Managing ERP Implementation to Deliver Value- A Project Management Perspective

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ABSTRACT
ERP-systems are software packages that enable the integration of transaction oriented data and business processes throughout an organization. ERP-implementation projects can be viewed as processes of organizational change. Many problems related to ERP-implementation are related to a misfit of the system with the characteristics of the organization. This paper uses the evidence of a case study to uncover some important dimensions of the organizational change issues related to ERP-projects. The scope of this paper focuses on assessing the seven common roadblocks of the ERP world , and provides the six effective suggestions-best practices and also presents the imminent risk issues that when handled diligently will deliver value to the ERP implementation.

KEYWORDS: ERP (enterprise resource planning system), Stakeholders, Management guidelines, IT-misalignment, Program Management office (PMO), Implementation lag, and Project Risk management

INTRODUCTION
The technology keeps advancing and the underlying rationale for ERP hasn't evaporated: we still need to reduce inventory, slash the costs of delivering products and services and make our operations more flexible. Yet the best ERP implementations we see in today’s businesses struggle to deliver 20% of the headline promise. The problem isn’t with the concept, or the enabling technology, or the complexity of deployment. The failures all point to one source: the (mis)management of implementation. By recognizing the classic mistakes that implementers make, and following some straightforward management guidelines, you can unlock the benefits of ERP to create the efficient, responsive business you need to compete.

Does The ERP Deliver Value?
Ventana Research frequently reports that senior finance executives believe their enterprise resource planning (ERP) software has failed to deliver sufficient value. There was some factual basis for this perception. Surveys performed during 2007 consistently showed ERP deployments fall short of expectations for return on investment (ROI) because implementation costs were higher than projected and promised benefits were harder to achieve. That these systems have ongoing costs for maintenance fees and upgrades further reinforces this view among some CFOs. But there is evidence that companies underestimate the positive financial impact ERP systems can have. We believe many CFOs are not achieving all the potential benefits from these systems because their negative perceptions have caused them to underutilize ERP systems in the areas of process improvements and innovation. We advise finance executives to work at increasing the value their companies receive from this core business system.

THE SEVEN COMMON ROADBLOCKS TO ERP REALIZATION
There are seven common roadblocks to successful ERP realization. Once these are recognized as blocks rather than showstoppers, we can take action to clear the path to implementation – and begin to close the promise gap.

1. Implementation Lag
Business and technology are both moving targets. If you spend too long evaluating and comparing solutions, by the time you're ready to commit the technology has moved on and your assessment is invalidated. Suppliers fragment and consolidate; platforms evolve; scheduled software products fail to arrive. Meanwhile your business requirements are evolving on an entirely separate plane.

2. Business/IT Misalignment
IT continues to be seen as an organizational outsider rather than a team player. Rarely do IT teams define themselves in terms of their role in the business. Status fears reduce many IT decision-makers to denying technology's role in transforming the business, preferring to repeat the mantra that IT merely serves the business. They're then unable to provide any vision for the business and lose the credibility needed to apply the brakes to runaway projects. The extent to which the two “sides” share a common viewpoint is primitive and informal.

3. Business Absence
Business users frequently disclaim responsibility for the organization’s choice of ERP system. In the past this lack of interest was blaming on the obscure nature of computer systems. Today's users are more IT literate, but if anything this has made them more rather than less suspicious of business systems. They believe that they'll exploit the data in the ERP system, not the system itself, and therefore don't contribute to the system's selection, design or installation.
4. Transition Risk
The degree of change management needed to move to a successful ERP implementation is universally underestimated. Even where change management is taken seriously as a discipline, process redesign is frequently fumbled. People have a deep-seated fear of admitting that change is difficult, which leads them to skimp on change management, which results in failed projects.

5. Transaction Worship
ERP is all about creating value from a holistic view of the business. Yet organizations are stubbornly unwilling to abandon their traditional focus on isolated transactions in favour of end-to-end business processes. It’s this addiction to transactions that buttresses functional silos.

6. Outsourcing Cop-Out
Outsourcing can be a beautiful experience between consenting parties. But all too often outsourcing exposes the absence of a proper specification of business requirements, and converts that failure into a contract-bound arena of conflict. Outsourcing can’t compensate for an organization’s failure to articulate its needs, set goals and commit to making the changes needed to deliver successful ERP.

7. Reporting Hangover
We put this roadblock last because that’s where organizations put it – yet it’s the biggest obstacle to ERP implementation, and the first that needs tackling. The system’s reporting capability is ERP’s impact on the business. We deploy ERP solutions so that we can intervene in the running of the business from an informed position of strength. ERP is an evidence-generating mechanism, so specifying what information we need to see, when and where and how often, is crucial to realizing ERP’s benefits. Unless we specify these IT outputs, we will make no business inputs. And the virtuous cycle we think we’re buying into won’t run.

The standard tips for project success: secure strong executive-level sponsors, create a detailed project plan in advance, and make sure enough people are dedicated to the project. While these are sound tips, they haven’t brought an end to system implementation failures an Alexandria-based program management consulting firm, recently reported that 51 percent of ERP projects are considered failures, while a full 30 percent far exceed budget and miss their completion dates by a wide margin. These numbers can be attributed to inherent problems in what are generally considered best practices for enterprise systems implementations.

SIX SUGGESTIONS
If seemingly tried-and-true best practices can’t guarantee project success, what can a company do to improve the chances that its next implementation effort won’t flop? Here are some suggestions:

1. Focus on Reaping Measurable Business Benefits.
Projects are much more likely to succeed when a company views the adoption of a new enterprise system as an opportunity to improve the way it does business, rather than an interruption of the status quo. This means tackling change-management issues head-on by giving people all the information they need about the new system, and how it will impact their jobs.

One manufacturer with a track record for successful implementations rarely green lights a project that isn’t expected to boost productivity or cut costs by at least 25 percent—and 50 percent or more is the actual goal. To ensure these levels of performance, the projects are formally managed, monitored, and controlled. To achieve breakthrough improvements, both users and IT staff members must have the same definition of project success. Great projects target the achievement of specific business performance, and assess potential, define business metrics that matter, report progress, and continue to do so until targeted benchmarks are reached. Key metrics include cycle times, employee productivity, and margins.

2. Establish a Program Management Office (PMO).
A disciplined PMO is the evolution of project work into business value creation within IT. The PMO seeks delivery of business benefits that can be gained through IT investment. This group becomes the soul of IT. Tuned into the business and the company’s future strategies, it routinely performs IT needs assessment and portfolio management, and assists line-of-business executives with business case development.

PMO gives projects context within the overarching goals of business value, but its role also subsumes projects—and many of the silos of IT. A strong PMO can handle a range of tasks often covered by different organizations:
- Project management, facilitation, and administration;
- Risk assessment and change management;
- Development and delivery of system/process training;
- Vendor and third-party management—especially if a consulting firm is involved; and
- Executive liaison for formally communicating project progress and business results on a regular basis.

The PMO also should communicate how the project is changing operational performance, ensuring that employees, customers, and suppliers associated with performance change have access to the measurements relevant to them.

3. Assess the Organization’s Technical Maturity Level Before Project Launch.
Companies design manufacturing and supply chain processes that optimize their own businesses. That’s why no two enterprise software implementations are exactly alike.

From an IT standpoint, companies begin implementations with different levels of skills and experience. This actually becomes one of the chief responsibilities of the project team: Design a meaningful plan that takes the organization’s maturity and capabilities into account.
When you consider the nature of application software—which ultimately embodies a company's business processes—implementation efforts must drive the cultural change required to fully tap the potential of the software's tools and processes. The magnitude of this change is characterized by the amount of process and technology change the new systems will require, and the degree of difficulty in getting users to modify behavior. Likewise, a savvy CEO is going to consider the incentive structures that exist, and whether they may actually inhibit the desire to alter the status quo.

Projects as significant as an ERP system deployment need strong leaders, tough principles, and a fully involved staff that will ensure system benefits are delivered to predefined performance levels. These project managers need the skills to assess operational capability—especially process and data quality maturity. They must develop performance-management metrics and the environment that project teams will operate within as part of project delivery. Some implementations may require a trained project professional—not just a key manager. Beyond thorough execution of project tasks, these professionals also must read and understand the changing environment—i.e., manage multiple constituencies across the project life cycle.

5. Pay Close Attention To Data Quality Early in the Project.
Missing or inaccurate data can be a true project killer. It's simple: Users will not trust a new system if they question the veracity of the information it generates. Unfortunately, the issue of data quality isn't a small one. Of companies responding to a recent PricewaterhouseCoopers survey, 75 percent reported significant problems as a result of defective data, and 33 percent had to delay or scrap new systems.

Other industry studies reveal that even smoothly run projects require teams that devote 20 percent to 30 percent of their time dealing with data consistency. Clean, reliable data is essential to the success of an enterprise software project, but it's a checklist item that often receives only cursory mention in project plans. Great project managers set data cleanup as a “must-do,” early-stage activity.

These steps should be included in the work plan:
- An assessment of the company's data accuracy. Consider factors like frequency of use, redundancy, and whether data is still at all relevant to the business processes.
- A remediation plan concerning scope and time. This could include generation of data, cleansing, consolidation, and transformation.
- Workflows and accountability for data-quality processes for ongoing accuracy.
- A validation process to ensure a clean start-up.

The data accuracy issue can become especially tricky when a project calls for a large amount of critical data to be moved from PC spreadsheets to a corporate database. A single user can be comfortable with the missing data or sloppy facts, but a corporation cannot.

6. Use Vendor Resources Wisely.
Manufacturers embarking on enterprise system projects almost never have enough resources, so companies usually need to work with the software providers to get projects done. The challenge is: Just how much is right? The answer shows up in advantages in time, cost, and success of implementations. Behind the question of how much of which resources—i.e., consulting, education, project management—a vendor can bring to a project, the real question is what in-house processes are in place to make the most of all the vendor can do. How will the manufacturer interact with the vendor to access capability, and what can be done to effectively leverage the services and tools that the vendor brings to the project? On the other hand, relying too heavily on the vendor may result in projects that meet all of the implementation milestones, but don't do much to improve the way the manufacturer does business.

Similarly, a company may not be privy to early warning signals that things need attention, or to key decisions that may have critical consequences for the business.

PROJECT RISK MANAGEMENT
More often than not, ERP implementations fail to deliver their potential value. Even if you have selected a product that is a good fit for your operations, there are many risks that can jeopardize your ERP project's success.

A risk is something that may happen and if it does, will have a positive or negative impact on the project. Most people dive into the negative risks but what if something goes right? Take the example we came across recently where we identified a project finishing ahead of schedule as a risk. It might seem to be a bonus but the completion date happened to occur at the busiest time of the year for the company. The last thing they needed was a project going live in their peak period. The mitigation was that if we were ahead of schedule, we would slow the project down by reducing resources.

Risk Management Plan
There are four stages to risk management planning. They are:
- Risk Identification
- Risks Quantification
- Risk Response
- Risk Monitoring and Control

Risk Identification
In this stage, we identify and name the risks. The best approach is a workshop with business and IT people to carry out the identification. Use a combination of brainstorming and reviewing of standard risk lists.

There are different sorts of risks and we need to decide on a project by project basis what to do about each type.

Business risks are ongoing risks that are best handled by the business. An example is that if the project cannot meet end of financial year deadline, the business area may need to retain...
their existing accounting system for another year. The response is likely to be a contingency plan developed by the business, to use the existing system for another year.

Generic risks are risks to all projects. For example the risk that business users might not be available and requirements may be incomplete. Each organization will develop standard responses to generic risks.

Risks should be defined in two parts. The first is the cause of the situation (Vendor not meeting deadline, Business users not available, etc.). The second part is the impact (Budget will be exceeded, Milestones not achieved, etc.). Hence a risk might be defined as "The vendor not meeting deadline will mean that budget will be exceeded". If this format is used, it is easy to remove duplicates, and understand the risk.

**Risk Quantification**
Risks need to be quantified in two dimensions. The impact of the risk needs to be assessed. The probability of the risk occurring needs to be assessed. For simplicity, rate each on a 1 to 4 scale. The larger the number, the larger the impact or probability. By using a matrix, a priority can be established.

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<thead>
<tr>
<th>Probability</th>
<th>Low</th>
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<tr>
<td>4</td>
<td>Medium</td>
<td>Critical</td>
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<td>3</td>
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**Impact**
Note that if probability is high, and impact is low, it is a Medium risk. On the other hand if impact is high, and probability low, it is High priority. A remote chance of a catastrophe warrants more attention than a high chance of a hiccup.

**Risk Response**
There are four things you can do about a risk. The strategies are:

- **Avoid the risk.** Do something to remove it. Use another supplier for example.
- **Transfer the risk.** Make someone else responsible. Perhaps a Vendor can be made responsible for a particularly risky part of the project.
- **Mitigate the risk.** Take actions to lessen the impact or chance of the risk occurring. If the risk relates to availability of resources, draw up an agreement and get sign-off for the resource to be available.
- **Accept the risk.** The risk might be so small the effort to do anything is not worth while.

A risk response plan should include the strategy and action items to address the strategy. The actions should include what needs to be done, who is doing it, and when it should be completed.

**Risk Control**
The final step is to continually monitor risks to identify any change in the status, or if they turn into an issue. It is best to hold regular risk reviews to identify actions outstanding, risk probability and impact, remove risks that have passed, and identify new risks.

**CONCLUSION**
While not perfect, conventional wisdom about enterprise software implementations is based on real experience. But it goes only so far. There's more to know and to do, and companies enjoying the rewards of success have pearls of wisdom to share. The classic errors of ERP implementation are avoidable. But in order to smash through the roadblocks, we need to accept that successful implementations demand interpersonal, logic and monitoring skills.

Like the telephone, ERP systems have become necessary for Global 2000 companies to do business. Yet like the telephone, the ways in which organizations apply the technology can make a significant difference in the value they receive from the investment, both in reducing their operating costs and executing their core business processes more effectively. Realizing greater value from ERP systems is a matter of focusing attention on the effective use and alignment of people, process and technology. The identification of roadblocks, implementing six effective suggestions-best practices and assessing imminent risk issues, the implementers can rest assured that the ERP implementation will deliver tangible value to their business.

**FUTURE STUDY**
ERP implementation project is a complex and difficult task, as a typical ERP system entails many users, both internal and external, ranging from top executives to data entry operators, external consultants and software vendors. The future study will focus on assessing the role of tacit knowledge management on the success of Enterprise Resource Planning (ERP) systems implementation.

**REFERENCES**


