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# Best Practices for Successful Enterprise Systems Training

A practical approach to achieving the promise of enterprise systems through  
human performance.

## Best Practices for Successful ERP Training

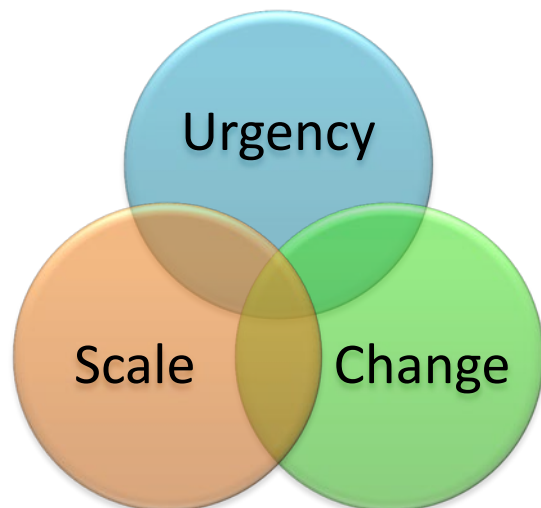
Successful training is critical to achieving the promise of Enterprise Software implementations. Flawlessly implemented software is an enabler to achieving the promise. However, people's ability to use the software on day one can either drive or derail the promise quickly and reflect poorly on even the best implemented software.

There are three elements that make enterprise software training unique. The first is urgency. Enterprise software typically requires significant configuration. This configuration is expensive and takes time, so when it is complete, there is no delay before go-live. End users are using multiple legacy systems one day, and the next day, they are using a new and often vastly different enterprise-wide system. This significant configuration effort followed by an immediate go-live event provides little time to develop and conduct end user training. Further complicating end user training is the fact that configuration and accompanying system changes continue even as training is being conducted.

The second element that makes ERP training unique is the scale of most ERP implementations. These implementations typically impact a large number of users and do so in a significantly interconnected way. After go-live, user errors not only affect the erring user, but have far-reaching implications. Input errors for orders now immediately impact raw materials ordering, production schedules, and potentially many other areas. Therefore, day-one performance is not just urgent, but critical. This "interconnectedness" allows errors to spread like a virus and can create a great amount of rework and effort on the part of the help desk and an already taxed support team.

The third element that makes ERP implementations unique is large scale change. Change in business processes, change in user interfaces, change in procedures. ERP implementations are a whirlwind of change. ERP systems simply do not replicate the existing business process. They bring major business process changes upon an organization. The magnitude of this change requires significant attention. Organizations often believe that ERP implementations are simply a new technology and do not realize that they are much more than that until far later than they should. Because the level of change is often unprecedented and underestimated, it can easily be overlooked as the configuration effort absorbs time and resources like a sponge. However, organizations cannot forget that go-live is not the goal – business performance is.

So how do organizations successfully deal with urgent, widespread, and significant business changes while still achieving the promise of ERP? The best practices described here should help you approach an ERP training initiative with a better



idea of what must be done to enable the success envisioned when an ERP implementation was chartered. In the sections that follow, these best practices for ERP training initiatives are discussed.



*Figure 1. Best Practices for Successful ERP Training*

### The Premise

The focus of a successful ERP training effort must always be performance. It may sound obvious, but it isn't. ERP training cannot be developed based on ROI or using Kirkpatrick's levels of evaluation. These methods are great and they do have their place in ERP training, but the immediacy and magnitude of the change makes these methods irrelevant by the time that they are implemented if they are the only measures. The number one critical success factor for ERP training is that it is focused on **what must be done on day one**. It cannot be focused on what the users know, how much they know, or how they feel about learning it. Obviously the learning experience must be positive, but this is a secondary measure. ERP training must be primarily focused on what the user can do – the required performance. A performance-based approach accounts for the critical day-one tasks and provides the training and tools necessary to achieve that level of performance. What the users can do is much more important than what they know. This premise is foundational to the best practices for ERP training.

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## **Best Practice 1- Use a Performance-Based Approach**

The premise that a successful ERP training effort is based on performance requires that training be designed and delivered using an approach with performance as the guiding principle. Performance-based training is developed around audience-specific performance objectives and the characteristics of each task to be performed. Without launching into a lengthy description of Performance-based Training, I'll summarize the approach as it relates specifically to ERP. In the world of instructional design, ERP implementations would typically call for what is described as a New Performance Planning Front End Analysis (FEA). Often this is described as a Training Needs Analysis (TNA) or a Job Task Analysis (JTA) depending on who is doing the work and the "methodology" that they use. However it is characterized, the key attribute is that to the end users, an ERP implementation comprises a list of business processes which are made up of tasks (transactions), almost all of which are unfamiliar to the user in their new form. An end user may have entered a purchase order thousands of times before, but in a new ERP system, the transaction is foreign, if only due to the new Graphical User Interface (GUI). Additionally, the analysis must uncover characteristics of each task. Typical task characteristics include complexity, frequency, criticality (importance of the task), consequences of error, and others. These characteristics, along with audience characteristics, help prescribe the most appropriate training media for the task. For example, a complex task that is performed dozens of times per day with high consequences of error is likely to be covered in ILT, practiced, and supported by procedural and online performance support. Conversely, a simple task with low consequences of error performed once a quarter may be supported by online performance support alone. The underlying philosophy is to provide end users with just the training and performance support required to enable them to perform the task properly **when it is time to do so**. In the case of ERP, too much training is as bad as too little. With end users typically remembering less than 60% of what they learn in ILT, it is also critical that success not be left to the memory of the user. Task-based performance support available at the point of need (such as context-sensitive help) is a critical component of ERP performance. This often takes the form of procedures, simulations and online references.

## **Best Practice 2 – Develop a Flexible Training Strategy and Plan**

Murphy 's Law is proven on most ERP implementations. These are large BPR and IT projects with many moving parts and provide ample opportunities to readjust even the most well-defined project plan. So it is critical that the training strategy be developed based on the lessons learned in previous implementations and the company's unique implementation and audience characteristics. Additionally, the plan must be thoroughly documented from analysis to training delivery and ongoing maintenance and support. The plan must include key assumptions, resource requirements, target dates, and even review and approval processes. However, the aforementioned list is table stakes for developing training properly. The key element that must be included for an ERP training project is flexibility. Flexibility is typically manifested in contingency plans and scope change mechanisms. However, for ERP projects, flexibility is also manifested in ongoing, planned alignment with business and IT partners.

## **Best Practice 3 – Develop a Role-based Curriculum Design**

The key to optimizing training time for a user is to provide just the training he/she needs to perform the ERP tasks related to their job. To effectively group tasks into a modular structure that can be



employees will create their own story for the change and frequently, the story isn't positive. Add to this environment the evolution of the workforce. We can no longer just "tell them what to do and they'll do it." Today's employees want information and expect to be informed. If they are not on board with significant change, they resist and sometimes become obstructionists.

I recall one ERP implementation in the 90's where employees were being called out of training and downsized due to the automation of certain tasks. Needless to say, the attention span of the remaining employees dropped precipitously and their attitudes were not highly positive. It was a complete nightmare. Poor change management adversely impacts training, souring attitudes and reducing attention spans at a critical time before go-live. To avoid this experience, employees must be informed about the implementation throughout, and presented with the business case to generate buy-in and dispel rumors. Otherwise they can become pockets of "rebels" within the company, performing their new tasks poorly, or even implementing workarounds, and detracting from the promise of ERP. Employees must be told what to expect and when, along with information about how they will be trained. This is best done through a well-articulated change management strategy and communications plan. Change management should also be integrated with training. A proper strategy and integration of change management and training results in better prepared training participants who are more receptive to learning and leads to a more effective learning experience.

### **Best Practice 5 – Plan for Maintenance and Upgrades**

Unlike many legacy or custom-built systems, an advantage of ERP software is that it is continually updated by the vendor. However, this also creates challenges for the companies using the software. These challenges include how to rollout these upgrades and releases and how to train users on functionality changes. In order to maintain a lower total cost of ownership, consideration must be given to how training materials and any performance support systems will be maintained through the course of upgrades and new releases. Key considerations for the maintenance strategy include the scope of the implementation, the audience size, geographic distribution, development tools and performance support delivery mechanisms, ongoing training strategy (new hires and upgrade training), training data considerations, and help desk/vendor support strategy. Where companies typically go wrong is to view go-live as their ultimate goal. This can lead to challenges at upgrade time or with new employees. In particular, training is often treated as a commodity during the purchasing process. This can lead to training development bids that are very lean. While it is important to manage training development and delivery costs, it is important to balance these considerations against the total cost of ownership and have a plan for ongoing maintenance and support of the end user training materials.

### **Best Practice 6 – Provide Performance Support**

The idea that a person can know everything required to do their job is becoming more distant as the complexity of jobs increase and the capabilities of technology grow. Additionally, it is a poor training paradigm with the exception of certain functions which require immediate and time critical performance (which even so is not the entire job typically). The answer is to provide ERP users with performance support mechanisms to provide guidance for tasks which do not require instantaneous recall. Examples of performance support mechanisms that greatly enhance performance include online procedures and tutorials, online simulations, quick references, and other readily available tools to give end users information that they need at the moment that they need it.

These materials also allow new employees to get up to speed more rapidly after go-live and serve to support performance long after go-live, reducing performance degradation over time.

When robust performance support is developed, the nature of training changes. Time is still spent on critical day-one tasks, but for other tasks, the training focuses on how to access the performance support solution. This approach “teaches the users to fish” and diminishes the need for lengthy ILT sessions, reducing the time spent in training while making training more effective. The approach also ultimately reduces dependency on the help desk and coworkers/SMEs, and prevents workarounds which diminish the business value of the ERP solution. Technology has evolved to allow for rapid development of performance support materials (discussed later), making such a solution much more cost effective and easier to deploy and maintain.

### **Best Practice 7 – Partner with the Business**

Successful ERP training depends on more than technically accurate training materials. It depends upon acceptance and support by many parts of the enterprise. IT, Business units, and SMEs all play a role in success. In order for training to be successful, the training team must coordinate effectively with the project team and these other parts of the enterprise. Business unit leaders must understand how much training their people will need and how best to support it and IT must understand the infrastructure requirements for any training tools, content, delivery and storage requirements, as well as classroom technology requirements. SMEs need to understand their role in Train-the-Trainer and delivery, and the change management team and employees need to know how training will be delivered and what is coming. All of these interactions need to be planned and executed well to make sure that training is conducted effectively and supported by the organization. This requires early and frequent communications.

### **Best Practice 8 – Leverage Rapid Development Tools**

A significant challenge in developing ERP training is that the configuration effort takes place in parallel with the training development effort. In short, the story is changing while you are writing the book. Having personally written, and rewritten, ERP procedures in the mid-90s, I can say that it’s painful, time consuming, and expensive. However, technology has allowed us to solve the problem in an elegant way. Starting in the late 90s, tools began to evolve that allowed training developers to author ERP procedures simply by performing an ERP transaction while automated software captured the steps, screens, button clicks, etc. and automatically produced a step-by-step procedure. Having led the product development group for a company that developed software for this purpose, I can attest to the impact of these tools. What used to take days could be done in hours, and more accurately. This provided a critical advantage for the companies using these tools. Training materials could be developed faster and changes could be accommodated very quickly and much later in the process. Training materials could also be produced by multiple authors quickly, and in the same format, simplifying the development process.

As the technology evolved, it became possible to develop online procedures that are available to end users directly from the ERP application. This context-sensitive help, available directly at the point of need greatly enhances the users’ ability to perform and provides critical performance support. Because these procedures can be rapidly created and edited and published to the entire end

user population easily, development and maintenance got a lot easier. Then the technology leapt forward to allow the creation of application simulations using the same process. The simulations are typically produced in multiple modes, allowing users to view demonstrations, practice the task, and test themselves. The simulations can also be delivered directly through the ERP application in many cases, resulting in a much more robust performance support solution and, in some cases, take the place of a training environment for practice. These tools now have a wealth of features including the ability to produce training media in multiple languages, translate materials, and deliver personalized training and performance support based on end user characteristics like language, role, and other factors. Leveraging these tools results in better training, reduced development time, and easier maintenance.

### **Best Practice 9 – Allow for Safe Practice**

The complexity of ERP applications, along with the broad scope of functionality makes it critical for certain tasks to be practiced in preparation for go-live. This kind of realistic practice exposes end users to the system and allows them to make mistakes as they learn. Typically, practice is a component of both Instructor-Led Training (ILT) and self-paced training. Practice must be realistic, yet it cannot be done in the “production” environment because actions there have real effects on the business. Typically companies handle practice in one of two ways. The first is to create a training instance of the ERP application and assign users training IDs so that they can log in and practice system tasks. This approach requires that appropriate training data be created and maintained as it is consumed through practice. The creation and maintenance of training data, along with logon, hardware, and storage considerations is not trivial. The second way that companies handle practice is to use simulation tools to allow users to practice in a simulated environment with varying levels of support from self-guided demonstrations to practices and graded trials. These tools are part of SAP’s Productivity Pak and Oracle’s User Productivity Kit and they provide an elegant means for users to practice. The advantage of this type of solution is that practice exercises are available after go-live for review, use by new employees, and revision for upgrades. Whatever approach you take, it is important that users be allowed a safe opportunity to develop skills and confidence prior to go-live.

### **Best Practice 10 – Evaluate Vendors Thoroughly**

The urgency of an ERP implementation often puts companies in an unusual position with respect to end user training. Some companies realize, in the midst of the implementation, that their implementation partner is not responsible for training and that they urgently need to find a solution. Others recognize the need early, but may not want to use the same company for end user training that they are using for their implementation. There are many Systems Integrators that have deep learning skills and do a great job with ERP training and change management. However, this is not always the case. Some larger firms have robust change management practices, but do not emphasize the training aspects of an implementation as strongly. The challenge is that they all tell a similar story and it sounds pretty good. How can you tell the difference? You must look closely at not only what they offer, but what you need. Take the time to map out your specific requirements in detail and incorporate the best practices described here. Pay close attention to their direct experience with end-user training and change management. Understand their staffing model to make sure that you will get experienced, well-managed resources. Ask about their project



management and adult learning approach. Define success criteria and ask how they will achieve success and mitigate risks. If you need to, get help from an independent third party to construct an RFP, assist in vendor evaluation, and coach your team through the process. The partner you choose can be a great asset, but a poor choice here can be very painful and costly.

## Summary

Hopefully the best practices described here will help you think through your ERP training initiatives and help you achieve success. They have been derived from years of lessons learned on complex ERP engagements and are designed to prevent mistakes that have been made too frequently by others.

Applying these practices to your ERP training initiatives should help you move from uncertainty toward a planned approach for success.

Assessing your progress against these best practices can also allow you to determine the “health” of your ERP training initiative and make appropriate adjustments. Figure 3 illustrates the high level overview from a best practice assessment. The assessment of the initiative against each best practice is represented as green, yellow, or red in the respective “slice” of the target and the overall assessment is represented in the bull’s-eye.



*Figure 3. ERP Training – Best Practice Assessment*

## About the Author

**Gary Walker** is an executive with over 20 years of experience with ERP training. He has led training business lines with experience in Workday, SAP, Oracle, PeopleSoft, J.D. Edwards, Siebel, Documentum, and Business Objects. He has managed alliance relationships with most of these providers and led the product development group that was responsible for the software sold by SAP as SAP Productivity Pak. As a former naval aviator, Gary understands the importance of time-critical training and being able to perform competently. For more information, including resources and tools for assessing and applying the best practices described here, contact Gary at [gary@walkerstrategy.com](mailto:gary@walkerstrategy.com).