

## CHAPTER 7: OPERATIONS AND POSTIMPLEMENTATION

### CHAPTER OBJECTIVES:

- Describe all the components to a successful “Go-Live” and determining their readiness.
- Understand what is involved in stabilizing the system after “Go-Live” and how to track and address problems and issues on a daily basis.
- Value the transition from developing a system to supporting it in a production environment.
- Understand the process of transferring knowledge to operational staff and the importance to the long term system success.
- Realize the value of training before and after “Go-Live”.

### CHAPTER OUTLINE:

- I. Opening Case: *Hugger-Mugger ERP Implementation*
- II. Chapter Preview
- III. Go-Live Readiness
- IV. ERP Training
- V. Stabilization
  - a. User Issues and Activities During Stabilization
- VI. Post Production Support
  - b. The 5 Points of Post-Implementation Support
- VII. Knowledge Transfer
- VIII. Implication for Management
- IX. Real World Case: Hewlett-Packard SAP Implementation
- X. Appendix A: Readiness Status Table Sample

### CHAPTER OVERVIEW:

An ERP system is “the first generation of enterprise systems whose goal was to integrate data across and be comprehensive in supporting all the major functions of the organization.” These complex information systems cross many different enterprise functions, including accounting, finance, marketing, production, etc. with the goal of making the flow of information dynamic and immediate, while integrating the varieties of departments and enterprise functions into a single infrastructure. Because of the problems associated with preparing to “go live” stabilization, and ongoing support, and the need to successfully achieve the organization’s main goals (i.e. labor savings, better customer service and process improvements), operational and post-implementation becomes one of the most critical points in the success of an ERP system.

The ERP implementation phase occurs just before going live and “is the culmination of a number of planned tasks, activities and resources brought together to implement the system based on the goals of the organization.” A project’s “Go-Live” readiness must be assessed in order to decide on going live to ensure that all tasks and activities are completed before the Go-

Live date. There should be several readiness reviews, starting several months before going live, in order to assess the progress toward it and identify the major issues on which to focus. These reviews need to be well documented and must be communicated to the project team and the company, as it allows individual team members to express concerns about the successful completion of the project and the Go-Live date. The first readiness review should provide management and the project team a detailed list of issues on which to focus. The following readiness reviews should review the Go-Live date to finalize the decision. The last readiness review should assess any of the outstanding issues previously reviewed, and assess the “Go Live” Readiness Review and Status Report.

Training is a key component in the implementation phase and should be provided to all that will be using the system. Although training does not need to be completed prior to going live, it is recommended that organizations use a validation method or certification to ensure that users know and understand how to use the system before going live. It is also recommended that training continue for a short period after going live to assist the users’ incorporation of the ERP into their jobs. Training must focus on how the organization is going to use the system and provide realistic examples (with real data) to serve as a practice environment and limit issues with the real system.

The next phase in implementing an ERP system is the Stabilization phase, which begins when the ERP software is in production, initial training is complete, and conversion of critical data is done. This process can last anywhere from sixty to ninety days after going live. During the transitions from Build to “Go-Live” and Stabilization, one should pay special attention to knowledge transfer, as team composition is likely to change, especially third party consultants. The first task in the knowledge management plan should be monitoring the transition from one phase to another and ensuring that knowledge transfer goes smooth. During the stabilization process, teams and users often meet once in the morning and in late afternoon in order to discuss problems and answer questions that may arise. The questions to be answered during this phase may range from how the system is working, incorrect data conversion and system stability. Also required during this process is the monitoring of the infrastructure for response times and to ensure backups are taken appropriately for all hardware and software. The stabilization period can be demanding and frustrating, with many long hours and much anxiety; but when accomplished successfully, it can significantly aid the organization in accomplishing its main goals.

Post-production support is the final phase of an ERP implementation and as important as any set of activities during the development phase. This phase is intended to manage the daily system operations and ensure the system is doing exactly what it needs to. Post-production support generally includes: training, “go live” support, data validation, data correction, and new features. This phase is so important to an ERP’s implementation that often times the entire implementation may be considered a failure, if the post production support plan and process are inadequate.

This chapter informs us that “the closer an ERP implementation gets to the ‘Go-Live’ date the more project management must focus on the issues, tasks and activities of being ready.”<sup>1</sup>

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<sup>1</sup> Enterprise Systems Management

This readiness process helps to outline which issues the project managers should focus on in order to successfully achieve the organization's main goals. The readiness reviews must fully assess the level of readiness of each project area in order to prepare for going live. The other main point to be outlined is that "to ensure a successful and sustainable ERP implementation, one must have a well thought out and understood knowledge transfer process."<sup>2</sup> With out properly preparing to "Go-Live" and making the necessary plans for Stabilization and Ongoing support, the PMO risks the long-term sustainability of the REP system and the ability to successfully achieve the organization's main goals.

## ADDITIONAL RELATED INFORMATION

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2. <http://connect.educause.edu/Library/EDUCAUSE+Quarterly/AnERPPostImplementationRe/39934?time=1207073573>  
(Wayne D. Powel and Jim Barry, "An ERP Post-Implementation Review: Planning for the Future by Looking Back," *A study of Gonzaga's use of its enterprise resource planning system recommended further investment in the software*, 2005, Accessed: April 1, 2008)
3. <http://blogs.ittoolbox.com/erp/roi/archives/the-importance-of-erp-postimplementation-audits-14971>  
(Eric Kimberling, "In Search of Business Value & ROI: Achieving ERP Benefits Realization," *The Importance of ERP Post-Implementation Audits*, March 8, 2007, Accessed: April 1, 2008)
4. <http://www.allbusiness.com/management/912850-1.html>  
(Scott, Judy E, "Post-Implementation Usability Of ERP Training Manuals," *The Users Perspective*, April 1 2005, Accessed: April 1, 2008)
5. <http://www.reliableplant.com/article.asp?articleid=10733>  
(Bernie Goldband, "Reliable Plant," *The Real Reasons Why ERP Systems Fail*, February 2008, Accessed: April 1, 2008)
6. [http://americancityandcounty.com/mag/government\\_government\\_technologytraining\\_employees/](http://americancityandcounty.com/mag/government_government_technologytraining_employees/)  
(Tom Ferrando, "Government Technology," *Training employees to use ERP systems*, September 1, 2001 12:00 PM, Accessed: April 1, 2008)
7. <http://www.kmworld.com/Articles/Editorial/Feature/Knowledge-transfer-is-critical-to-ERP-success-9092.aspx>  
(Rajiv Enand, "KMWorld," *Knowledge Transfer is Critical to ERP Success*, Apr 1, 1999, Accessed: April 1, 2008)

## ANSWERS TO END-OF-CHAPTER REVIEW QUESTIONS

### 1. Why is the readiness process so important to an ERP implementation?

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<sup>2</sup> Enterprise Systems Management

The readiness process is important to an ERP implementation because it assesses all tasks and activities and shows what areas need to be addressed prior to the Go-Live date and should ensure that the Go-Live will proceed smoothly with no threat of backwards retreat to the old legacy system. The readiness process is also important because it assesses the Go-Live date and makes sure that the system and users are prepared.

**2. What project areas need to be assessed in a readiness process?**

All project areas across the entire span of the project need to be assessed in a readiness process. Some of the areas included are the infrastructure, development, configuration, conversion, testing, training, communications, operation, command central, reporting, and users.

**3. What is included (and not included) during the stabilization timeframe?**

After the ERP system goes live, the organization will need to shift into a stabilization process that can take about sixty to ninety days. While development should be avoided during this timeframe, management and staff should focus on answering questions about how the system is working, incorrect data conversion, system stability, and perceived problems with the software.

**4. Why is knowledge transfer important to the long-term stability of the ERP system?**

Knowledge transfer is important to long term stability because it helps to reduce many problems associated with moving from implementation to production. As the teams are likely to change in different phases, especially in the Go-Live and Stabilization phases, a smooth transfer of knowledge is critical to ensuring the smooth transition from implementing to stabilizing the software. The first task should include a thorough knowledge management plan to monitor the transition between phases.

**5. What are the 5 areas addressed in post-production support?**

The 5 areas addressed in post production support include: Training, beginning prior to going live and continuing after; “Go-Live” Support, a system for when users require assistance; Data Validation, a way to test users and ensure they are proficient in using the system; Data Correction, to update bad data; and updating with new features.

## **DISCUSSION QUESTIONS**

- 1. ERP systems need on going support to ensure the system does what it is supposed to do. Identify and describe the support structures needed for stabilization and post-production support.**

**Stabilization:** The stabilization process begins when the ERP system software is in production, initial training is complete and conversion of critical data is done. This stabilization timeframe must be used to let the users get familiar to the system, new processes and provide for a timeframe to fix problems or bugs in the system. During the stabilization period, the IT staff will be monitoring the infrastructure for response times and ensure backups are taken appropriately for all hardware and software; often at the same time they are researching and fixing problems. There should be very little development addressed during this phase.

Also, stabilization includes cleaning up data and parameters (sometimes referred to as business rules), and the process of cleaning up the data can lead to significant improvements in understanding the organization's products and processes.

**Post-production support:**

First, subject matter experts (SMEs) will need to provide ongoing support, and need to be prepared to provide service to many people in their departments, as people will no doubt encounter difficulties. Second, the support process is divided into tiers.

**Tier 1:** Is considered triage and is usually the Help Desk or Call Center. This group will attempt to address very straightforward problems or questions, often related to password problems or resets or general access issues.

**Tier 2:** The Help Desk will forward the question or problem to tier 2. Tier 2 support is where the subject matter experts are used.

**Tier 3:** Tier 3 can be a combination of technical staff along with vendor or implementation partner support. These are often complex problems that will require the technical support staff to research and fix.

There are others ways of providing support to users, in addition to in-person support. The user could access web based frequently asked questions (FAQs), job aids that are printable that describe how to access and complete a function within the system, short videos on using the system and complete training documentation that shows and describes step by step how to use the system.

**2. The knowledge transfer process is something that is needed throughout a project. Discuss why it is vital to the sustainability of the system.**

Knowledge transfer is the deliberate process of converting conceptual knowledge into broadly applied procedural knowledge. It is achieved through well-designed collaboration and interaction between the knowledge source and the target.

ERP integration requires orchestration of a variety of internal and external resources. Knowledge transfer between employees, vendors, subcontractors and consultants is a

critical factor in ERP deployment, use, maintenance, and success, and the post-production process

It is elemental to ERP integration and is critical to ERP success. Including knowledge transfer as a specific deliverable in the contract with a systems integrator or other external resources can be challenging, but will improve the probability of success.

## **CASE QUESTIONS: HP SAP IMPLEMENTATION**

**1. What were the common threads between the Hugger-Mugger and HP ERP implementations?**

HP failed in planning and providing for the IT problems that eventually cost the company over five times the cost of the original project. The IT problems that are inherent in many of these large ERP projects must not be allowed to snow ball and cripple supply chains and other essential business processes. IT projects and their effect on business processes must be thoroughly assessed and given adequate leeway for unplanned and potentially disastrous disruptions. HP suffered the consequences back in the summer of 2004 because minor IT problems were allowed to become major business disruptions due to inadequate contingency planning. Similarly, Hugger-Mugger's implementation lacks a good, if any, methodology and certainly no understanding of "go live" readiness and how to address the issues once the system was in production.

**2. What were the key project management strategies that may have been used to minimize "Go-Live" problems with the HP SAP "Go-Live" process?**

Firstly, the project team did not test the legacy interfaces with live data or production data. Inadequate testing of the legacy interface came to the fore when the customer orders could not be taken by the system. The company lost \$160 million due to this issue.

Added to the above issue was the fact that the contingency plan did not work properly. Not enough time was spent on the back-out plan.

Another major issue was the planning around training of the new system. Training was administered before the Go-Live Date without any refresher courses just before the implementation date. This resulted in many questions as well as ineffective usage of the system by the users.

**3. When implementing an ERP system, especially supply chain systems, identifying risks and minimizing them require planning. Discuss how IT needs to work with the business to address "Go-Live" planning and issue resolution.**

Key business processes need to be defined by the functional users such that the IT team can ensure there is a process in place to ensure business can continue if there are issues

with performance or the system working properly. This includes good testing and recovery processes, along with a contingency plan that allows for moving forward or even retreating to the legacy applications, if necessary.