Institute for Value Creation

Conversion Strategies:
Build We Must

IMPART SOLUTIONS

Conversion Strategies: Build We Must

"Green field" implementations of PeopleSoft or other "tier 1" ERP systems are few and far between. The vast majority of implementations are tasked with loading data into the new PeopleSoft system. On the surface, this requirement is not that complicated. However, implementation teams should consider these questions:

- Has the Chart of Accounts been streamlined?
- Have reporting hierarchies been redesigned?
- Have the business processes and business rules been changed?
- Is the entire team PeopleSoft-proficient?

As you can imagine, there is quite a "rip tide" under our placid conversion surface.

Data, Defined

An accounting system contains many different kinds of data, which can be categorized into two different groups:

Control data tells the system how to process the information it receives. This data is not transactional in nature. It does not contain financial / customer / vendor information. Rather, it is the infrastructure upon which the system is built. Examples of this type of data are calendars, ChartFields (the Chart of Accounts), Asset categories, and "PeopleSoft trees."

Transactional data is the information (financial, customer, vendor, etc) that is received from other systems or entered by end-users and processed by the PeopleSoft system. Over time, this data builds a picture of the organization. Examples of this data are: receiving a Federal Express bill for $400; generating a check for $20,000 to pay a contract programmer; or issuing a purchase order to buy 100 staplers at $1.50 each from Office Depot. Taken together over a period of time, these transactions build a picture of the financial results of the company.

Conversion, Defined

Conversion can be defined as the process of manipulating data from one format / system to another format / system. Data is extracted from the source system; certain values may be translated to different values in the new system; data is reformatted according to the new structure; it is processed by and stored in the new system. Thus, the information can be accessed in any manner supported by the new system.

Typically, control data (PeopleSoft configuration data) undergoes dramatic change in an implementation, and so cannot be easily converted. Certainly PeopleSoft requires control data for its operation. In fact the "Strategy and Planning" and "Design" phases of the project should be almost solely focused on configuration-related tasks.

There are many reasons why control data is not converted. The data may come delivered with PeopleSoft, such as currency codes. Often, there are configuration requirements that simply do not exist in the old system. A "Product" may be its own entity in PeopleSoft, where in the old system it was embedded in the "Account" value. The old configuration data can be used as a starting point, but there is little benefit to moving these values from the old system into PeopleSoft.

Transactional data, then, becomes the main focus of "data conversion."

Conversion Considerations

Simply put, the conversion process must ensure that PeopleSoft can accurately reconcile information from the old system (or systems). Balance sheets, income statements, accounts receivable reports, depreciation schedules, warehouse inventory, and check registers produced by the new system must reflect what was published from the old system.

As part of a PeopleSoft implementation, certain processes and current accounting conventions may be modified to take advantage of the inherent "best practices" embedded in the PeopleSoft software, as well as observed best practices in other Finance organizations. Historical data must be converted following the new conventions; these new conventions require a "convert and reconcile" exercise for users when they are called upon to research historical items. There is certainly a point of diminishing returns when converting history.

Often, as part of a PeopleSoft implementation, the Chart of Accounts is redesigned. The ChartFields may be expanded to include more detail, contracted to summarize information, or simply be "sliced" differently. Historical data should be considered when defining ChartFields:

- Increased granularity: If a "legacy" account is broken down into further detail, how should history be converted? Here, one of the new accounts is selected to hold the historical data. There is likely little value in "allocating" the old account to the various new accounts.
- Creating "conversion only" ChartFields: If the ChartField redesign is significant, this approach may offer the path of least resistance. A limited set of Accounts are created to capture historical data; these accounts are then closed to new activity when the system enters production. Closed Departments are handled in a similar manner.

An implementation provides a golden opportunity to pass data through a strainer, so that only the purest data is converted. Despite all best efforts, data can become dirty. The same vendor is entered more than once; perhaps with a different name or address (older systems may force this scenario). Customers are duplicated. There may be duplicate items, or perhaps the item counts in the system don't reflect the actual counts. Assets might exist in the system, but are no longer in use, or assets exist in the real world but are not found in the system. The amount of effort required to scrub conversion data is directly related to the accuracy of the current system data.

While it may be tempting to fully decommission the old system, removing every trace of it from the user's desktop and the data center is seldom a cost-effective approach. This approach will force the project team to devise an archive solution sooner rather than later! So, it is important to strike the right balance between limiting converted historical data and providing access to non-converted historical data. Ongoing business operations and typical research requests are processed (in the "new world") while the ability to quickly research atypical requests (in the "old world") is retained.

What Happens to the Financial Data Not Being Converted?

From time to time, research will be required into historical items that fall outside the date range for conversion. This eventuality can be addressed in a few different ways:

- Archived data: Copies of relevant reports from

the old system are maintained in a secure, on-line environment. Hard copy reports can also be stored. The old system is completely decommissioned, and cannot be used for research

- Previous system as inquiry-only: Via system security, the functionality of the old system is limited to a "view only" state. Report submission and any query capabilities are maintained, but no transactional processing can take place. Since the system is no longer a transactional system, no maintenance fees or upgrades should be required. Access to the system should be reduced to key personnel. The key benefits to this approach are that no training is required to operate the inquiry screens, and the level of conversion effort is reduced. However, this approach provides reasonable access to the data in a cost-efficient manner. A potential issue is that, in time, the organization will be running a "museum" piece; the long term costs to maintain outdated hardware, operating systems, etc may outweigh the initial benefits.
- Archival conversion: Historical data that falls outside the conversion date range is converted, but in an archived manner. This data would not be present in the transactional processing system, but in a fully configured "offline" PeopleSoft system with "inquiry only" security. The key benefits to this approach are that all electronic data is represented in the new Chart of Accounts and (perhaps) reporting structures, and is accessible through the same reporting tools. Since this system is not a transactional system, it can be built at some point after PeopleSoft enters production mode (so the organization would move from the "previous system as inquiry-only" to this model).

Financials Conversion Scope – Example

One implementation reality is that the window for entering production operations is limited. Often, the first and last three months of the fiscal year are "dead zones." So it is likely that conversion will take place in the middle of the year; this scenario can influence the conversion approach.

Here is a typical conversion approach (the abbreviations in parentheses indicate the PeopleSoft application that houses the data):

- Actual account balance data for two prior years (GL);
- Actual transactional detail from beginning of the year to the Cutover Date (GL);
- All current year payables activities (AP);
- Inactivated in the current year and active vendor and employee (expense reimbursement) information (AP, PO);
- All non-retired assets as of cutover date (AM);
- All open receivables as of cutover date (AR);
- All active customers (AR);
- All open purchase orders (PO);
- Current Fiscal Year budget (GL)

Production Cutover Approach

"Cutover approach" refers to the process of transitioning end users from the old system to the PeopleSoft system. A key aspect of this transition is the timing of the data conversion and an understanding of that impact on the Finance and IT areas.

In the example mid-year conversion, there are two

types of data conversion: historic and point-in-time. "Historic" refers to data from a period of time before cutover, where the data is typically not changed during the normal course of business. An example of this type of data is General Ledger account balances from prior years. "Point-in-time" data refers to items that are open or in process. Examples of this type of data are assets that haven't been completely depreciated and open purchase orders.

Historic data can be converted well before the actual cutover date. A major assumption, however, is that this data will not change. Prior year General Ledger balances fall into this category. Much of the Accounts Payable data can also be converted prior to cutover, as well.

The following sections address each of the conversion approaches for the example PeopleSoft application. The General Ledger conversion goes into a bit more detail on the options for loading history.

General Ledger Conversion

Overview

PeopleSoft processes detailed journal transactions, which build Ledger accounting balances. As journals are processed, they update a "bucket" in the PeopleSoft Ledger, corresponding to the ChartFields, fiscal year, and fiscal period of the journal detail lines. Taken together, these "buckets" hold the net activity per period for each ChartField combination (this information is stored on the LEDGER table).

Conversion Approach

The relationship between journals and the ledger offer a number of General Ledger conversion alternatives:

- Ledger Balance only: Here, the "end result" of journal processing is converted. This approach is a "ledger to ledger" conversion, where the old system's "buckets" are converted into PeopleSoft Ledger buckets. The net result of all transactions for a given time period is converted. The PeopleSoft system will not have supporting journal lines, so transactional historical reporting cannot be accomplished.
- Ledger Balance via Summarized Journal Processing: Rather than load the Ledger tables directly, PeopleSoft journal transactions that hold the balances are created. The journals are then edited and posted, building the balances and providing supporting detail. Of course, this detail is not valid for true historical research, since it is the sum total of all transactions for the time period.
- Ledger Balance via Detail Journal Processing: This approach is a "transaction to transaction" conversion, where each old system transactions is mapped to a PeopleSoft journal line, and processed in PeopleSoft. This approach provides a complete historical view of account balances and supporting transactions. It is also clearly the most intensive approach, from the reconciliation and processing point of view.
- Ledger and Journal Load: This approach provides the history and supporting detail of the "Ledger Balance via Detail Journal Processing" approach by a direct load of the ledger table with balances, and of the journal tables with transactions. This approach may be more suited to a PeopleSoft re-implementation, since the source data is already largely

organized in the appropriate format. The key benefit to this approach is saving the time required to actually edit and post detail transactions. One drawback is that both journal and ledger conversions are required. Once the ledger balances are reconciled, the ledger / journal relationship can be reconciled via the "Ledger vs. Journal Integrity" report (GLS7010).

The "Detail Journal Processing" approach can usually be leveraged for the ongoing journal interface processing.

Often, depending on reporting needs, a combination of approaches can be used.

Accounts Payable

Overview

Vouchers are entered into the system, forming the basis for creating payments. A voucher has a "header", containing information relevant to the entire voucher, such as vendor information, and "detail" lines, containing the item, amount, quantity, and so on. Payments are created in two ways. Pay Cycle Manager creates payments from many vouchers and is scheduled on a regular basis. Express Payment is used to create payments one at a time.

Conversion Scope Example

The Accounts Payable conversion options are similar to the General Ledger options, in terms of loading and processing vouchers. The direct load approach mitigates the issues of running pay cycles. The example conversion scope is:

- Current year payment information (closed and open vouchers)
- All active vendors and employees (for expense reimbursement)
- Vendors and employees that were inactivated during the current year (to maintain integrity of converted current year payment information)

All current year information will be converted to facilitate 1099 reporting and prevent duplicate payment of invoices.

Reconciliation is accomplished via be comparative reports (check register) and voucher sampling.

Asset Management

Overview

PeopleSoft Asset Management provides a mechanism for the acquisition, purchasing, categorization, depreciation, and retirement of assets. Asset books contain data such as cost, depreciation rules, and retirement information.

Conversion Scope Example

The three Asset Management "interim tables" that hold financial and physical data are populated with the old system data, and loaded into PeopleSoft via the Transaction Edit, Transaction Loader, and Depreciation Calculation programs. The example conversion scope is:

- All non-retired assets as of cutover date

Reconciliation will be comparative reports (depreciation schedules).

As part of cutover, some additional asset retirement may occur, so that the PeopleSoft system contains only non-retired assets.

Accounts Receivable

Overview

Pending items are processed by the Receivable Update process, and are used to create or update posted item and item activity information. Finally there are different methods that can be used to apply payments. Payment Predictor automates cash application, matching payments and items on selected values.

Conversion Scope Example

The example conversion scope is:

- All open receivables as of cutover date
- All active customers as of cutover date

When converting open items, there are two options. The current balance can be converted, or the transactional detail building the balance can be converted.

To bring in the balance only, the conversion program creates one pending item. When bringing in both the invoice and the credit memo, two pending items are created, each containing the same business unit, customer ID, and item ID. An appropriate entry type is assigned, as well as an amount and a number of other values. The Receivable Update program creates a row in PS_ITEM for the item, and two rows in PS_ITEM_ACTIVITY, one for each pending item. In other words, after both pending items are posted, PS_ITEM contains the balance for the item, and PS_ITEM_ACTIVITY contains all rows that affected the balance.

An open item conversion has the following advantages:

- Less complex interface programming requirements;
- Smaller conversion effort, in terms of the amount of data and related balancing activity;
- Better data quality – customers that exist in the old system may in fact no longer be customers;
- Simplified table setup for areas such as entry type and entry reason definition.

Reconciliation may be comparative reports (aging / dunning letters) and payment sampling.

Purchasing

Overview

Purchasing provides the capability to maintain vendors, build an item catalog, issue requests for quotes, and analyze procurement patterns. Requisitions are created and approved (automated Workflow is an option), and once approved are sourced, which takes the item from inventory (if maintained) or issues a Purchase Order. Or a Purchase Order can be input directly. Purchase Orders are reviewed, approved, and dispatched to vendors. Once an item is received from the vendor, the Purchase Order and receiving data is sent to Accounts Payable. Finally, Purchase Orders and receipts are reconciled and closed.

Conversion Scope Example

The example conversion scope is:

- All open Purchase Orders as of cutover date
- Vendor conversion should be accommodated in Accounts Payable conversion

Reconciliation will be comparative reports and purchase order sampling. Vendor information will be converted as part of the Accounts Payable conversion. All appropriate cross-referencing and / or renumbering of vendor information on purchase orders are also a consideration for this conversion.

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In a very real sense, the conversion process compresses years and years of the old system's transaction processing into months of PeopleSoft processing...so the effort required to create an accurate representation of historical information in PeopleSoft can be significant. Understanding the difference between configuration data and transactional data, and how these types of data should be treated during conversion, is important. The requirement for "data scrubbing" and the granularity of data conversion are also key factors in the overall conversion design. Finally, the amount of history to be converted, and the timeline for entering production operations, plays a significant role in the overall conversion approach. Conversion is not "sexy." It requires extraordinary attention to detail. Done incorrectly, the project fails. Done correctly, the organization will enjoy the confidence provided by a streamlined, efficient, and accurate system, with processes in place to ensure the data stays that way.

About the Institute for Value Creation

Delivering exceptional results requires exceptional knowledge—of industries, of solutions, of market conditions, and of business processes. Impart Solutions's Institute for Value Creation (IVC), provides understanding and solutions to key management issues through IVC's series of research, events and whitepapers.

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