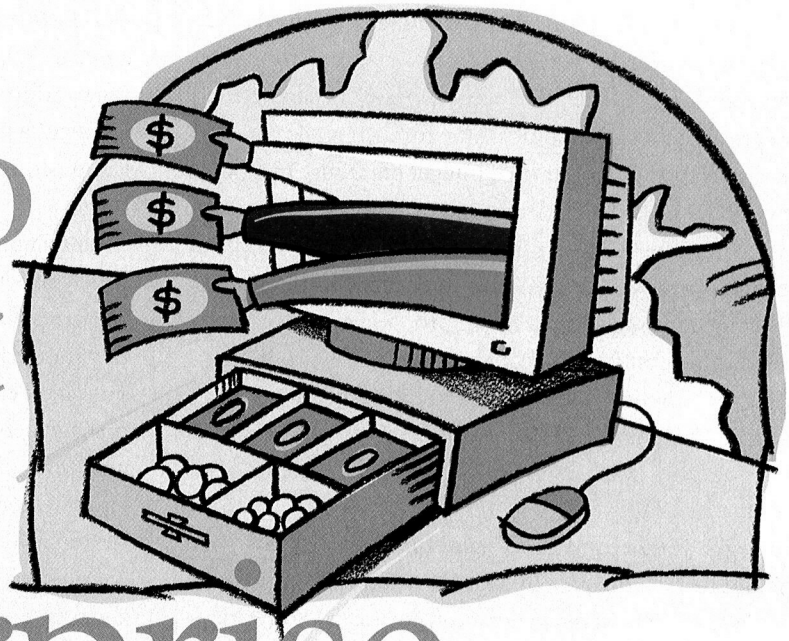
How to Budget for Enterprise Software



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"So, how much is it *really* going to cost?" That's one of the first questions most executives ask when they are considering a new software purchase, especially those who are planning a major financial/enterprise resource planning (ERP), human resources/payroll, customer relationship management (CRM), or other enterprise software selection and implementation. The problem, as most financial executives have learned from experience, is that buying software isn't like buying a tangible product such as office equipment or a machine. There are about as many methods of pricing as there are software products, and every company's implementation issues are unique.

ILLUSTRATION: ARTDISC

As unbiased software selection consultants, we are frequently asked by our clients to help them put together a budget for new software. Many have gone through this procedure before and want to avoid the problems/issues they encountered, or they are doing a new type of investment and want some guidance. Based on this experience, we are going to share some of the fundamentals you should consider in your own budget planning. First, we'll review the seven basic elements of a software budget and give you some ballpark numbers that will help you get started. Then we'll discuss how to refine your budget as you move through the selection process. When we're finished, you should have enough information to put together a preliminary budget and have a good understanding of when you'll have more exact numbers.

SEVEN ELEMENTS OF A SOFTWARE BUDGET

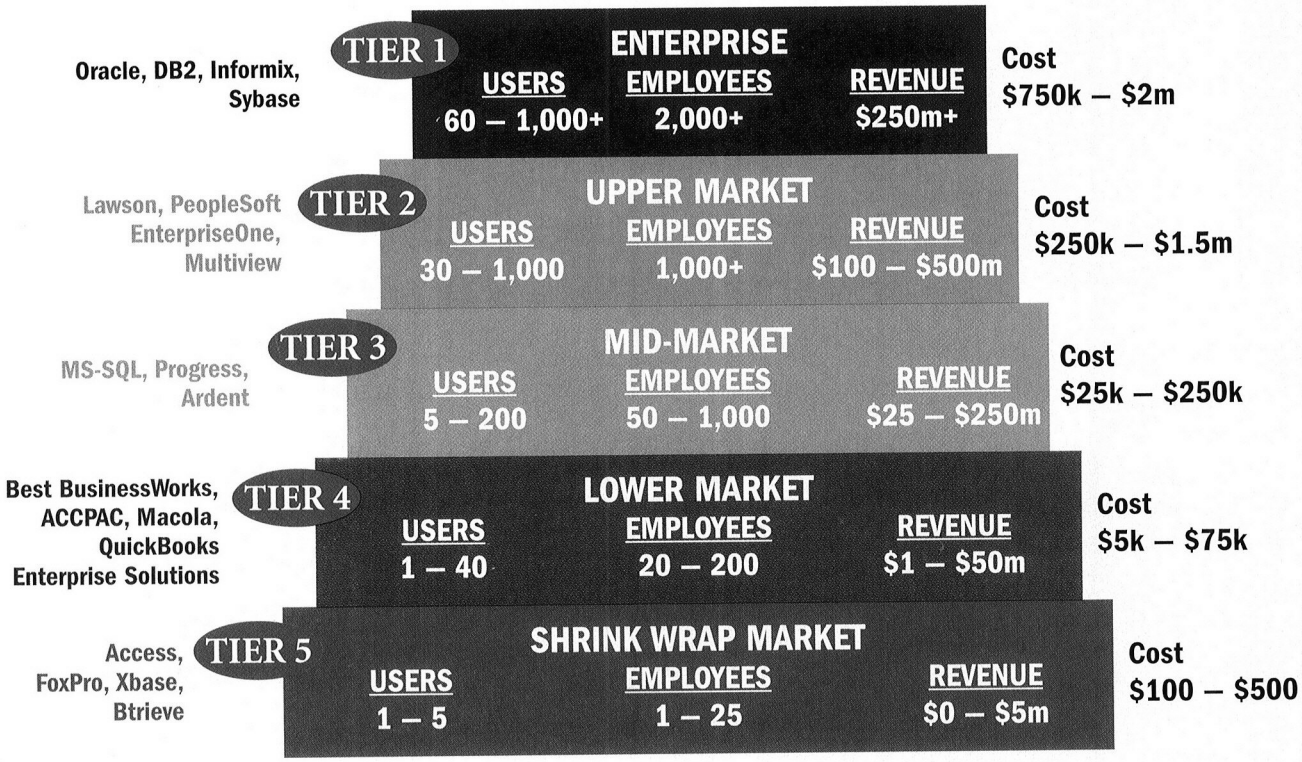
To begin, you need to understand the main elements that should be included in a budget for enterprise software. We divide them into seven general categories: (1) Software License, (2) Database License, (3) Hardware, (4) Implementation Services, (5) Training, (6) Annual Maintenance, and (7) Internal Costs. Each of these elements has various subcosts, but initially you need to concentrate on the general categories only. Later on, as you get more information from the vendors, you'll be able to add more details.

We have created a software tier chart as a tool to help you get started (see Figure 1 and the Tier Chart sidebar). Decide where you fit, and use the numbers provided as a guide to help you put together your budget. Because the range of numbers is so wide, we'll discuss the seven elements of a budget in conjunction with the situations that will push your budget to the higher or lower end of the range.

Software License. Software license pricing models vary widely by vendor (see sidebar on p. 46), but, in general, if you are planning to implement a large number of functional modules (such as financials, manufacturing, distribution, payroll, human resources, customer relationship management) and have a high number of end users logging onto the system, you can expect to be at the higher end of the cost range. Also, if your company has multiple locations, this cost tends to increase. Conversely, if you are planning to implement just a few modules (say, only the financials) and have fewer users on the system, you will be at the lower end of the scale.

Database License. Because the database license is usually based on the number of end users that log into the system, companies with higher user counts will typically pay more. But if you already own a license for the data-

Figure 1: Software License Budget Tier Chart



base that the selected software runs on, you can essentially eliminate this line item in your budget. Here are some average numbers that you can plug into your budget for now: Tier 1, $75K; Tier 2, $50K; Tier 3, $20K; Tier 4, $10K; Tier 5, none.

Hardware. The nice thing about this element is that the cost of hardware has come down significantly over the last 15 years. You should take into account the possibility of new hardware for the server, any client machines, and infrastructure upgrades (scanners, wiring, etc.). If your hardware is up-to-date and you'll be selecting a system that's compatible with your current infrastructure, you can minimize your investment. But a move to a new server platform (i.e., HP3000 to Intel-based servers) will create a larger impact on the cost of the project.

Another factor that will impact your hardware investment is the need for redundancy and uptime. For example, a telephone call center that takes orders and needs to be up and running 24 hours a day will require a larger hardware investment with redundant servers. This has the effect of pushing you up to the higher end of the range. Here are some average hardware budget numbers for companies that have to do some upgrades but don't have to make wholesale changes to their infrastructure: Tier 1, $100K; Tier 2, $50K; Tier 3, $30K; Tier 4, $10K; Tier 5, $2K.

Implementation. In many cases, the cost to implement the software will be the biggest component of your software budget. Implementation is extremely difficult to estimate because it depends on so many factors. These factors include project management, the implementation consultant's expertise (understanding of your company, industry, and software product), the amount of business process reengineering required, and hourly rates. In general, the faster you implement the software, the lower the cost.

At the beginning of the budget process, implementation is estimated as a ratio to the software license cost, which means that for every dollar of software license cost, you can expect to pay X dollars of implementation. For example, if a software product generally has a 2:1 implementation ratio, for every $1 of software license cost, you can expect to pay $2 implementing it. Tier 1 companies generally have higher implementation ratios because of the complexity of the software and their implementations.

Using the software license cost you estimated, apply the following ratios to your implementation estimate. Adjust the ratio to take into account the complexity of your situation and the length of time you feel it will take to implement the software. Tier 1 would be a 2:1 ratio; Tier 2, a 2:1 ratio; Tier 3, a 1:1 ratio; Tier 4, a 1:1 ratio; Tier 5, none because these packages are usually self-implemented.

Training. Training is a critical element of your budget. You need to make sure that users are properly trained and that they don't begin to create spreadsheets outside the system. You will have various training options, including computer-based training, train-the-trainer, off-site, and on-site training. Your budget will change depending on the training option you select. For right now, use a per-

Tier Chart

Tier 1	Software License	$250K – $2 Million	
	Database License	$50K – $100K	Use $75K
	Hardware	$100K – $200K	Use $100K
	Implementation	1:1 Ratio to 10:1 ratio	Use 2:1
	Training	10% – 20% of software license	Use 15%
	Annual Maintenance	18% – 25% of software license	Use 20%
	Internal Cost	Estimate	
Tier 2	Software License	$150K – $1 Million	
	Database License	$25K – $75K	Use $50K
	Hardware	$25K – $100K	Use $50K
	Implementation	1:1 Ratio – 5:1 ratio	Use 2:1
	Training	10% – 20% of software license	Use 15%
	Annual Maintenance	18% – 25% of software license	Use 20%
	Internal Cost	Estimate	
Tier 3	Software License	$75K – $600K	
	Database License	$10K – $50K	Use $20K
	Hardware	$25K – $75K	Use $30K
	Implementation	.75:1 Ratio – 3:1 ratio	Use 1:1
	Training	10% – 20% of software license	Use 10%
	Annual Maintenance	18% – 25% of software license	Use 20%
	Internal Cost	Estimate	
Tier 4	Software License	$10K – $100K	
	Database License	$5K – 25K	Use $10K
	Hardware	$5K – $25K	Use $10K
	Implementation	.5:1 Ratio – 2:1 ratio	Use 1:1 ratio
	Training	10% – 20% of software license	Use 10%
	Annual Maintenance	18% – 25% of software license	Use 18%
	Internal Cost	Estimate	
Tier 5	Software License	$150 – $1,000	
	Database License	None	
	Hardware	$500 – $2,000	Use $1,000
	Implementation	Self-Implemented	
	Training	Self-Trained	
	Annual Maintenance	Purchase Upgrades	
	Internal Cost	Estimate	

centage of the estimated software license: Tier 1, 15% of the software license price; Tier 2, 15% of the software license; Tier 3, 10% of the software license; Tier 4, 10% of the software license; Tier 5, none because users usually train themselves.

Annual Maintenance. This is the annual amount you pay the software vendor to develop new functionality, technology, and generally keep the system updated. Some vendors also include upgrades and high-level technical support. When you make your final selection, be sure you understand the services that are included as you may need to purchase an additional support plan. You can expect to pay 18%-25% of the software license cost annually. For purposes of your initial budget, use 20% as a rule of thumb for all tiers except Tier 5, where you will just purchase updates as you need them. Expect to begin paying annual maintenance in the first year during implementation unless you are able to negotiate a different arrangement.

Internal Cost. Unfortunately, the internal cost that companies elect to include in their budget is unique, so we can't really provide an estimate. Generally, companies estimate billing rates and calculate the number of hours they expect to be taken away from the normal daily staff activities. You may also include such items as:

- Duplicate work effort (e.g., data entry to multiple systems during test phases).
- Time required for conference-room pilot testing.
- Lost productivity for the duration of the project. Some team members may spend up to 80% of their time on the project for the first one to three months and then 50% until the project is complete.
- Temporary work space to hold project team meetings, product demonstrations, and conference-room pilots or to house the implementation team.
- Travel expenses for remote team members.
- External subcontractors.
- Temporary staff to maintain current business processes.
- Overtime, bonuses, or other incentives to reward individuals involved in the selection and implementation process.

You should now have a good idea about how to start a budget that will put you in the ballpark for your software implementation. Although some companies may spend

Software License

Software license prices vary significantly by vendor and are constantly changing, which makes for a very confusing market. Here are the most common ways that software vendors price their software:

A. Concurrent Users: This is the most common way to price software. Although many users may log on and off throughout the day, the license is based on the number of people that will be on the system at the same time.

B. Named Users: This is also a very common pricing schema where the vendor charges a fee for every named user that will access the system.

C. Active and Casual Users: This pricing method provides a lower price point for "casual" users (such as those who only access reporting tools) who aren't using the system constantly throughout the day.

D. Modules: Most vendors charge a price per module. Many times they combine this price per module with the concurrent-user or named-user pricing model.

E. Employees: Some vendors base the license on the number of employees at a company. HR/payroll software is frequently priced using this method.

F. Revenue: High-end software vendors will use the company revenue method to offer lower-cost options to smaller companies. Implementation is usually tightly controlled in this scenario to keep the cost of implementation down.

G. Capital and Operating Budget: Software vendors that focus on the government market will often base the license cost on the size of the capital and/or operating budget.

H. Transactions: Transaction-based license costing requires periodic audits of the software system and allows the software vendor to charge more as a company grows.

I. Processors: Some vendors (especially mainframe software vendors) use the number of processors as the basis for pricing their software.

J. Site License: This is an unlimited-use license for a company. The nice thing about this type of license is that you don't have to manage the user counts.

K. Subscription: Subscription-based pricing is frequently used by application service provider (ASP) software vendors. These vendors host the software in a data center, and you access the application via the Internet in an outsourcing arrangement. All of the maintenance and upgrades to the system are handled by the ASP. This pricing method allows for a lower up-front cost, as there is no initial license cost, but it usually results in higher long-term costs on a monthly basis.

more in one category than another, every company should plan on at least some cost in each area. As you go through the selection process, the detailed costs will come to light. Let's now take a close look at how and when you can refine these initial budget numbers.

BUDGETING IS AN ITERATIVE PROCESS

As we mentioned earlier, you won't have all of the information at the beginning of a software project to put together a firm budget that will take you through the implementation. This means that budgeting is really an iterative process and that you will end up with four main iterations as you go through the selection process: (1) Preliminary Budget, (2) Short-List Budget, (3) Quoted Budget, and (4) Negotiated Budget.

Preliminary Budget. The preliminary budget is the budget that we have discussed, and it is created before you begin the selection project. Most companies use this budget to gain executive approval and as a benchmark for the project.

Short-List Budget. After you have conducted requirements analysis, completed the initial research of the software vendor market, and decided on a short list of three or four software vendors, you can refine the budget with the numbers and estimates you receive from the finalists. You should create a separate budget for each option so you can include more details and have a better way to compare the cost of the vendor options available to you.

At this point you are still getting high-level estimates from the vendors. They typically try to make these estimates as low as possible during the selection process and may underestimate what it will really take to license and implement the software. Examine their estimates, and apply some realism to the numbers based on what you know about your company. For example, if you know that your implementation will probably be difficult and complex, you may need to increase the project cost of implementation. On the other hand, if the vendor has included functional modules in their initial pricing that you won't implement, you can reduce the software license cost.

Quoted Budget. After reviewing the short-list vendor proposals, you should conduct scripted software demos with these vendors. This serves two purposes: (1) It allows you to compare the software products equally, and (2) the vendor gains a much better understanding of your company and the work it will take to implement the software. When you make your final decision (after the demos and any final due diligence, including user visits, follow-up clarification, etc.), you can get a detailed quote from the selected vendor. The quote should contain all of the costs that will be part of the solution, including any third-party functional modules needed, and a more detailed implementation estimate.

Negotiated Budget. After receiving the quoted budget, you will enter into final contract negotiations with the selected vendor. The final contract will form the basis for the detailed negotiated budget and will contain final pricing (including discounts that are almost always negotiated into the contract) for the software license, hardware, and annual maintenance. Unless you negotiate a fixed-price bid, implementation and training will still be an estimate and will change as you go through the implementation process.

Unfortunately, you won't know the actual cost of the project until after you have completed the implementation and are up and running. But as you go through the software selection process, you should be able to gradually refine your preliminary budget until you have a negotiated budget that will be very close to the final cost of the project.

GETTING STARTED

You should now have enough information to start work on your preliminary budget and have a good understanding of when you'll be able to get more of the details to refine this budget. Because every situation is unique, we recommend that, as you start putting together your numbers, you get in contact with a software selection consultant, a software research firm, a few software vendors, or implementation companies to validate your estimates. If you would like a free cost-estimation spreadsheet template that you can use to help put together your budget, please e-mail us at budget@softresources.com. ■

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