Introduction

Every company's ERP implementation has a life cycle—often extending 10-20 years. In this article, I discuss the unique training requirements of each phase of the overall ERP life cycle.

Product Evaluation

As your company goes through a detailed process to select an ERP package, training is often treated as an afterthought. The software vendor will assure you that the details can wait, and that the project budget should include a substantial amount for project team training.

There is no “magic number” for the percentage of the total ERP implementation budget that should be allocated for training.

Many clients are aware of a Gartner Group research paper that stated “companies allocating less than 13 percent of project costs to training are three times more likely to have their ERP projects fall short of business and project goals compared with companies that spend 17 percent or more on training.”

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1 “Post-Implementation Usability of ERP Training Manuals: The User's Perspective” by Judy E. Scott.
Gartner’s report was issued a decade ago. I feel that 17% is too high, and better guidance is available from Cushing Anderson of IDC. His research shows that “projects allocating 7% of the budget to training were significantly more successful than projects where only 4% of the budget went to training.”

Our own polling research with SAP® and JD Edwards® clients shows that the average spent on training was 3.6% of the IT budget.

For another view on the subject of ERP training budgets by CJ Rhoads, click here: http://it.toolbox.com/blogs/jdedwards/erp-training-whats-the-magic-number-15198

My advice is to take a hard look at the training component of your ERP implementation budget. Realize that you’ll need training for your executives/senior management, project team, and end users. Be prepared to look for alternatives to vendor supplied training. You can often spend less and get more benefit by working with firms that specialize in training for your ERP package.

This phase is also the right time to start thinking about purchasing a software package to enable creation of end-user training and documentation materials. From one capture process, multiple types of materials can be created, such as: interactive simulation lessons, live help, “cheat” sheets (job aids), detailed end-user documentation, and training manuals for classroom training. There are literally hundreds of software platforms that play in the end-user space. Three that stand out from the rest, are: Kaplan’s STT Trainer, RWD’s uPerform, and Oracle’s UPK.

Before we leave this first phase, here are a few thoughts on how to increase the ROI of your ERP project. Most clients underestimate the cost of outside consulting services during the ERP life cycle. Consulting fees can be as much as 60% of the total project cost. The best way to contain and reduce those costs is to ensure that your team has the knowledge they need to independently configure, test, and run the ERP system. That typically means bringing outside expertise in house as employees, and proper training of key team members and end users.

Implementation – Phase I

The first phase of an ERP implementation, where your company goes live for the first time, is the most demanding in terms of the variety of audiences, and the sheer quantity of learning that must occur.

I’ve grouped employees and their training needs as follows:

- Executives and Senior Management
- Project Team
- Super Users & End Users

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2 “Impact of Training on Project Success” by Cushing Anderson, IDC.
Executives and Senior Management

This group is often skipped over in the rush to get the implementation started quickly. That would be a mistake; executives and senior management need to understand what they are in for—both in terms of future benefits and implementation challenges in the months ahead. You will probably have a relationship with your ERP vendor for the next 10-20 years—so top management needs to get involved at the beginning.

A two-day session on the following topics is highly recommended:

- An ERP package-specific overview of key functionality, benefits, and likely impacts on your organization
- Understanding the role of Executives and Senior Management
- Best practice implementation methodology
- Governance and Organizational Change Management—how to realize and measure value (i.e., return on investment) from the ERP project
- Accelerating buy-in from key stakeholders

I also recommend spending the day after this 2-day session on a simulation game specific to your ERP package. Playing a competitive simulation game with the real software is a great way to kick off a project. Invite the project team and the trainer from the first two days to participate as well. At the end of the day, debrief the entire group on key points learned during the entire three days.

Handed skillfully, these three days result in two critical accomplishments:

- Top management understands how the software will drive change within the company.
- The project team understands the overall goals of the ERP implementation and how the ERP solution is a part of the overall company strategy.

Executive management is responsible for the success or failure of the ERP project. Both the project as a whole and the training component of the project need to be driven by the overall corporate strategy.

When that happens, top management has started to take ownership of the ERP solution, and the ERP project will have a much better chance of success. Depending on the complexity of the implementation and the size of the company implementing, it may be useful to conduct a second tier overview training session as part of the selection process. Senior, non-executive, management can best judge how the potential solution can support their company’s strategic operating objectives.

Project Team Training

Project team training is a must at the beginning of the implementation. Phase I might include General Ledger, Accounts Payable, Inventory, and Procurement. Or you might be doing a “big-bang” roll out where all of Financials, Logistics, and Manufacturing are scheduled to go live at the same time.

Your project team needs configuration-level training on all the core application modules being implemented. The focus should be on utilizing the software to complete end-to-end business processes such as order-to-cash, or procure-to-pay. Technical training needs include report writing, development, and system administration.
Training must be closely related to the overall corporate strategy. The ERP solution should be framed in terms of supporting the operational objectives that, in turn, support the corporate strategy.

Early project team training is the best way to begin the process of combining your company expertise with external consultants' ERP expertise to arrive at the best-fit solution. You won’t “learn everything” that the software does, but if your consultants are experienced enough, they will teach you the basics plus the functionality most relevant to your business issues.

Beyond configuration of specific functionality within a module, project team training should also focus on the integration between different modules within the overall business process.

Tip: Avoid sending your project team to week after week after week of training without the chance to use what they’ve learned in a prototyping/conference room pilot environment. Two weeks in a row is the absolute maximum to schedule anyone for classes. Schedule training on a “just in time” basis, just before the course content will be project tested.

End-User Training

Back-schedule end-user training development from your go-live date. Early on, do a rough-cut timeline so there are no surprises later. This should consider the number of users to be trained by business process, a list of work procedures that require training, estimated time for each class, sequence of training classes, facilities needed, and the need to train as close to go-live as possible.

Involve both professional course developers/instructors and key business users in a train-the-trainer model for end-user training delivery.

Use a combination of live, instructor-led classes; virtual, instructor-led classes; and eLearning content. Arm your end users with Quick Reference Cards and online access to “how to” information. Have end users start to use what they’ve learned by involving them in testing the software before going live.

After going live, have your internal help desk track excessive numbers of calls and respond with additional training where needed.

The main objective of end user training is for end users to become autonomous in using the ERP system to accomplish their daily work tasks. Too much information at the beginning is counterproductive. Rather, after a six-month period of being live with the solution, users can benefit from a fuller discussion of alternatives within the software. They will be more able to ask questions that pertain to real problems they’ve encountered.

Tip: Consider sending your internal end-user training team to a series of detailed transaction-based courses (as opposed to configuration courses), so that the internal project team will then be able to develop a high percentage of the end-user training materials in-house. That will reduce the expense of contracting out end-user training development and execution to an outside firm.

Knowledge Transfer

All consulting firms “talk the talk”, but do they “walk the walk” when it comes to knowledge transfer? Are they really committed to getting the job done (i.e., getting your team to the point where they can independently solve problems) or do they view you as a source of uninterrupted revenue for years to come?
Steve Phillips, in his excellent blog titled: ERP Consultants: Is the Promise of Knowledge Transfer Just Part of the Sales Pitch?, discusses 17 steps clients can take to ensure that knowledge transfer actually takes place. Knowledge transfer needs to be a part of the project deliverables that clients sign off on during the implementation.

How about this for a radical idea? Tell your project team and end users that you expect them to be so knowledgeable that the consultants don’t need to be onsite for the go-live. Of course, experienced consultants will always have a lot more experience than 90% of all clients on a project, so you might want them around to help your team handle unforeseen issues when you go live.

**Change Management**

Executive/Senior Management training should also include an exploration of their role in the roll-out – particularly in supporting the change management process.

This is also the right time to continue to recruit executive sponsors or phase/module leaders - getting key influencers to volunteer to participate is contagious.

The project team also needs change management training. Specifically, understanding the project management process – time lines, status reports, how to report issues, resolution steps (how to identify, classify, report, track, resolve and close issues).

Here is where the project team becomes advocates - they should be encouraged (and trained) to identify how project management processes can be improved further. A communications plan for identifying milestones and successes should be put in place.

Site visits to other client sites for key Executives, Senior Management, and project team members are an excellent way to learn what works (and doesn’t work) in the real world of a major ERP implementation.

**Implementation – Phase II and Beyond**

A major ERP implementation can be spread out over multiple phases taking several years to fully implement the software. New implementation team members come on board, new end-user departments start using the software, and more advanced knowledge is needed on modules that have been live for a while.

Training new employees is important. “Knowledge leakage” is a phrase coined by Cushing Anderson of IDC, to describe the fact that IT skills can quickly degrade—as much as 50% in just six years, due to factors such as employee attrition, failure to fully train new hires, and changes in the technical environment.4

Cushing provided these practical suggestions on what to do about knowledge leakage:

> “During the prototyping phase - organizations should identify ‘how skillful’ their teams need to be to get the benefits promised by the system - then train to that goal for project teams and users.

4 The Silent Killer: Knowledge Leakage and the Impact on Technical Skills, Cushing Anderson, IDC.
Understanding this level of “performance” makes identifying the signs of knowledge leakage easier – every year, every user takes (one or more) short, task specific quizzes on how to perform certain tasks – the ‘team’ needs to score to some benchmark - and individuals have to meet some minimum threshold. Alternatively, measuring output based metrics (processing time for invoices, error rates for order entry, etc.) might also signal leakage, but be more easily monitored, and might already be collected for other performance management activities.\(^5\)

Periodic team updates can bring new team members on board the right way as well as refreshing the knowledge base of the experienced team members.

Tip: Onsite configuration level training is a good fit during this phase. Classes are most effective when your team gets a 360-degree view of the full functionality of the software, combined with being able to drill down for extended details on the most pertinent topics.

### Extending Value

Financials used to be considered the “back-office” solution. Now, the entire ERP suite of financials, logistics, manufacturing, and HR is considered the “back-office”. The sexy stuff includes Advanced Planning, customer and vendor facing applications such as self-service, CRM, SRM, and decision support applications such as Business Intelligence/Dashboards/etc.

Take advantage of internally generated information, such as help-desk incident monitoring and refresher/team evolution training, to identify projects with the greatest opportunity for extending the value of the ERP solution.

Additional knowledge in the form of articles and white papers, can be obtained at low cost from your software vendor and from independent publications such as [JDEtips Journal](#) and [ERPtips Journal](#).

Before new applications or upgrades go live, you’ll need to train end users on the new functionality being implemented.

Tip: All of these additional software applications are implementation projects in themselves. Training on new applications continues to add value to the overall ERP solution.

### Maintaining Value

This phase, combined with the Extending Value phase, occupies at least 50% of the lifetime of an ERP solution. This is when an actual return on investment occurs, if it will occur at all. Training is centered on fine-tuning the organization’s overall knowledge base. Turnover in key staff positions is one of the main reasons for continued training requirements.

Responsibility for on-going training should be assigned to a specific group. New hires and employees with new job responsibilities will need to be trained on the ERP software.

Tip: Most configuration-level training needs during this period can be handled by attending public classes conducted by training vendors. End users can continue to be trained by internal key business users (Super Users).

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\(^5\) Email from Cushing Anderson, IDC, dated 4/2/2010.
Declining Value

The writing is on the wall, and “everyone” knows that a major re-evaluation of the ERP solution is coming up in the next year or two or three. Very little investment in the current ERP solution occurs, and almost no training is scheduled.

ERP software evolves, and clients should evaluate the new functions and operational improvements of the installed ERP solution as they are added by the software vendor. The company will then have better information about the cost-benefit of evolution vs. starting over.

If you are looking at a major upgrade to your current ERP solution, is the time right to open the door to additional vendors, and begin the dance again?

Tip: As you prepare to go through the ERP Lifecycle again, have you documented the lessons learned during the current lifecycle? What did you do right? What could have been done differently and better (hopefully)?

Bonus Tip: Did you start analyzing what went right and what went wrong a long time ago?

Non-Phase Specific Notes:

ERP training should be part of an overall employee performance management program. ERP clients may thrive by creating a Center of Excellence (COE) and tying together their training, upskilling, and documentation in one integrated offering, which requires investment, but also reduces dependency on outside consulting.

Virtual, instructor-led training (VILT) can be effective in most of the phases described above. I would not recommend it for executive management overviews, but it can be an alternative delivery method for project teams and end users. For more information on VILT, click here.

About Klee Associates, Inc.

Utilizing highly experienced field consultants to create detailed learning materials and to teach classes, Klee Associates increases the ability of SAP and JD Edwards project teams and end users to configure and use their ERP software in North America.

We author and deliver public and onsite configuration-level classes for project teams, plus transaction-level training for Super Users responsible for end-user training.

For more information on our SAP and JD Edwards training programs, please contact:

Jocelyn.Hayes@ERPtips.com (SAP)  
Stu.Tolen@ERPtips.com (JD Edwards)

www.ERPtips.com (SAP) | www.JDEtips.com (JD Edwards)

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