



ERP Budget 101: Part II

Constructing the Managing-Level Budget

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This article is part two in a two-part series on the ERP budgeting process. In part one, we outlined the steps involved in assembling an initial planning budget for an ERP project. This article summarizes the steps involved in developing the budget you will use to manage and track your ERP Project expenditures.

Following are three types of budgets typically involved in an ERP implementation.

- (1) the Rough Order of Magnitude budget,
- (2) the Planning-Level budget
- (3) the Managing-Level budget.

In part one, we outlined how these three types of budgets vary in purpose, detail, accuracy, and the time it takes to complete. In part two, we focus on the final Managing-Level Budget.

Purpose of a Managing-Level Budget

A managing-level budget should be as comprehensive and as detailed a budget as possible in order to effectively manage the costs of an ERP implementation.

The managing-level budget contains the most detail of the three types of budgets, and can take several weeks to finalize. In fact, the managing-level budget is not finished until after contract negotiations with the various vendors have been concluded and the planning phase of the implementation project has ended. If prepared properly, the managing-level budget will be accurate to within five percent of the final project costs, given no major scope changes occur during the implementation.

Developing the Managing-Level Budget

The development of a managing-level budget is simply the refinement of the planning-level budget based on more current and accurate information for each of the ten ERP budget categories¹.

Refinements based on vendor negotiations.

Since the managing-level budget is produced after contract negotiations with the various ERP vendors, the institution now will have exact costs (not estimated costs) for various budget categories. For example, at this point in the budgeting process the institution should know the following costs:

- Software licensing and annual software maintenance costs

¹ For a list of these ten categories see Table 2 in Ismail Jama's article, "ERP Budget 101: Constructing the Initial Planning Budget." This article is located in the ERP Library at www.collegiateproject.com.

- The various third-party (ancillary) software licensing and maintenance costs
- The database licensing and maintenance costs
- The hardware costs and maintenance
- Any reporting solutions that were part of the total ERP package for the institution

After all negotiations have been completed, the institution will also have better estimates of the implementation costs. In fact, if the institution has negotiated a “fixed price” contract, the institution will know exactly what the training and consulting costs will be. Even if certain elements of the implementation services are variable, rather than fixed, institutions sometimes negotiate for fixed travel costs. For example, often times the institution will negotiate a fixed rate for travel expenses, usually in the form a fixed dollar amount per consulting hour.²

Another source of budget refinements is scope changes that may be made during the negotiation process. For example, the institution may decide to delete certain pieces of the vendor proposal. To illustrate, the institution may decide to drop the document imaging part of the ERP package, or perhaps drop a third-party room scheduling solution, both of which had been included in the original planning-level budget.

Also during the negotiation phase, the institution could decide to add components not originally planned. For example, perhaps a misunderstanding occurs related to what was included in the RFP response. After reading the RFP response the institution believed that certain functionality was available, but during negotiations they discovered the functionality was not available. As a result, the institution might add to the contract a particular third-party software solution that will supply the functionality.

² A caution here: if the institution negotiates a fixed price for either services or travel, the vendor will add a substantial contingency into the rate in order to protect themselves.

Refinements after the planning phase. Final refinements in the managing-level budget will also occur during and shortly after the planning phase of the ERP implementation. An example is housing for hardware. Prior to the planning phase, the institution believed that new hardware would be housed in a known central location. After planning, the institution might discover that additional space will have to be built or rented. Another example is after planning the institution discovers that more staff will be required in one or more departments to handle the service level requirements during the implementation.



Reducing the contingency. Once the managing-level budget is assembled, institutions should make one final refinement in cost estimates. This refinement involves reducing the size of the contingency that was used in the planning-level budget. In many cases the planning-level budget will have ten to fifteen percent contingency while the managing-level budget might only have a five percent contingency.

Developing a Cash Flow Budget

Knowing the total costs of each of the various ERP budget categories is extremely important from a cost management standpoint. However, to manage the budget properly, an institution should now develop a cash flow budget for the project. This involves developing a budget expenditures model over time.

From a cash flow standpoint, most institutions will at least break out the budget expenditures by year. Some institutions break out expenditures semi-

annually or even quarterly. From our experience, we recommend that institutions break out predictions of cash outlay for *each and every month* of the implementation for budget tracking purposes.

Producing a cash flow model by month is fairly simple for some of the budget categories, but more difficult for others. In the end institutions must make some assumptions about cash flow and later adjust based on actual expenditures.

Easy categories for cash flow estimates. The easy categories for a cash flow budget include the software licensing costs and maintenance costs from the various ERP vendors, as well as the hardware, database, and reporting solution costs. These amounts and payment terms are specified by contract allowing easy cash flow predictions. Further, staffing costs (including new hires or “backfills” and third-party project management) are fairly easy to estimate on a project timeline.

A difficult category for cash flow estimates. The most difficult budget category to estimate from a cash flow basis will be the implementation costs, including travel. These costs comprise the consulting and training services that will be needed to implement the software over the life of the project. These professional services are usually the single biggest cost category in the budget.

Help from the implementer. We have found that the best approach to develop the cash flow budget is to enlist the help of the ERP implementer in getting monthly consulting estimates (including travel) over the life of the contract. These monthly estimates must reflect as much as possible the realities of the effort required at different points on the timeline. In other words, you should not simply divide the total implementation costs by the number of months of the project. Generally the implementer should know *a priori* when more effort will be expended at certain points in the timeline than at others. For instance, we know institutions will incur substantial consulting costs at start up, at times when more than one module is being implemented

simultaneously, and before certain milestone dates, such as “go-lives.”

Thus the first step is to sit down with the implementer firm and find out the module sequencing, the total number of months for implementation, the number of months in which more than one module will be implemented, and the various key milestone dates. Predicting monthly consulting expenditures is often more of an art than science. Our advice is to get the best information you can, and then make educated guesses. You can always begin to adjust the budget expenditure model as situations change during the implementation.

Implementer resistance. We have found that vendors will resist this exercise for one or more reasons. Thus it is important to make sure you include this monthly cash flow exercise as a contract requirement for ERP implementers.

Tracking the Cash Flow Budget

An important element for staying within budget is to put in place a monitoring and feedback process to provide the institution constant information concerning budget expenditures against plan. These expenditures should be broken down by the various ERP budget categories.

Once you have a monthly budget expenditures model, you can easily compare actual expenditures to expected expenditures each month. And as the project progresses, you will focus on the cumulative dollars spent compared to the predicted cumulative dollars spent, separately for the various ERP budget categories.

Exhibit A below shows an example of how to track project expenditures, by category, according to a project expenditure model developed in the planning phase of the project. This information is shown graphically to the steering team and various other institution executives so they can instantly grasp the status of the project at a high level. At the same time, executives can drill down to discover details needed for further analysis.

The executive dashboard in **Exhibit A** was for a simultaneous system implementation of an ERP solution across nineteen higher education institutions and a system office. The gauges on the right hand side of the dashboard give system executives a high-level understanding of budget expenditures against the plan. The bar graphs in the center of the dashboard gave executives specifics, broken down by several major budget categories.



A Final Note

Once you develop a managing-level budget and a monthly expenditures model based on this budget, your institution has the information it needs to effectively manage ERP costs.

However, staying on budget is more than having a good budget in place. You must have a strong dose of management skills to keep the project on budget. In the ongoing management of your ERP budget, the best way to avoid unwanted costs and stay within budget is to follow the five principles below.

- 1. Keep the project on schedule.**
Schedule delays invariably lead to increased project costs.
- 2. Manage project scope.**
Scope creep always increases project costs. Manage scope aggressively according to a pre-established scope management process.
- 3. Limit software modifications.**
Limiting software modifications is an offshoot of managing project scope. Software modifications not only drive up project costs, but they also increase ongoing costs during periodic software upgrades. Limit and aggressively challenge software modification requests.
- 4. Manage vendor hours.**
Unmonitored vendor hours will drive up implementation costs.
- 5. Frequently publish a budget expenditures dashboard.**
Feedback through frequent dashboard reporting raises the budget awareness level for all project participants

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