

THE EA WAY TO ERP

Sarah Smith (pictured) of Enterprise Architecture Solutions discusses how helping key people act decisively can make for a successful ERP project, and the role an enterprise architecture (EA) can play.



Introducing or changing an organisation's ERP system is a major, long-term initiative that demands significant planning, resourcing...and money. Regardless of the reason for the project – whether it's your first foray into ERP or a consolidation exercise due to a merger or acquisition – there will be a huge number of important decisions to be made along the ERP journey.

To effectively manage the risk associated with ERP, you need to provide the right people with the information they need, at the time they need, to enable them to make decisions based on the facts. In reality, this is easier said than done, so this article highlights some ways you can move towards making this happen.

Understanding business objectives

First, it is crucial to understand why your organisation is embarking on this ERP journey and what it wants to get out of it.

Often companies take the view that ERP implementations are pretty much the same in terms of objectives – to simplify and standardise those back-office processes that are not differentiators to the business, across the entire organisation.

Of course, at the highest level this will be true for most, if not all, organisations. However, you need to dig a little deeper to understand why such simplification and standardisation is required.

Take, for example, an organisation which has been left with numerous ERP systems following years of mergers, acquisitions and a federated approach that has allowed each region to implement its own processes. It may seem obvious that a consolidation will be beneficial, but what is the real driver behind it?

- Is it to save money simply through the consolidation of these numerous ERP systems?
- Is it to drive best practice through standardisation across the business, to streamline processes and drive down costs?
- Is it to improve above-market reporting by having a consolidated information source, rather than many different sources of information that provide different types of information that are hard to collate into one big picture?
- Is it to simplify the data landscape by reducing the number of sources of master data?
- Is it simply technical consolidation to manage technical and support costs?

All these reasons are valid, and can all lead to the same high-level outcome – to implement or upgrade the organisation's ERP systems. However, your understanding of the real objectives of the project can help you to make the right decisions during the initiative and this can have a tangible effect on its long-term success.

Understanding your back-office processes

In the early days of ERP, organisations aimed to configure the systems to suit the way they worked. Now many companies accept that at least some of their processes should be altered to suit the way their chosen ERP systems work.

Today's ERP systems incorporate industry standards and best practices in their processes and so adopting those processes, in as standard a way as possible, is often the most efficient route, both for the project and the organisation as a whole.

However, this only applies to those processes that are not a differentiator for your organisation. Where a process can be a differentiator, that is exactly where you want to avoid doing the same as all your competitors!

It is vital, therefore, that you have a complete understanding of your organisation's value chain so you can be certain which processes are differentiators and need to be treated separately, and which should be standardised across the business and in line with industry best practices, as far as possible.

Although we can easily trip the ERP process areas off the tongue, this really does need to be thought through. For example, for some organisations, manufacturing might not be a differentiator since the packaging and branding, rather than the product itself, is what sells the product. In this case manufacturing will fall under the ERP umbrella.

For another organisation, however, the manufacturing process may provide a differentiator in price or quality and in this case you may not want to standardise the process, or allow it to be incorporated into a commercial ERP system's best practices!

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Once you have understood the real drivers behind the ERP project, you need to ensure you have a complete understanding of your organisation's value chain and what differentiates you from your competitors.

Take time upfront to understand how your processes currently work; where they can be standardised easily and where this will cause issues for a particular country or function within the enterprise; where you are likely to meet resistance and whether there is a valid reason for this – eg, regulatory differences across different regions.

Understand what management information your executives expect at the end of the project and ensure that any changes along the way do not alter this, or that the alterations are agreed first.

Make sure you understand the relationships between the various business processes and functions, the information they use and the systems that support them, so you are better placed to understand the impact of change on other areas of the project.

Companies often regard this type of upfront planning and information gathering as costly, in terms of both money and time. In reality it enables you to take better, traceable, quicker decisions *en route*, saving you both time and money in the long run.

The level of detail you capture should be as much as you need to support the project. By describing where you are today, you are able to understand what is changing and what will be impacted by the change. Well-defined target processes, information and systems requirements, and the dependencies between them will form part of the plan that guides everyone through the project and will provide the traceability to the original objectives.

In a long and complex project, such as an ERP implementation, there is often an urgent need to start the project once the major decisions have been taken and a tendency to start hitting the keys early in the project to 'get things moving'.

Inevitably, however, there are situations that arise that you did not foresee and where decisions need to be taken. These can be anything from a major change, such as outsourcing part of the back office, to a change in regulations.

The ability to quickly understand the impact of these changes and replan accordingly is critical to everyone, from the business sponsor to the implementation team. Questions arise at times like these that challenge the validity of the project:

- How much is this change going to cost?
- What other projects depend on this one?
- Will the original requirements be impacted by this change?

Anything, therefore, that can help you take these decisions effectively and quickly is of great benefit and you will reap the rewards of your upfront planning once you are managing project changes.

Using enterprise architecture practices

Much of what is described above might automatically be completed in an organisation with a mature enterprise architecture (EA) capability. Of course, many organisations do not have an EA capability or have one that has not reached full maturity – but in these situations, you can still take an EA approach at the beginning of an ERP project.

Some of the key points of an EA approach have already been described, such as ensuring that the business objectives are fully understood and agreed; that the business capability model and value chain are completed and agreed; and that the current and target landscape within the scope of the project is understood and documented.

Basically, this is the hub of an EA approach. Understanding the relationships between the processes, information and data, applications and technology – both within the scope of the project and to those with links outside it – allows you to make faster and better informed decisions *en route* which can reduce risk, manage costs and accelerate delivery.

EA tools

The volume and complexity of the information associated with an ERP project can be overwhelming, and there is often no relationship between the requirements and specifications for the business processes, information requirements and systems design.

Using traditional office tools such as Excel, PowerPoint and Visio can add to the complexity, as these products aren't designed to manage dependencies between the elements that are being described.

Often the processes are drawn in PowerPoint, information models are produced in Visio and a variety of other specifications in Excel and Word. The design authority for a business process might make a change in PowerPoint but the systems designer may never be aware of this as they're working against v1.0 of the spec.

This is a nightmare for project managers and one of the most common causes of running over budget as the inevitable rework occurs.

A good EA tool can manage the definition of the constituent parts of the project – objectives, processes, information and data, applications and technology – and manage the relationships between them. With the right information in the tool, it will be able to provide immediate answers to business questions, and ensure everyone is working off common and shared information and understands the impacts of change to the project.

If your organisation doesn't yet have an EA tool, it may be worth taking a look at the open source tools that can be used without adding significant cost to the project. They are free to download and provide a means to capture the information and relationships into a central repository, combined with powerful reporting and analysis tools that enable you to interrogate the data captured to aid decision making during the project lifecycle.

They can import data from a wide variety of sources so you won't need to start data capture from scratch. Reports can be built very quickly (hours/days not weeks/months) and the products use industry-standard (non-proprietary) technologies so there's no vendor lock-in.

Conclusions

To deliver an ERP system successfully, companies need accurate and timely information about and across the organisation. If the teams delivering the system are to act quickly and decisively, then the right people must have access to the right information at the right time.

However, the scope of the implementation project, and the information required to plan and execute it, spans the enterprise. By adopting an enterprise architecture approach to how you collate, manage and use this information, you can ensure that everyone involved in the ERP implementation – business and IT – at all levels of decision making, has the information that they need to make the right decision and understand the impacts of that decision.

It quickly becomes very difficult to manage this information about the enterprise, due to the sheer volume of the elements involved and the complexity of the interdependencies between them. Tool support is vital but need not require significant investment to support the EA approach.

Open source tools are available to replace office productivity tools that lack the capability to manage the complex relationships that always exist in ERP projects. These open source tools also provide the ability to deliver decision support in a variety of forms that are easily consumed by whoever needs that information.

By adopting EA practices supported by appropriate tooling, you can significantly improve the chance of delivering your ERP project on time and on budget.

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