample of existing data been performed? Have any adjustments been made if necessary?
	Are more than one mock conversions necessary based on the criticality of the system? A mock conversion is a controlled "dress rehearsal" of the execution activities required when converting data into the target system. It is meant to be a pre-go-live test in that everything that occurs in a go-live conversion has been tested in a mock conversion. The main objective of the mock conversions is to test the conversion process and scripts. The mock conversions are intended to identify and resolve any conversion software issues, address any configuration issues, identify any additional data validation and verification efforts, and prove the conversion procedure. Each mock conversion will simulate the real go-live process with actual data volumes.
	Is the project team confident that the data conversion should go smoothly? Has a plan for the full conversion been developed? Has the date been communicated when the conversion is taking place? Consider performing the data conversion during non-business hours, preferably on a Friday evening. This allows a few days of contingency (over the weekend) to resolve any last minute issues or to revert back to the system backup taken just before the conversion/migration began. For on-line systems, consider shutting down service while the data migration is run.
	Has the system data been normalized?
	Is the data ready for conversion?
	Has the converted data been validated/reconciled for accuracy and completeness? Check items such as: <ul style="list-style-type: none"> • Formatting of data elements • Data completeness • Data accuracy
	Have duplicate data elements been eliminated?
	Have all issues been resolved?