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ERP Projects: 5 Risk Factors and How to Manage Them

Introduction

As anyone who has ever been involved can attest, implementing an ERP system is an inherently risky activity. Indeed, research has found that 20% to 25% of ERP initiatives are considered failures and between 55% to 60% are compromised in some way by the organisations undertaking them. Implementation failures occur for all sorts of reasons and the effects of failure can range from the relatively benign (such as "poor user-friendliness") to the business-endangering ("inability to process transactions").

This paper looks at five of the factors that that can lead to project failure if they are not properly managed and includes mitigation steps to address the related risks.

The five factors covered below are:

1. Lack of Business Ownership
2. Inadequate Focus on Delivering Benefits
3. Poor Project Team Skills
4. Failure to Improve Business Processes
5. Inadequate Business Change Management

1. Lack of Business Ownership

One factor that looms large in our experience is where an ERP implementation is regarded and treated purely as an IT project. It is not. An ERP implementation is primarily a large, complex business change project and it will not be successful unless the business takes ownership for the project.

To mitigate this risk the project must be led by the business, and support for the project and the changes it will bring should come from the top. In order to drive the necessary changes, senior management commitment should be visible to the whole organisation

An ERP implementation requires cooperation and input from almost everyone in the organisation, across most functional areas, and at all levels. Ownership of the project must therefore be firmly established across all of the senior management team, not just those in areas directly impacted. Every area that the project touches should be represented on the ERP steering team. The appointed project sponsor will be the champion of the project and should therefore be a senior manager in the organisation with a clear understanding of the project goals and an ability to articulate them.

To ensure commitment and to start the project on the right footing, the management team must reach agreement on the project objectives and have a common set of expectations regarding business process change. They should also fully understand the ERP implementation process and the resources required to deliver a successful project. They will be asked to assign some of their best people to the project and, potentially, change their business processes. They will only do that if they have bought into the project objectives and taken responsibility for delivering them.

Risk mitigation steps to ensure business ownership for the project

- Educate the senior team so that they understand that ownership of the project is with the business, not IT
- Ensure the senior management team have a common understanding of the project objectives and the effort required by the business to deliver a project
- Put a strong steering team in place, with representatives from all functional areas

2. Inadequate Focus on Delivering Benefits

A successful ERP project is one that delivers business benefits as well as meeting the usual project metrics of "on-time and within budget".

The business issues to be addressed by the ERP system are usually identified when the justification for the project is developed and these should align with the organisation's strategic direction. To ensure that the business strategy and the project goals remain synchronised and the benefits are delivered, benefits realisation reviews should be included at each stage of the project plan.

Figure 1: Typical sequence of ERP project steps

Pre-launch

Before the project is launched, the expected benefits should be identified, recorded and checked to ensure that they are realistic and achievable. The baseline values for each one should be established, an owner assigned and if possible, achievement of the benefit should be linked to the individual's Key Performance Indicators (KPIs). Preferably, the owner should be from the business area impacted by the benefit rather than the project team, as this will tie the benefit to the overall organisation rather than the project.

Launch

Including details of the expected benefits in the project launch communication starts the process of making sure the whole organisation is clear on the project vision and can see how the project contributes to the achievement of the overall business objectives.

Design

As the blueprint for the new system emerges during the design stage of a project it is crucial that the benefits are examined again to make sure the new business processes proposed work towards achieving those benefits. If new benefits emerge at this stage these should also be captured, evaluated, and assigned to an owner.

Build and Test

During the build and test stages of the process, the benefit owners should confirm that the system will deliver the identified benefits by participating in and signing off on the acceptance tests.

Post go-live

Benefits are usually not fully delivered until well after go-live when the project team may no longer exist. It is important that a time-phased, post go-live benefits realisation plan with milestones and goals is agreed, and that owners are assigned to measure and report on each one. As the project manager will no longer be responsible, an overall owner should be assigned to drive achievement of the realisation plan and to ensure that regular formal reviews occur.

Risk mitigation steps to ensure benefits are realised:

- Identify, document, and have the appropriate business owner sign off on the benefits before the project starts
- Hold benefits reviews at key milestones during the implementation
- Assign a benefits owner to track realisation post go-live

3. Poor Project Team Skills

During the preparations for an ERP implementation, the focus is often on the skills and experience of the vendor team. While this is important, it is also critical that the "internal" team are carefully selected, as their knowledge of the current business processes and their ability to recognise where these can be improved are key to a successful project. These are also the people who will ensure that the data is correct, the system is adequately tested, and end users are trained.

Questions that may arise when putting together a strong internal team are:

- How is a team with the necessary skills structured and formed?
- What key attributes should a project team member have?
- How can inadequate skills in team members be identified and addressed before the team's performance is negatively impacted?

Structuring and Forming an ERP Internal Project Team

To start with, a clear understanding of the structure of an ERP implementation team is required. The structure of the team will depend on the size and scope of the project, but in general, the following "internal" team roles will need to be filled:

- Project Manager
- Business Change Manager/ Lead
- Process/Functional Leads
- Subject Matter Experts (SMEs)
- Technical Manager/Lead
- Data Migration Manager/Lead

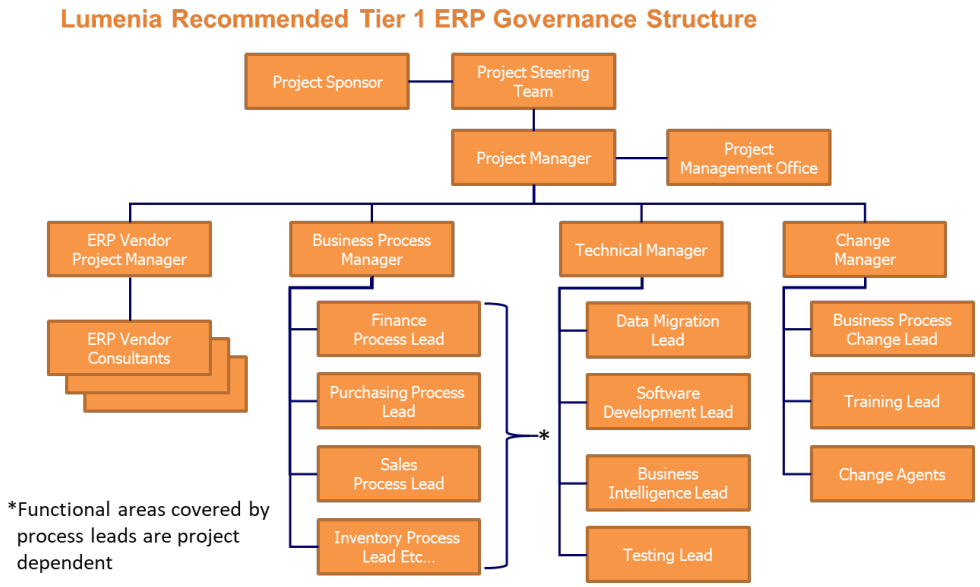

Figure 2: Typical ERP Governance Structure

Each candidate for a place on the project team will bring their own unique combination of personality, experience, skills, and competencies. Ideally, finding the right candidates for a project team role should be approached like any other recruitment exercise. Draft a job profile and document the desired criteria, interview and assess multiple candidates and, hopefully, some outstanding individuals will be offered positions on the team.
Unfortunately, the real world generally doesn't work like that. Challenges in the real world include:

- Persuading people that joining the project team is a good career move for them

- Persuading managers to give up their best people for a period of time while they're seconded to the project
- Lack of real choice regarding team members (e.g., only one possible candidate; picking from the best of a bad lot; having someone foisted on the team to 'get rid of them' in some shape or form), leading to unsuitable candidates ending up on the team

It is important to recognise that these challenges may exist and to take immediate action to address any that arise in your organisation.

Key Attributes for an ERP Project Team Member

As listed above, there are many different roles on an ERP project team. The precise nature of each of these roles differs greatly but certain characteristics are common across all team members:

- **Experience**
  Each team member will be expected to have the relevant level of experience in the area they are representing in order to contribute effectively to the project. Past involvement in an ERP implementation is a definite advantage, and is a "must have" for the project manager.
- **Knowledge**
  A comprehensive knowledge of business processes is essential for SMEs and process/functional Leads, while technical staff will also be expected to be familiar with business processes and understand how technology supports them.
- **Skills**
  Each team member should, as a minimum, possess the skills required to execute the tasks assigned to them. An aptitude for working with ERP systems is a prerequisite, but skills such as process mapping, preparing and executing test scripts, and delivering training presentations are also important.
- **Dedication**
  Being an ERP project team member means hard work, often with long days and periods of intense pressure. Team members need to be hard-working, task-focused and resilient.
- **Good social skills and teamwork**
  Process/functional Leads effectively represent their area of the business on the project team. As a result, they must be able to:
    - Interact with users from the area they're representing to critique proposed new ideas and processes.
    - Interact with the other team members to ensure that cross-functional processes make sense.
    - Feel comfortable interacting with users at all levels in the organisation

Based upon the attributes above, it is likely that you will be asking several of your best employees to participate in the ERP project. The fear is that by taking them out of the day-to-day operations, there will be an immediate negative impact. It is tempting therefore to assign team members part-time to the project. This introduces competing priorities, i.e., business as usual vs project tasks, and makes achieving the timelines very difficult. Instead, it is strongly preferable to resource the project with full time personnel, freed up by backfilling their usual business roles. This also ensures there is a role for the team members to return to post go-live, as the backfill can be released.

Identifying Inadequate Skills in Team Members

A good project manager should have the ability to quickly assess their team and plan around any weaknesses. Psychometric or occupational assessments can also be used to identify how well each of the candidates is suited to the requirements of their role on the project team. As well as identifying particular strengths or positives, the assessment can also help to identify weaknesses or potential problem areas versus the relevant competencies.

It is very unlikely that you will find candidates with all of the skills required. You should recognise that most will need to be coached or monitored regarding some aspects of their performance. The key point here is that if you know about weaknesses in advance, then you can plan around them. In certain circumstances you might have to think about reassigning some project responsibilities. For example, a process lead may be very skilful at testing the system but may not be confident standing up in front of their peers to deliver training. It's much easier to do this at the start of the project rather than further down the line when you've run into a problem.

Risk mitigation steps to ensure the project team have the right skills

- Create job descriptions for each project role and then assess and interview potential candidates
- Strongly resist attempts to assign people to the team just because the are "not busy right now"
- Consider each team member's strengths and weaknesses and assign tasks accordingly

4. Failure to Improve Business Processes

Implementing ERP introduces an opportunity to review and improve business processes. Most modern ERP systems are built around good practice processes and implementing a standard solution encourages adoption of these processes while avoiding the substantial risks introduced if the solution is customised unnecessarily to accommodate current, and maybe less than optimal, processes.

Although many organisations start an ERP project with the objectives of improving business processes and avoiding customisation, few achieve this goal. This is often due to inadequate Business Change Management (as described in the next section) but it can also be a result of the timing and approach taken to designing and getting agreement on the new processes.

The first consideration is the timing of the business process review. Should business process design be done before selecting the new system, before implementation, or during implementation?

The second consideration is the methodology. Is it best to follow the traditional business process design methodology, i.e., document each current process in detail before performing a gap analysis to identify improvement opportunities and then design and map new processes, or is it better to instead start with a good practice standard process and work towards achieving that?

Timing of Business Process Review

There is clear argument for mapping improved future state business processes in advance of selecting a solution. This ensures that requirements are based on the new, improved processes and that the most appropriate solution is selected on that basis. But that's not the only argument for this approach. Taking the time to consider and map future state processes before the implementation project begins significantly reduces the risk of time overruns during the design stage of the implementation. Having approval for process improvements from the relevant people in the organisation in advance of the ERP project results in more efficient design workshops where the internal team are open to improving processes and utilising standard functionality instead of asking the vendor to replicate what they currently have.

The counter argument to this is that there is no point transforming processes in advance of the design stage as the processes will depend on what is available "as standard" in the selected ERP.

This is no longer a valid argument as most ERPs are built around good practice processes, and as long as the newly designed future state processes have their roots in good practice, there will not be a conflict.

Business Process Design Methodology

That leads to the second question: methodology. The most efficient approach to business process design is to start with good practice standard processes and identify where the current processes differ from those. These points of difference can then be analysed to understand why the organisation is operating as it is. Unless there is a sound competitive advantage or industry specific reason to keep the current process the good practice process should be adopted. Few organisations have up to date processes mapped to the level that will be required for a design workshop anyway and spending time mapping current processes, which in all likelihood will need to be changed anyway, is not an efficient use of resources. Adopting standard processes also ensures that opportunities to utilise new features and automation available with the new ERP system can be fully exploited.

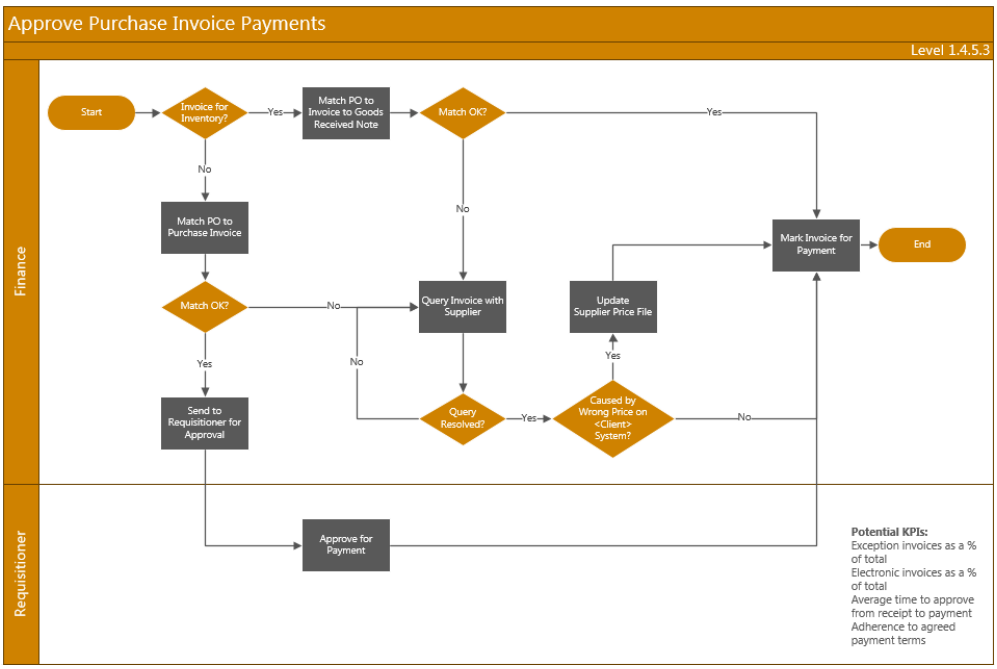

Figure 3: Sample standard good practice flow

A concern raised when looking at process improvements is that the business process owners often have limited experience of seeing how similar processes operate in other organisations and complain that they "don't know what good looks like". They may need external help to identify improvements and to document future state processes. Providing the required support and redesigning processes in advance of the implementation ensures:

- The internal team are prepared for design and approach the workshops open to improving processes
- The organisation can take advantage of automations and new functionality available to support standard processes in the new ERP solution
- There is a reduction, or even an elimination, of the need to customise.

Risk mitigation steps to encourage Business Process Improvements

- Carry out a Business Process Review and Redesign exercise in advance of the implementation project
- Start with standard good practice flows when redesigning processes and work towards adopting those
- Get support for your team to help them identify the processes that need changes and to move towards improved, standard processes.

5. Inadequate Business Change Management

One absolute certainty is that the introduction of a new ERP system means that things will change. Business processes and procedures will need to be amended. Job/role definitions will have to be updated. Some roles may even cease to exist. For an ERP implementation to be successful, it is essential that change is proactively managed to ensure the new system is adopted by users and the expected benefits are achieved. As mentioned in the section above, the failure to improve business processes and to avoid unnecessary customisation is often due to inadequate Business Change Management.

As human beings, we don't like change and it is natural for users to be fearful of the changes an ERP implementation will bring. If those fears are not acknowledged and the root causes addressed, resistance will build and this introduces risk to the project completion or to the realisation of identified benefits. A structured and methodical approach, ideally provided by someone with experience managing change on an ERP project, is the solution.

Structured Methodology for ERP Business Change Management

There are four streams of activity to be considered when managing change during an ERP implementation, all of these contributing to the Benefits Realisation stream:

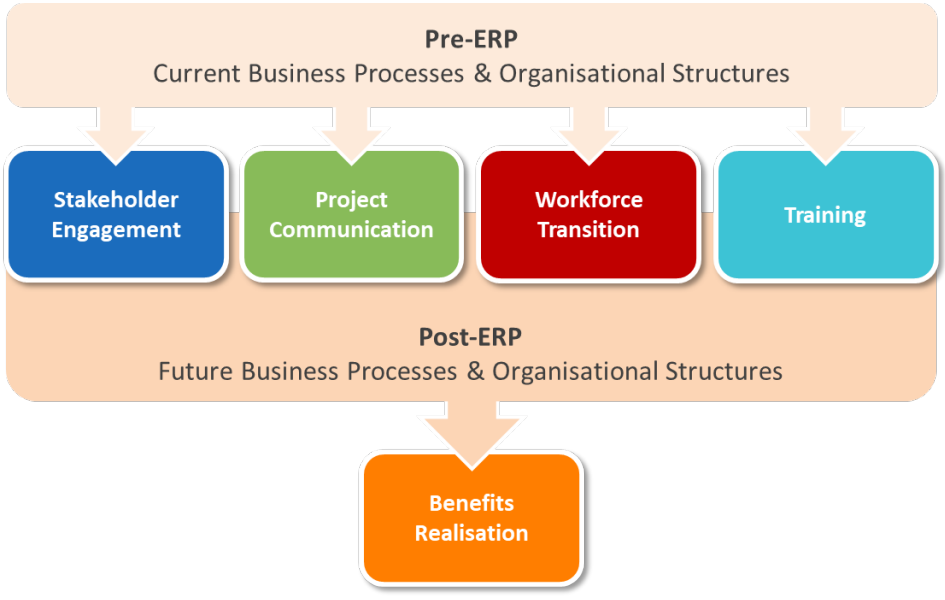

Figure 4: ERP Change Management Streams

At the start of the project, the expected complexity (by site, by function or both, depending on the project scope) should be assessed, and the change impacts documented. This will guide the appropriate level of effort required from each stream.

Benefits Realisation

Ensuring that the project benefits are identified is fundamental to change management. Clearly articulating the benefits to be gained from the implementation is key to winning hearts and getting support for the project. When users understand why things need to change , they are much more likely to adapt. Of course, not all areas of the business will realise benefits, so it is important that users are aware of the overall picture and understand how their flexibility and openness to change will contribute to the organisation's successful implementation.

Stakeholder Engagement

Identifying project stakeholders and stakeholder groups and focusing on the resolution of issues that may reduce their level of support for the project is another important area within organisational change management.
Using surveys followed by regular interviews to tease out concerns and gauge the level of engagement from each stakeholder/group is an effective way to reduce the risk of any unexpected issues arising and impacting the project scope and schedule.

Project Communication

Having a structured process for imparting project information to stakeholders or stakeholder groups is another key factor in ensuring ERP project implementation success. This keeps the project connected with the business.
It is important to determine what information the stakeholders need and when and how they will receive updates. As well as providing updates on project status, the communication plan should make sure that those outside the immediate project team are informed about any process changes or new process designs. This ensures that a broad range of inputs are considered and any potential issues are dealt with early in the project, paving the way for easier acceptance of new processes post-implementation.

Workforce Transition

This stream involves identifying the areas of the project that will have an impact on workforce roles and responsibilities and guiding the organisation through the change process.
Introducing new business processes or changing the current processes can impact the organisation in different ways. In some cases, tasks may disappear or may need to be reassigned. Some roles may no longer be relevant or may change dramatically. New roles may also be required. A detailed job impact analysis is required and a workforce transition plan needs to be put into place. Even if there are no major changes to the processes, the current roles will need to be mapped to the new roles on the system and the appropriate security profiles assigned.

Effective Training

Tasks to ensure effective training include the identification of learning needs, development of curricula and training materials, and the delivery of training. Lack of effective training is often cited as a reason why an ERP solution fails. No matter how good the solution is, if users don't know how to use the system properly it is unlikely that benefits will be realised and improved processes embraced.
Before the launch of the project the approach to training should be determined. Will all training be done by the vendor or external consultants or will there be a "train the trainer" approach? What materials are required and who will develop these materials? These questions and many others need to be addressed and incorporated into a high level training plan. Later on, once the Workforce

Transition stream has identified changes to business roles and/or new roles, a Training Needs Analysis can be carried out to decide who needs to be trained and what training they need to receive. The detailed training curriculum and schedule can then be developed and communicated.

Risk mitigation steps to ensure Business Change is managed

- Assign a Business Change Manager to the project, preferably someone with experience managing the change that ERP projects bring
- Use a structured methodology to ensure stakeholders are engaged, appropriate information is communicated, workforce transition is managed, training is effective, and benefits are realised.
- At the start of the project, assess the expected impact of the project on each functional area and site and use this analysis to determine the effort required from each of the change streams

Conclusion

Risk is inherent in any ERP implementation project and therefore effective risk management is critical in ensuring the project achieves its objectives. Identifying risks and putting in place appropriate risk management plans should be one of the project manager's central responsibilities.

Experienced project managers will be familiar with the risks and mitigation steps described in this paper. Most organisations will have little in-house experience of ERP implementations and may have limited project management capability. The role of the project manager is central to the success of an ERP implementation, so outsourcing this role is worth considering.

Risk management is often thought of as the avoidance of negative outcomes but it is clear that for an ERP implementation to be described as a success there must also be positive outcomes. Good project management should focus on managing risk so that the project's goals and objectives are met and the organisation achieves the expected benefits.

About Lumenia

Lumenia is an independent ERP consulting organisation, specialising in business transformation through the implementation of Enterprise Resource Planning and related enterprise software applications.

We have developed unique methodologies that allow our clients to undertake ERP and business change programmes using structured processes that maximise the likelihood of project success by promoting business ownership, minimising risk and controlling cost, while ensuring that planned business benefits are realised.

We employ an outstanding team of independent ERP consultants and support staff. All Lumenia consultants have a minimum of ten years professional experience.

Contact us today about your ERP implementation project.

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