Facing Changes in ERP implementations

Author: Sandy Hofman Aruan

Abstract

Late 1990s signified era of Enterprise Resource Planning System (ERP) implementations in many industries (Shank et. al, 2002). Companies expend millions dollar to get their ERP up and running. Unfortunately, many of them failed to implement ERP successfully. Robbins-Gioia survey stated that only 46% out of 232 companies successfully implementing ERP (Robbins-Gioia, 2002). Why do companies often fail to implement ERP? Apparently, they fail to consider and plan change management properly.

This essay discusses cause and effect of changes in ERP implementation and recommends the solutions for problems related to it. First, have a realistic expectation on technology and implement the software step by step (use pilot/demo project approach) to minimize the change possibilities (Trotta, 2003). Second, encourage open communication around all elements to optimize information sharing regarding the implementation (Connell, 2001). Third, emphasize on long-term overall organization benefit rather than optimizing sub-unit performance. Fourth, have top management sufficient commitment to support the project team and encourage employees during implementation (Scott et. al, 2002).

Enterprise Resource Planning System (ERP) and Changes

Just as its name, ERP is an information system that attempts to integrate all enterprise functions into a single computerized system and then serve all those different functions with the needed information (Koch, 2002). For example, when a customer places an order, salespeople will put the order into ERP. After that, the order will be automatically routed to warehouse to see whether the item is ready or not. If it is ready, they will ship

the item, and then the order will be automatically moved again to financial department for payment collection. All the process is done automatically and without rekeying the information over and over again.

Observing the way ERP works, several benefit can be expected from implementing such system in the company. The automation can definitely shorten the lead time and increase input accuracy, which in terms will increase efficiency and effectiveness, reduce cost and integrate all information for better business analysis and planning (Hamilton, 2003).

However, implementing ERP is not an easy task. It is not a matter of installing new software in computers and then ready to go. Implementing ERP needs careful planning and management. Manoeuvre, an IT consultant company, stated that managing changes is one of the most important factors in determining the success of ERP projects (Manoeuvre, 2001). Companies need to realize that upon implementing ERP, their business environment will change, business processes will be reengineered, employees will need to relearn things, and sometimes even reduced due to redundancy (Manoeuvre, 2001).

Failure in ERP Implementation

Unfortunately, many companies failed to consider and oversee changes appropriately. Robbins-Gioia survey stated that 51% out of 232 companies implementing ERP expressed that the implementation was unsuccessful (Robbins-Gioia, 2002). All of them were faced with imminent danger to fail the huge project and, in some cases, even suffered bankruptcy.

Why could companies suffer such heavy losses from failing to oversee changes? It is because many problems may arise from that and presumably lead to project failure. Figure 1 shows the cause and effect from failure of recognizing changes.



Figure 1 – Cause and effect of underestimating changes

Aladwani stated that underestimating change can be caused by insufficient top management commitment, ineffective/ lack of communication, or unrealistic expectation of technology (Aladwani, 2002), as shown in figure 1. Sometimes, top management does not realize the true significance of what is actually happening upon implementing ERP. How it will affect every aspect of the organization. In the end, they will fail to give sufficient commitment to oversee the changes (Aladwani, 2002). Another reason is that there is lack of communication among management and the project team and users. Due to that, each element may fail to recognize the changes that happen and inherently fail to take proper actions to cope with the changes (Rockford, 2004). Overestimating the ability and the benefit of technology can also be a source of underestimating change. The company may think that ERP is already very advanced and not need to concern very deeply on the changes that may happen during implementation (Rockford, 2004).

As you can see from figure 1, failure to recognize changes may also lead to miscalculating or misplacing the right resources to the project. The company may

miscalculate the time allocation, or budget, or placing incorrect skill/resource in the incorrect spot (Dryden, 1998). Merit project in Dryden's article surveyed that \$300K project may escalate to \$1B project due to changes of business process during implementation. These mistakes will most likely to cause budget overrun and in terms will force the company to shut down the project.

Failure to recognize changes may also develop demoralized employees. Insufficient top management commitment or lack of communication to explain the importance of implementing ERP to the employees can demoralize them. It is because old habits die hard. Employees were already settled with their old ways of doing things. Now, they are forced to adapt to the new unfamiliar business environment without appropriate support. Employees will get demoralized, and without proper actions, it may cause employees resistance (Nah et. al, 2004).

Training adequacy is a must after ERP implementation (Aladwani, 2002). Like any other software or information systems, ERP is only a tool to help the company running efficiently. Without proper skills, ERP will be rendered useless, and in some cases, may be harmful (Scott, 1999). Due to improper use of ERP, FoxMeyer corporate lost \$34 million in transaction and eventually halted FoxMeyer operation (Scott, 1999). Furthermore, demoralized employees, who do not have adequate training, will be most likely to reject the ERP because of their unfamiliarity with the system.

Managing Changes

From the problems identified upon ERP implementation, companies should consider below recommendations carefully.

1. Have a realistic expectation on technology and approach the implementation using pilot project method (Trotta, 2003)

Do not put too much confidence on ERP; expect to face many problems upon implementation. Focus on small gain rather than unrealistic goal. Reduce the scope, rather than putting more resources (Scott et. al, 2002). By doing this, the company will be able to keep changes at minimum risks. It is easier to supervise smaller scope project than huge budgeted project. Planning and scheduling can be handled more easily and therefore reduce the training inadequacy.

2. Encourage open communication around all elements of the company (Connell, 2001)

Communication should always be kept open and active. Employees should be encouraged to communicate with the project team or the management. Any useful information should be distributed as soon as possible. By this way, changes can be identified as early as possible and proper actions can be performed before too late.

3. Emphasize on long-term overall organization benefit rather than optimizing sub-unit performance

Employees often feel heavily burden with the changes of business environment. They feel that their performance is not increased by using ERP. At this point, management should step up and emphasize the essence of using ERP is not on optimizing sub-unit performance, but more to bring longer-term overall organization benefit. Utilize consultant to explain the importance of ERP, how it works, so that employees can feel more optimist that what they did are actually bring more profit to the company.

4. Have top management sufficient commitment to support project team and employee (Scott et. al, 2002)

Top management should become a champion/sponsor to the project. They should influent the supervisors/managers of their company on importance and benefit of the project to the company and have them to encourage their subordinates. Most importantly, they should popularize above recommendations across the company because they have the power enforce the company culture.

Conclusion

Very expensive bitter experiences learned by those companies should give us thoughtful lessons on how to better prepare for mitigating risks from changes in ERP implementation. Failure on identifying changes in early stages has proven to be devastated to the ill-fated companies. To minimize the risks caused by changes in ERP implementation, there are several recommendations that can be applied.

First, have a realistic expectation on technology and implement the software step by step (use pilot/demo project approach) to minimize the change possibilities (Trotta, 2003). Second, encourage open communication around all elements to optimize information sharing regarding the implementation (Connell, 2001). Third, emphasize on long-term overall organization benefit rather than optimizing sub-unit performance. Finally, have top management sufficient commitment to support the project team and encourage employees during implementation (Scott et. al, 2002).

Reference

Aladwani, A. M. (2002). *Change management strategies for successful ERP implementation*. Available online: <u>http://web.njit.edu/~jerry/OM/OM-ERP-Papers/ERP-</u> <u>10-Success.pdf</u> (Accessed: 10/05/05)

Connel, J. (2001) *Without communication, ERP solutions are a bust.* Available online: <u>http://techrepublic.com.com/5100-22-1040676.html#</u> (Accessed: 10/05/05)

Dryden, P. (1998). *ERP failures exact high price*. Computerworld. Framingham: Jul 27, 1998.Vol.32, Iss. 30; pg. 0_1, 2 pgs

Hamilton, S. (2003). *Maximizing Your ERP System – A Practical Guide for Managers*. McGraw-Hill, New York.

Jakovljevic, P. J. (2001). *ERP Beginner's Guide in So Many Words*. Available online: http://www.technologyevaluation.com/Research/ResearchHighlight/BusinessApplication s/2001/02/research_notes/ TU_BA_PJ_02_05_01_1.asp (Accessed: 17/03/2005)

Koch, C. (2002). *The ABCs of ERP*. Available online: http://www.cio.com/research/erp/edit/erpbasics.html (Accessed: 17/04/2005)

Manoeuvre (2001). *The Six Deadly ERP Sins*. Manoeuvre Pty Ltd, Lane Cove, New South Wales

Nah, F.F.; Tan, X. & Teh, S. H. (2004). *An Empirical Investigation on End-Users' Acceptance of Enterprise Systems*. Information Resources Management Journal. Hershey: Jul-Sep 2004.Vol.17, Iss. 3; pg. 32, 22 pgs Robbins-Gioia (2002). *ERP Survey Results Point to Need for Higher Implementation Success*. Available online: <u>http://www.robbinsgioia.com/news_events/012802_erp.aspx</u> (Accessed: 10/05/05)

Rockford Consulting Group (2004). *The 12 Cardinal Sins of ERP Implementation*. Available online: <u>http://rockfordconsulting.com/12sinart.htm</u> (Accessed: 10/05/05)

Scott, J. E. & Vessey, I. (2002). *Managing Risks in Enterprise Systems Implementations*. Communications of the ACM, 2002 April, Vol. 45 No 4 p. 74 – 80

Scott, J. E. (1999). *The FoxMeyer Drugs' Bankruptcy: Was it a Failure of ERP?* Available online: www.ndsu.nodak.edu/ndsu/bklamm/BPandTC%20references/ BP%20TC%20Scott%201999%20Foxmeyer%20drugs%20bankruptcy%20was%20it%20 a%20failure.pdf (Accessed: 10/05/2005)

Shank, J. K. & San Miguel, J. G. (2002). *ERP as a Strategic Management Tool: Six Evolutionary Stages*. Available online: http://www.cfoproject.com/documents.asp?dID=1512 (Accessed: 17/04/2005)

Trotta, G. (2003). *Managing A Successful Integration Project*. Available online: http://www.ebizq.net/topics/erp_integration/features/3366.html (Accessed: 10/05/05)