Catalyst Manufacturing ERP Implementation Guide

A summary of the primary project tasks that would be involved with a formal ERP project implementation below. Each step is not necessarily required in every situation so you'll need to evaluate in light of your particular project and needs. For a comprehensive review of the subject, please refer to the book, ERP: Making It Happen by Wallace and Kremzar. APICS is also a good resource for educational and training materials on the subject of ERP implementation. They can provide on-site and remote education and training options.

1. Identify the project team consisting of functional team leads who will be implementing the system as well as someone who will manage the software implementation to completion.

2. Provide overview training of the software to the functional team leads. This can be accomplished by formal system training or having the leads review the software and help topics that relate to their functional areas.

3. Populate Foundation Data
   - In this step, you'll create customers, vendors, items, operations, work centers, locations, operators, shop calendars, and all list data needed to support customer orders, shop orders, and purchase orders. Refer to the Populating Data help topic for more details. If you have the QuickBooks Link, you may be able to import customers, vendors, items and other list data directly from QuickBooks. You can also use the standard import spreadsheet (CatalystImport.xls). When entering data into the import spreadsheet, enter a few test records and try to import those before populating the spreadsheet with all of your data.

   - Other considerations include standard operation times, item lead times, lot sizes, order policies, labor and material backflush strategy, scrap rates, yields and work center schedules..

   - The setup of your bill of materials and routes is critical. They need to accurately reflect the product setup and run times, work centers, and component quantity requirements They also need to have the proper structure i.e. levels in the BOM. For example, if you make an intermediate part or sub-assembly and it resides in inventory for a period of time before it's used in the next level, it needs to be a separate item number and level in the BOM. Each level in the BOM will have a product configuration with its own product route and BOM.

   - Other considerations include decisions on warehouses and locations, outside processing requirements, and standard forms, reports, and procedures needed to support requirements.

4. Provide function-specific software training for the project team leads (e.g. sales, planning, production, inventory, finance, shipping/receiving, etc.). The leads will need to be familiar enough with how the software works to be able to determine how to design the future state in their respective functional area. It's not necessary for each functional team lead to be trained and understand all functional areas (although this may be desirable from a cross-functional training standpoint), but they should be knowledgeable of how the software works for their functional area.

5. Map current process to target process
    *   This involves creating process flow charts for the current state (without Catalyst) and future state (with Catalyst). The process depends on your manufacturing environment. Please refer to the process flows in the Catalyst Help menu for an overview of the Catalyst processes.

    *   What basically occurs in this step is an evaluation of your current business processes and mapping them into how you're going to perform them using Catalyst. Every aspect of your business that will be using Catalyst needs to be considered. For example, how will you enter and maintain sales orders, plan materials and capacity, schedule production, purchase materials, receive materials, ship product, maintain accurate inventory, create/maintain customers, create/maintain vendors, create/maintain items, maintain product configurations, etc. This step is really what takes the longest and is the most critical to the success of the project.

    *   You can use the data you've populated in step 1 to help you determine the future state by prototyping a subset of your items through each of your business processes. To create a test or "sandbox" environment for this purpose, refer to the help topic found on the Catalyst MFG Help Center.

6. Perform gap analysis to identify business and software gaps
    *   Gaps are changes you need to make to either business processes and procedures or software functionality to support the way you need to do business. On the business process side, it could mean you need to create a new form or ticket to capture inventory movement (i.e. material transfer) or create a procedure to conduct cycle counts. On the software side, it could mean the creating a new report or modifying the software to support a key business requirement.

    *   Gap analysis can simply involve each functional lead performing their different tasks in the sandbox environment. All the functional team leads will need to test or prove out how they will use the system at go-live and document the process so they can train other users in their functional area.

    *   Both business and software gaps need to be resolved in this phase. This requires designing and specifying the business processes and software modifications. The design changes are executed and completed in the preparation for go-live.

    *   If applicable, define user-level security by defining roles and assigning access levels to the forms, reports and menus.

7. Prepare Organization
    *   Implement the design changes identified in the previous step. This includes both the business and software changes. On the business side, consider the following:
        o   Identify production control activities such as who will prepare shop packets, what will the shop packets consist of, who will be responsible for printing and distributing shop packets, and who will be responsible for documenting production quantities and material usage. Also, will labor be

reported to show how much work has been completed on a job? Will material and labor variances be reviewed to verify transactions are reported correctly?

o   Identify inventory control activities and who will execute and manage those tasks. For each inventory transfer, material issue, production receipt, etc. identify who and when the transaction will be entered. To maintain accurate inventory records you would like each system transaction to occur as close to the physical event as possible. The material issue transaction can be handled with a backflush transaction if the normal usage variance is low, volume is high, and the relative cost of the component is low.

- Develop written procedures as required. You may also want to include screen shots and other system instructions in your procedures. These could then be used for training and reference purposes.

- Project team leads will need to perform training for all other users in their functional area.

- If applicable, setup user-level security as defined in the design phase.

- Plan cutover for final implementation. This includes populating all your open orders and performing a physical inventory.

8. Go-Live
- If you've performed all of the above steps, this should be a non-event, however, you should be prepared to respond to user requests for login information, password resets, installation problems as well as follow-up training issues. If an issue arises that wasn't considered in the design and implementation phases, call the functional team leads together as needed to resolve.

- Don't forget to recognize and reward the functional team leads and others involved in the implementation for all their hard work and a job well done.