The Complete ERP Systems Implementation Guide for SMBs





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About the author

James Crowter's passion is helping organisations improve their efficiency by getting business processes optimal more of the time – and how technology can help.

As the Managing Director of one of the longest established Microsoft Dynamics 365 Business Central (formerly known as Dynamics NAV) partners in the UK, he's spent the over 25 years working with organisations of all sizes and types implement both ERP & CRM.

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Introduction

Many business leaders talk about integrating business systems and some fall by the wayside for fear that the process is too costly, too complicated and too time consuming.

Yet, whilst an investment is required both financial and time, the realisation that both are more manageable than expected and yield great benefits, have lead small to medium sized firms embracing technology and information and harnessing the power that integration brings alongside their larger counterparts.

But what do we mean by an integrated system? How can that benefit a business? What are the considerations? You have a system but feel it's not fit for purpose today? Where do you start?

We have put together this step-by-step guide to help you on your journey to either update your present system or introduce a whole new solution. You might think you have a robust system in place but it's always worth taking a little time to question what you have to see whether it is still current and fit for purpose.

The content of this guide is aimed at simply telling the story of why an integrated business system, or Enterprise Resource Planning as it is most commonly known as, is a valuable asset to your business and not an administrative tool as it can mistakenly be considered as.







1

What is Enterprise Resource Planning?

What is Enterprise Resource Planning (ERP)?

Many business leaders talk about integrating business systems and some fall by the wayside for fear that the process is too costly, too complicated and too time consuming.

ERP is a series of integrated applications that help a business connect activities across all departments, ensuring that everyone in the organisation is working with the same data and processes.

For many businesses, the biggest investments are in human resources, inventory and fixed assets and managing those resources is what ERP is all about.

Depending on which business process a company wants to improve and the type of business it is whether a manufacturer or service provider, determines which ERP tool is required but on the whole, for any firm looking to make efficiency improvements, save time and money by automating and standardising certain processes, even a simple system will bring about a valuable change.

What areas does ERP address?

Businesses that sell products will need an ERP system that covers manufacturing, supply chain and distribution functions.

For businesses that sell services, ERP capabilities such as project management for service engagements, field services support and sales and marketing functions are very important.

However, all departments within a business will benefit from an integrated ERP system and there are various software applications that support functions but more importantly, integrate into one complete system to streamline processes and information across the entire business.

Finance

Recording, tracking and consolidating all sales and operational information into one central accounting system is essential for firms these days.

ERP financial software delivers this capability with centralised general ledger, accounts receivable, accounts payable and payroll systems.

Being able to instantly see a company's financial position means decisions can be successfully made. It's not just about financial information that is current; it's live information that can be trusted.

HR

If there is the need to track personnel hours and employee performance as well as the administrative side of HR in managing employee benefits, ERP offers a centralised function with the capability also to manage talent and staff development.

Business Intelligence

Probably one of the biggest benefits a good ERP system can provide is the ability to analyse data, assessing live information that can be acted upon.

Rather than spending hours pouring through files, developing spreadsheets to add the numbers up or sitting in on long meetings where members of the team provide updates from which a position can be identified, simply accessing the information from one system makes business analytics easier.

An experienced ERP supplier from the onset can provide all pre-designed reports that companies use to interpret business sales and operations positions as well as bespoke reporting.

Purchasing/Procurement

ERP makes purchasing and procurement a streamlined end-to-end process from issuing purchase orders and supplier management to payments and reporting.

The software enables decision makers to receive automatic documentation to approve payments and orders and thus reducing the administrative burden as well as ensuring that everything bought is tracked and recorded.

Customer Relationship Management

Customer Relationship Management (CRM) is a process that all companies do in some shape or form. However, most systems operated are not integrated and many live on simple spreadsheets that don't provide a rounded process. A CRM application includes sales force reporting, tracking and automation, marketing, service and support.

Within an ERP system it is a central library in effect of customer information that a company can use and access.

It stores and keeps records of all interactions with prospects, customers, clients and partners, and can track all of these interactions or conversations across marketing, sales, service and any other customer-facing department.

Manufacturing

To give a company much-needed visibility into its manufacturing processes, an ERP system that encompasses not only the company's internal operations, but the operation's business partners and suppliers in the production of goods from raw materials, inventory and supplies is enormously valuable.

More over, integrated into purchasing and procurement, it provides a complete picture of purchasing and supply chain, enabling a company to spot areas to make efficiency savings as well as tracking stock levels and being able to respond to changing market conditions as they happen.

What's more, it becomes a valuable tool in OEE (Overall Equipment Effectiveness) in terms of utilising machinery and people in the most efficient way.

Manufacturing, or MRP as its referred to, features in ERP provide greater flexibility and accuracy of production planning and capacity availability, with visibility to manage inputs and outputs to ensure best run rates and improved performance standards.

Equally as importantly, the real data and analysis informs management to make decisions about the value of suppliers and customers alike.

Distribution/Warehousing

Applications that ensure orders are filled in a timely manner are essential to customerfacing businesses. Many ERP distribution systems also include comprehensive warehouse management functions that ensure that inventory in warehouses is optimised to meet the company's supply chain requirements.

Efficiency in this area becomes critical so that picking is conducted in the most efficient manner - an intrinsic part and key measure to optimising time in full deliveries and that space is utilised. The automation also means that sales links to customer quotes and orders directly, reconciling inventory and fulfilment as well as updating accounting systems in real-time.

Inventory

An inventory management system optimises inventory stocking and consumption and provides for both manual and automatic inventory forecasting. Companies can set order policies for individual parts (single serial identification) and assemblies (batch identification). Reports can also be issued on inventory exception and potential oversupply conditions, and the software has the ability to track inventory across multiple locations.

For businesses that operate over multiple sites, the ERP application becomes essential in keeping track of stock, raw materials and other inventory that is housed in different locations. Whilst a concern that any business strives to avoid, with regards to product recalls, the tracking of components proves invaluable and for some industries such as food, beverage and automotive, is a legal requirement.

Project Management

Companies looking to track project profitability and control margins as a project is being performed will find the project management software within an ERP system a valuable tool.

It means project managers can fine-tune project performance and ensure that key performance indicators are met as the information contained is up-to-date and can be evaluated and reports be produced at any time throughout the project.

The application enables multi-level work breakdown structures for projects, scheduling project resource ability and enable managers to manage bids and contracts and provide accurate billing information of project costs throughout the project time-frame.

Service Management

For companies that are professional service organisations or have billable service field functions such as service and preventative maintenance, the service management ERP application offers optimisation, tracking and management of these services as well as identifying trends in part failures.

The software also enables firms to evaluate customer satisfaction levels and servicelevel agreement, warranty and contract performance as well as supporting legislative and industry regulations and accreditations.





2

Defining the need for change

Defining the need for change

Introducing a new, integrated business system presents an opportunity to look at the way things are done now - and how to do them better.

Yet, there is also a significant impact on the business with a new system:

- The cost of the time to implement
- The risk if things go wrong
- The cost of putting things right
- The failure to achieve the envisaged benefits

It is therefore important to do some work to establish whether there is a significant need for an integrated business system or whether your current system needs a bit of an overhaul.

By identifying whether a real need exists provides the opportunity to explore and define the requirement. By emphasising the need to understand and challenge your existing processes will involve people across the spectrum of your business. It's also important to consider that after software GoLive, a culture orientated towards continuous improvement will ensure you get the most from your investment long into the future. Where the application is linked to a strategy, the technology is an enabler for the realisation of the strategy.

If you are finding that staff:

- struggle to respond to customer demands, because information is held in silos throughout the business and it's a time-consuming and frustrating process to track it all down, assess what is required and then reply?
- feel pressured into checking and double-checking the data you're seeing on your screen, because you're not always confident that the information from your stock-control system, or your production forecasts, is accurate?

- find that a mountain of paper forms, invoices and authorisation slips is making it difficult for business-critical decisions to be made in a timely fashion, forcing staff to spend far too much time on mundane tasks?
- discover bottle-necks in business processes are created during holiday periods, or when one or two people are absent, because the company's core operations rely on too few experienced employees?

One 'Yes' is bad news - but not critical. Two means problems, which need tackling now. Three suggests the company is fast approaching crisis-point. Four indicates a business, which will struggle to survive.

Equally, it's also vital that you and other executive members of your management team are brutally honest about what they see happening at the operational level.

The first step to removing obstacles and creating a more productive business, regardless of the sector, is to admit that those obstacles exist.

And that your management team finds that:

- fire-fighting prevents them from getting to the strategic?
- they trust their instinct, rather than the numbers?
- they spend time finding out, rather than affecting?
- their workarounds have their own workarounds?

It's the sign of an ambitious, and also courageous, management team when all those questions can be answered honestly. The next step is to discover if your current systems are fit-for-purpose, and if the number of 'Yes' answers continues to grow, the conclusion is clear. Your company's systems and processes need a fundamental and radical overhaul.

From the outside, it might seem obvious that a dedicated and forward-looking management team would immediately realise what needs to be done.

However, Technology Management's experience gained through years of working alongside and advising management teams at small and medium-sized companies suggests the opposite is often the case.

Longer working weeks are never the answer

Regardless of the sector, the age and experience of the executive team and quality of the products and/or services that they supply, many business owners and senior managers decide that the solution is to work even harder and to work even longer working weeks - and weekends.

Such commitment is admirable at one level, but inevitably it means that even the most energetic leadership team gradually loses its dynamism and its competitive edge, because no amount of effort can counter-balance the impact of working for too many hours, month after exhausting month.

As Technology Management often asks businesses it meets, helping them realise that change has to happen: "How much are sleepless nights actually worth?" It's usually taken initially as a half-joking aside, but the serious point is soon realised.

Who gains when a business-owner or management team tries to conceal the truth from themselves, and thinks that ever-more hard work will somehow remove the hurdles and internal barriers that their company faces? Not themselves, their families, their employees or their customers, and once they understand that the most crucial step is for them to adopt a different mind-set, the road ahead is immediately less bumpy.

The right solution will deliver multiple benefits

Introducing solutions, which can make their business more agile and more productive, will also deliver benefits, which are not always immediately obvious.

Ambitious individuals will be impressed by an organisation which recognises and tackles business-critical on issues; not just because their working week will be less fraught once more efficient systems and processes are introduced, but because they'll feel more secure about the prospects for the business and themselves.

Introducing new faces to the management team may not be a pressing current issue, but delivering a fit-for-purpose business model will encourage more talented people to stay.

Customers, both existing and potential, will be equally impressed when they learn that the company is embarking on an initiative, which will deliver better and more efficient services to them, without increasing your prices, because improved productivity will automatically strengthen your bottom-line.

The providers of any external funding you might have, whether they are High Street banks, high-net worth individuals, family members or other sources will also feel more reassured that clearer audit trails and more transparent processes are being installed, as will your auditor.

Your supply chain will welcome the changes

Your suppliers will also be pleased to hear that your systems are about to undergo a thorough 'corporate MOT' because working with an outdated structure will undoubtedly have caused log-jams for them.

So, having decided that a solution has to be found, the next step is to identify one which will be cost-effective and will guarantee that your productivity and operational challenges can be met and overcome.

- Throwing staff and money at the problems would probably work, but even if there were no difficulties accessing the required finance, the impact would blow a hole in an MSB's balance sheet and make nonsense of its previous ROI calculations.
- Increasing training levels would be effective in the medium-term, but most MSBs don't have the resources to take qualified employees away from operational work to train junior colleagues, and external training would be very expensive.

Unfortunately, many manufacturers see only those two unpalatable options, and - unwilling or unable to take either course - simply decide to continue as before, knowing they need to improve, but not seeing the right pathway.

Sector-specific functions are an absolute must

However, an ERP solution is one being chosen by manufacturers across every sector, from construction to food and drink, from automotive to aerospace, and from rail to offshore and nuclear. As a concept, it's been around since the late 80s, but the latest software packages are as far ahead of the original ones as are the iPhone and the Android to the ubiquitous Nokia phones of the 90s.

The benefits of an ERP system - particularly with sector-specific features, and installed by a supplier or vendor who has demonstrable experience of your industry - are many. Among them are:

- Full visibility throughout your business systems and processes; allowing decisions to be made in a timely fashion and based upon realtime data.
- An integrated business model that removes the old 'silos', immediately delivers significant efficiency savings and stimulates team-working.
- Automated systems, in the warehousing, production, finance and personnel departments, which free staff from wearisome and repetitive tasks.
- More time to spend identifying and then pursuing new business opportunities, because of the immediate improvement in productivity levels.

Some firms were early adopters of ERP, and think their current systems are as efficient as can be, but they have usually been procured and installed on an ad-hoc basis.

Typically, the first use of software will be a basic accountancy package, and other departments subsequently have different systems installed, but without researching the software sector to see if each offers a 'best practice' solution, or if each system is compatible with every other.

ERP software makes you agile and productive

The inevitable result is a business, which operates from a series of silos which aren't fully inter-connected, creating administrative log-jams and production inefficiencies which prevent the company being agile and productive.

Removing those outdated and inefficient software packages, and installing an industryspecific model, delivers an integrated and coherent business structure, which also enables better and more productive relationships with suppliers and customers.

As the manufacturing operation integrates, and as staff become fully familiar with the new system, benefits for these companies will include improved stock control, reduced wastage, a smoother work-flow and increased margins, not least via reduced costs.

However, long before the implementation stage is even considered, any manufacturer looking to either upgrade its ERP system or to install one for the first time, must take time to research the sector to make sure it has chosen the correct supplier or vendor, and with the necessary experience of its sector or niche.

It's always good to talk - to other customers before deciding on a system

Case studies are a solid start, but always ask your preferred supplier if you can talk to those companies, to ensure you are fully comfortable with your provider before contract discussions are completed. What is key in what you glean from those conversations is not just how the software works but, more importantly, how the provider planned and implemented the system. There will always be a few unexpected issues along the way but it's essential to understand how the provider responded to those to ensure the implementation was ultimately successful and met the objective.

Installing the right ERP system will genuinely transform the way your business works, so it's crucial not to rush into any element of the decision-making process. You must also ensure that the package you do choose is tailored to your precise requirements, and that it's a proven solution.

Your chosen system must be tried and tested as too must your provider

You need a system in which every component has been tested, which has been proven to the satisfaction of its users, and which operates with demonstrable integrity at each stage.

Whilst ERP packages are developed with sector specific features, ensuring your provider has proven expertise of your particular industry is paramount. Understanding how a particular sector operates, the challenges it faces and the processes involved, is essential. It means the provider can talk to you in your language, instantly appreciate what you are trying to achieve and ensure that the system implemented is fit for purpose.

If you don't test the software capabilities for your industry alongside the knowledge of your provider, you'll find that the system may well 'go-live', but won't function as planned when it reaches your factory floor for example.

By the time it does go live, of course, you'll be many months into the project, and trying to resolve issues with a system on which your business now relies on and this could be disastrous. Yes, making sure that every aspect of a system and the provider is 100% right for you will stretch your decision-making process, but the resultant time and effort will be repaid many times over in the months and years to come.

Smooth planning means a smooth integration

Deciding which solution to adopt will take time, but installing the system is not a 24-hour process, and any provider, which suggests it can be should be very firmly avoided.

Before you even decide upon a 'Go-Live Day', you must ensure that your provider has experienced staff who can install the system, and then train and guide you and your employees through the process.

It's also essential to identify a project manager in your team who can be the first point of contact, and it doesn't have to be a member of your management team.

It might be your IT manager, it could be someone with experience of ERP from a previous employer, but they need to be in place well in advance and have the time made available to them to focus on the project. It's important to pick the right individual, one that is comfortable with challenging department leads to ensure the best outcome, that understands the business and appreciates potential impacts on each area and that can communicate well to all levels within the organisation.

Whilst many try to juggle the day job with implementing a new system, it shouldn't be underestimate how much time is required for successful implementation and it is worth investing in that from the onset as it will pay dividends in the long run and be a far smoother process.

Integrating your new system will permit existing processes to be optimised for 'best practice', so the initial changes in working procedures will typically be less dramatic than the improvement in results.

However, as you and your colleagues become more adept at understanding and operating the new system, new benefits will be realised, and different ways of working will be adopted.

More time for new business opportunities

As the system beds in; there will be visible improvements in efficiency and accuracy, when dealing with internal issues, clients or suppliers, which will leave more time to address new business opportunities.

Your management team will have fewer dayto-day demands on its time, and when those demands arise, they'll be dealt with more swiftly, and the result is a more agile, flexible and responsive business.

Some decision-makers new to ERP might appreciate the potential benefits, but still have concerns about the initial impact of the software, and how it will interact and impact on their current operating systems.

To address such issues, there are effectively three different implementation strategies; used according to the nature and preferences of your business, your current systems and your new software.

Big Bang or not - the decision is down to you

Inevitably, deciding to go live with your new system on an agreed date, when every employee switches across at the same time, is known as Big Bang.

The majority of implementations do adopt this approach, but it's something to discuss very carefully and well in advance with your chosen system provider. Again, it's something on which you should be able to learn from the experiences of other customers, but essentially it's a decision for your management team.

A second option is a phased roll-out, which as implied sees your users migrate to the new system over an agreed period, and the third is parallel adoption, your existing systems (known as your legacy systems) and your new ERP software run simultaneously, so users can learn about the new whilst still working on the old.

However, a phased roll-out may be more practical and certainly, consideration about running two systems, should be discussed carefully with your supplier. In many cases, running two systems for a day or two is all that is required as you'll be see that you'll be up and running pretty quickly. There isn't a right or wrong choice here, it's the one which you feel will be best suited to you, your existing systems and your staff.

Long-term benefits for you and your company

The presence of modern ERP systems, which can be easily updated according to your changing requirements and technological advances, will also be a boon in years to come. It may well be that 2016 is way too soon for you and other executive members of the management team to be considering an exit, but when that time comes, whether via a MBI, MBO or BIMBO, the transparency and clarity offered by your ERP software will be much appreciated when it's time to value the business.

Succession planning has never been something at which Britain's small and medium-sized businesses have excelled, but the transfer of knowledge is far easier with the right systems and processes in place.

In short; if you need to drive greater productivity and higher margins into your business, and to steal a march on your rivals, then it's time to learn more about what ERP can do for you. If you always do what you've always done, you'll always get what you've always got! Change the cycle this year.



3

What are the considerations?

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What are the considerations?

Introducing a new, integrated business system presents an opportunity to look at the way things are done now - and how to do them better.

Take a little time

As explained, it is not a quick fix type project, getting it right from the onset and putting in the time will pay dividends over the long term so, consider carefully when the right time is for you and your team to start making the change and put a project plan firmly in place.

On-premise vs Cloud ERP solution

The business environment is changing rapidly and technological improvements are being made at a staggering pace. Keeping up is always a challenge for a business and that's why looking at the benefits of Cloud ERP verses On-Premise solutions must be considered. If your business is growing rapidly, looking to enter new markets, operate over many sites, are reliant on spreadsheets from various departments across different locations to piece the pieces together, find employees need greater flexibility and need real-time access to information or your business plan includes acquisitions or mergers, then Cloud ERP is more for you.

Equally, you may find that cloud computing is the way forward as it can provide benefits for managing cash flow for updates and upgrades as suppliers simply charge a subscription fee to include in addition to upgrades, all hosting and maintenance, data security and that a system is always up and running. However, connectivity becomes key here and that will steer you in terms of which way is the best way you need to go. On-premise typically means ERP solutions are installed locally using your company's hardware and servers and then is managed by your IT staff. There are more ongoing costs and investment to purchase software and the related hardware, servers and facilities to run it.

Costs to consider on-premise can certainly be greater initially and ongoing but whether you decide to go for either on-premise or cloud ERP, talk the costs clearly through with your chosen supplier. Certainly both options still require further investment in to:

- Hardware in terms of servers as well as the devices of your choice including the rise of BYOD (Bring Your Own Devices) where employees use their own devices remotely
- Software licenses both office and for mobile capability
- Software customisation
- Data conversion for GoLive
- Project management
- Consultancy
- Training
- Travel expenses
- Upgrades

While some of these costs will be one-off (e.g. hardware, training and consultancy),

others will be on-going (e.g. maintenance), particularly if you opt for an on-premise system.

With on-premise solutions, we'd recommend that in order to get a better picture of the cost exposure, a long-term perspective should be taken. A meaningful time-horizon is five years. By the time that five years has passed it is quite possible that the application has been reviewed and a new budget established for additional work, such as an upgrade or the bolt-on of additional functionality. With a cloud ERP system, after the initial implementation, it's monthly fee that covers the updates and hosting amongst other things.

Not to be overlooked for either on-premise or cloud solutions, are the indirect costs, which are mainly internal costs. These can include:

- Time and consequent cost of employees involved in the project
 Costs incurred due to other activities not being carried out
- Costs related to off-site travel and sustenance, e.g. off-site training

Justification – costbenefits

Once the need has been defined and the costs are intelligently estimated, it is useful to determine what the benefits are and whether the benefits justify the cost. A good starting point to evaluating whether a new system could be justified is to map out the existing business processes. This helps focus attention on key areas in a systematic manner.

A hypothetical example is presented in Figure 1 overleaf.



Customer relations:

• Better response time for handling customer order queries

Production scheduling:

- Ability to evaluate the effect of changing customer demand and optimise production schedule
- Ability to manufacture to demand rather than to stock, thereby reducing finished goods inventory and the potential for stock obsolescence

Materials requirements:

 Better visibility of requirements and potential problems, thereby reducing the likelihood of failing to detect a potential shortage

Supplier management:

 Ability to move to blanket purchase orders and weekly delivery schedules, thereby enabling inventory reduction, which in turn has an associated reduction in the costs of financing and storing materials

Materials handling:

- On-line matching of PO and delivery details, thereby improving control of deliveries
- Improved tracking of materials, thereby reducing the likelihood of 'lost' materials.
- Real-time stock movement records adjustment, thereby facilitating upto-date inventory analysis and the identification of slow/no-moving stock

Manufacturing:

- WIP (Work in Progress) visibility enabling progress tracking and hence improving customer awareness about deliveries
- Better and timelier production information resulting in fewer mistakes and shorter lead-times

Despatch:

 More efficient documentation production enabling faster despatch of finished goods

Quality:

• On-line data collection resulting in improved quality information leading to reduced quality problems; this in turn results in reduced customer returns and, hence, reduced repair costs and warranty charges

Accounts:

- Integration with the sales, manufacturing and purchasing functions, thereby providing realtime information about operational performance
- Ability to handle consolidated invoices or self-billing resulting in less document processing

General:

- The adoption of workflow should lead to shorter process cycle-times
- Real-time and on-line data access which results in less documentation
- Data entry at point of origin, thereby eliminates duplicated data entry and reduces the likelihood of data entry error, which in turn reduces the time spent recovering from problems resulting from data error
- People have more time to understand what the data is and is telling them rather than spending time putting data in the first place



Intangible:

- Easier and more efficient problem solving
- A more efficient and happier workforce
- Better able to be more pro-active in improving the business

It is to be expected that the resultant list does not reflect all the benefits. As well as those that are unobserved, there may well be unanticipated benefits, which emerge from the discovery of unnoticed functionality or innovative ways of using the new application. The benefits are those anticipated to occur as a result of moving to a vision of how things will be done. Often new technology is assumed to be associated with reductions in personnel. The reality is that this is unlikely to occur. Changes in the nature of the work may result in specific tasks being eliminated. On the other hand, new tasks will emerge. One of the lessons from this exercise is that the project is not about an IT system. It is about people and the management of change.



Quantifying benefits

The quantification of the benefits provides a measure that can be evaluated with the context of the costs. The practicality of establishing numbers is prone to be difficult and imprecise. The only recourse is often speculation.

However, the danger arises over being optimistic about the benefits. If they fail to materialise, this could be because the potential to achieve the benefits was simply not there.

It is perhaps better to establish a best and worst case prediction, as well as a figure representing what should be expected. Where it is difficult to quantify the benefits, recognition that there are benefits to be achieved should not be ignored. It contributes to a better understanding of what can be achieved. Assuming that the benefits outweigh the costs, this provides a justification for the decision to proceed. Further, the quantification provides a benchmark with which to assess the success of the implementation.

However, it should be appreciated that the value of the system is not in the technology itself but in the way that the technology is used. This important point reveals the opportunity presented for the technology to be viewed as a means to achieve a strategy.

Moreover, competitive advantage can be gained through the innovative use of the technology, even if the competition has the same or 'better' technology. So, it makes sense to consider the application within the context of a business strategy.



How to choose your business system supplier?

4



How to choose your business system supplier?

The critical stage for effective selection of an ERP supplier is the supplier selection process. By 'supplier' we mean either a software company you're dealing with directly or, more likely, a software integrator that acts as a third party for the software company.

For the purposes of this guide, the definition is interchangeable. A good supplier can be selected in one of five ways:

- The lucky dip
- The friend next door
- The name
- Sub-contract the process
- Systematic and rigorous evaluation

Although the first approach is quick and may prove successful, the odds are not in its favour. The odds of a successful selection are perhaps better with the second approach. Certainly, the relationship may be better, but there is no guarantee that the product and service is the best or even adequate for the application.

Alternatively, the third approach offers perhaps even betters odds since its reputation goes before it. However, it suffers from the syndrome of just because it has the name it does not mean that it is good for your business.

An alternative approach is to employ a consultant to do the task. Apart from the expense, the consultant is unlikely to be familiar with the business and there is the issue of acceptability of the findings. Does the consultant have an unbiased view of the vendor market or has he some affiliation with a specific vendor? One should also consider what happens later if the implementation or the relationship with the vendor becomes a problem.

The final approach, while time-consuming, will still not guarantee success. However, the

likelihood of the picking the wrong supplier is reduced.

Depending upon the selection criteria used, it is more likely to yield a better fit with the needs of the business, as well as generating a better feeling of comfort with the IT partner.

Assuming you choose the final approach, here are some steps to consider in your evaluation. When looking at each stage, consider that the selection process:

Stage 1

Gather and scope your requirements of what you need the ERP system to achieve for all levels of your business. From top down, ensure you list the requirements of each department and the various level of seniority wants and wishes. It is importantly to put that list into 'must have', 'desirable' and 'nice to have' groupings.

You may have 100 or considerably more requirements but it's important to set realistic expectations and have a minimum set of objectives to achieve and work towards achieving the others as your system beds in.

Stage 2

Find out who is out there via trade publications and internet search. There are many suppliers.

Generate a short-list of suppliers who offer the potential for meeting requirements. Typically, this is around 10-15. Consider for each: geographical presence, size of supplier, ongoing support, number of implementations, profitability/stability, initial impressions, relationship between supplier and software house, skills and product knowledge.

In the table below, are a few suggestions of the type of questions you should be asking yourself in making the initial selection.

Geographical presence

Is the potential supplier easily accessible? If you have multiple sites will the supplier be able to respond quickly enough?

Size of supplier

Will the supplier have adequate resources to commit to your project both now and when it's time to support it? How many customers do they already support?

On-going support

You want a supplier that continues to challenge you and demonstrate innovations.

Number of complete implementations

How many relevant implementations has the supplier completed in the last two or three years?

Profitability/stability

Initial impressions

How long has the supplier been in business?

Don't discount those first impressions. What is the first contact like with the company?

Relationship between supplier and software house

What software partnerships and accreditations/ certifications do they have?

Skills/product knowledge to support implementation

Consider a supplier's personnel and proven projects.

Stage 3

Now it's time to really hone in and whittle the initial selection list down further to those who are deemed most suitable by matching your requirements against a company's offer. After this process, you'll typically you have three to four on your list now and can start to really flush out the detail about what each supplier can do for you.

The table below gives you an idea of how to select:

Criteria	Why	Parameters
Functionality	Does the software do what is required of it? How much required functionality comes as standard? Is it hardware compliant? What additional tools are there?	Core functionality/range of modules/ interfaces/additional tools/database/ platform
How long has the supplier been in business?	Don't discount those first impressions. What is the first contact like with the company?	What software partnerships and accreditations/certifications do they have?
Costs	Are they acceptable? Do the benefits outweigh the costs?	Ascertain initial hardware/ database/ application/users/implementation support/ training/ maintenance/ additional tools
Organisational credibility/ viability	Will the company stay in business for the potential life of the software after implementation?	Origin/history/turnover/employees
Experience of implementing in target sector	Has the application been successfully applied in the required environment? Will the supplier be able to provide the benefit of experience of the target sector?	Implementation statistics/sectors targeted/clients'/reference sites
Support (during/after implementation)	Will the expertise be available when required?	Nature of support, in particular, local support and telephone support
Reputation	What can we learn about the vendor from others?	Clients, 3rd party reviews, press
Responsiveness & Support	How professional and responsive are they? How supportive have they been so far and what do they offer going forward?	Initial request for information/ presentation/nature of support (local & telephone)/manner of response

After you've undertaken the exercise of scoping your requirements and selecting potential suppliers, it's now time to get in touch with those on your short-list. Whether you develop and send out an RFI (Request for Information), suppliers need to demonstrate to you what they can offer, as well as provide an idea on pricing. You are in effect, asking them to complete the exercise you have in terms of presenting their software functionality, implementation approach, experience, costs and so forth.

Stage 4

Final selection. The final stage is aimed at selecting a supplier. Two features characterise this stage: detail and involvement of people.

This is the time when the opportunity exists to find out everything about the supplier and their products and services. It is better to find out about weaknesses now than after selection.

It is also the time when others need to be actively involved. It is necessary to instil a sense of ownership for the selection into those who will have responsibility for implementing and using the system. If problems arise at a later date, people who are involved with the system should not be in the position of saying 'Well, I did not choose this system'. Furthermore, these people will be able to handle questions about functionality in areas familiar to them. Tasks at this stage include issuing an Invitation to Tender, the organization of presentations and demonstrations, the collation and synthesis of views and the management of the decision making process.

The key role of those involved in demonstrations is to evaluate the functionality of the software as well as making you feel comfortable and confident in their ability to undertake the project. This needs to be done in such a way that the relative merits of the different packages can be compared and a scoring mechanism is the ideal way to achieve this.

An example of what you'd typically look to score is summarised below and there is a template you can utilise at the end of this document.

Selection Considerations Checklist

Product functionality

Underlying technology	 Database Platform Maintenance, performance, security Scalability Cloud Multiple site networking Integration
Implementation technology	 Business modelling tools System configuration tools Document management utility
Technological capabilities	 Additional fields Connectivity and links Ability to download as .xls, .txt files Data collection flexibility User friendliness Web-enabled screens Screen design capability Integrated reporting tools Business intelligence tools Workflow Ease of customisation Stationery (pre-printed or on-line)
Adoption	 Interactive training Online help Is there on-line data search? Comprehensive documentation of functionality Ease of upgrade
Costs revisited	Costs can usefully be broken down into:
--	--
	• Hardware
	Operating system
	Database license fee
	Core software license fee
	Additional module license fee
	Third party software license fee
	Integration of third party software
	Software customisation
	Data conversion
	Project management
	Consultancy
	Training
	Living and travel expenses (also travel time)
	Upgrades
License fees	There may be an option for license fees to be for fixed number of concurrent users rather than named users. The former is likely to be the cheaper and more flexible option. The amount allocated to training tends to be conservative in ERP projects.
	Since one of the main weaknesses of an implementation is espoused to be
	lack of training, this suggests that training budgets should be significantly increased to accommodate the unknown.
Maintenance fees	Don't forget the annual maintenance fee, which covers help-desk support and may include software upgrades (though not the cost of the labour to for the upgrade process).
Credibility/viability of software company	How big are they?
	• What is their spend on R&D?
	• Where is it located?
	• When was it established?
	• Is it profitable?
	 Do they have a well-established network of partners to support implementation?
	• What is their product roadmap?
Experience of client's business sector	Does the supplier have evidence of experience in your market? While it is not an absolute prerequisite, it goes a long way in demonstrating a good understanding of processes particular to your market and a system that can meet its functional requirements.
Reputation	Visits to a supplier's customers or talk to them over the phone. Whichever way you do, it's important to get a good picture of how the supplier operates.

Scoring

The decision of which supplier to select will be based upon some comparative evaluation of each of the criteria. One approach is to use a scoring system. A score is given to each criterion for each of the suppliers. Different weights can be attached to each criterion depending on its perceived importance. It may be felt that functionality should be heavily weighted and the product direction lightly weighted, for example. A final score for each criterion is determined by multiplying each score by its weighting. These final scores are summed up to give a measure of the attractiveness of the supplier. An example can be found at the end of this document.

The four-stage process will take one person around four to six weeks depending upon their familiarity with the marketplace. It may be useful to develop a plan of the appraisal process including dates for decisions and contract exchange.

By planning these events, meetings can be arranged to ensure that all those involved in the selection process are available thereby minimising delays due to conflicting appointments.

During the process a lot of data will be collected, which will need to be appraised in some way. A spreadsheet is useful for the collection of this data. It provides a useful tool to allow the comparison of the relative strengths and weaknesses of each potential supplier.

What is important to bear in mind is relationship. The relationship between you and your supplier becomes a primary consideration. Whilst the process of tendering is that a supplier will respond to your request in the ITT or RFI, certainly at the presentation and demonstration stage, it may be that there is a solution that is flushed out and discussed as a better approach. As with any project of this scale, what first starts out as a requirement, can change over the course of the journey as both parties get more familiar with each other and what the ultimate goal is to achieve from the ERP system.

It is a partnership and thus what may help is to actually short-list sooner and get to the two or three supplier list stage earlier on in your process and pay for the suppliers to work with you to scope your requirements on a consultative basis. By doing it this way, you get to the point or understanding what you need, the suppliers' capabilities both in terms of software and sector knowledge as well as identifying who you feel confident in working with on the project.

Whichever approach you take to the selection process, it is important that you consider also what a supplier suggests is the best fit-for-purpose solution as in some cases, it could save you money in the long term as it may be a smaller ERP solution to what you originally thought you needed. All in all, it's about getting what works for you and your business and what offers best value, not just in terms of price.







Making sure implementation goes to plan

Making sure implementation goes to plan

Business management software sits at the heart of your organisation supporting all of your company's operations and processes as you have previously read in this guide.

When the time comes to replace it, every new implementation entails a certain level of business and technical risk. Over the next few pages we've provided a few lessons we've learnt over 25 years of Technology Management being in business. These lessons are designed to help you reduce the project risk and successfully deliver your ERP project objectives.

The right people for the right amount of time

Enough time from the right people is vital. You cannot put temporary staff on these projects because they do not understand your business well enough. It's going to take substantial time from the most pressured people in your business but it is short-term pain for long term gain.

It's also important that the project team are empowered to make decisions. Often you need an overview of the whole system to make the right compromise.

Be realistic about how much time the project team can commit whilst still keeping the business ticking over. But don't put off the project because things will be quieter next year; something else always comes along and it will never happen. Get it started, allow a reasonable timescale (with some contingency) and you will see both the time and money savings all the sooner.

Sketch out the ultimate vision

Technology advances rapidly and what is state of the art this year could be obsolete next year. So, it's a difficult area to plan for long term. That said you should have a plan for what you want technology to deliver to your business. In times past, that used to mean just you and your employees when office-based, but now it needs to include them whilst on the move as well as your customers and suppliers.

So, before you start any project, it's worth spending a couple of hours as a team discussing not just the objectives for this project but also the wider vision for technology across the business in the future. That might just mean that choices made in this project make the future a whole lot easier, less costly and therefore quicker to achieve.

Start simple

Don't try to build the ultimate ERP system from day one. In fact, just do the minimum of replacing the old systems functionality and very little more. One of the reasons you are replacing your existing system is that the new one has far more capability. However, trying to implement every last extra feature in one go increases the amount of change and therefore the risk and timescales.

In addition, your experiences of using the new system for a couple of months will help you identify the features that can help your users and the business overall. Experience shows that when we build these 'big systems' we often then have to spend time post-implementation taking them apart again. It's much more efficient and effective to phase-in the new features once everyone understands them.

Embrace experienced consultants

Well, as consultants and a software supplier, we would say that wouldn't we? But Technology Management has been brought in on as many projects during or after implementation and having seen what has gone wrong so many times; they fall into two main categories:

a) Consultants with limited capabilities

Some suppliers will have consultants that react rather than lead. They just wait for you to tell them what you need - which inevitably leads to you getting what you have.

A good consultant will challenge you to change. This means you will get the most out of the system, which is not compromised by following historical practices. It takes the ability to understand your business combined with in-depth software and implementation knowledge – much more than just a quick training course in the software - to do this.

b) A lack of trust

You are paying your supplier a lot of money so take their advice. They have no incentive to make your life difficult and their primary motivation is to get the job successfully done and move on to the next project with an enhanced reputation.

Challenging them repeatedly just slows the project to a crawl and inflates costs. If their advice is bad or inconsistent, you'll soon spot

that they don't know their stuff and that's the point to ask them to leave!

A good consultant will challenge you to change to help you get the most out of the system.

Agree clear objectives

Stick to the original project objectives, don't get side-tracked. Where projects go over time or budget it's often because aspects were introduced that were not in the original plan. At the start of the project make a list of the objectives and for each project task identify which of the objectives it will help achieve. Scope creep is the third most common cause of projects going off track.

The best software doesn't fix poor processes

All too often we have seen companies that have inaccurate stock, or are slow to produce figures, and new system is seen as the magic bullet to fix the problems. The bad news is that, without addressing the underlying process issues, a new more sophisticated system will probably make things worse.

What a new system can do is, due to a thorough examination of what's going wrong as well as making the processes easier or enforced, is enable required change.

Just be aware that projects of that type take longer than simple software implementation projects - business process engineering and education has to be done as well.

Don't use technology for the sake of it

Gadgets today have lost their nerd credentials and everyone wants to use the latest 'tech'. But what difference will it make to your customers and/or the bottom line? Will spending £400 on a hand-held tablet to replace a paper notebook that costs £2 a few times a year help your customers or the bottom line? Do you really need to track all those processes through your system or will it just cost time to do it?

Technology is critical to business today and Technology Management is its biggest fan but that also makes us positively angry when we see it hyped and applied where it's not needed. We suspect your company has a limited budget for IT. Spending it on areas where it's not effective means that other areas have to wait – where ultimately IT could make a real difference!

Regular & effective communication

Communication is key. It has to be regular but we are not a fan of regular meetings for the sake of it. One person, usually the project coordinator, needs to send out at least weekly (and then daily once critically close to go-live) updates that tell everyone what has happened and what is planned to happen. Follow that up with a telephone conference call when decisions need to be made and milestones reviewed. Better to have it by phone, or preferably Skype so you can all see the same screen, then wait until everyone can meet in person. The time needed for this should again not be underestimated.

Adapt rather than invent

Don't change the software; change the process to fit the way the software is designed to work - unless there is a good commercial reason. Just because you haven't done it that way in the past doesn't mean it's wrong or won't work just as well. Using the software, the way it's been designed to work will pay off hand over fist not just now but at every upgrade going into the future.

Every bit of data costs you money

It is critical to understand what data you need - and when. The instinct in recent years has been to try to capture everything 'just in case' but this has made systems long-winded and inefficient. Just because you can capture data, it doesn't mean you should.

An example that comes to mind is from when Technology Management was working on a system for a local metalworking company and we started implementing full traceability. Incoming batches of steel were logged all the way through to the components into which they were manufactured. We'd been discussing this for a couple of hours when we found out that the company had only needed the traceability twice in the past five years. Given that it would double the time to process stock transactions and enter all the data, we suggested that spending a couple of hours digging through the old production cards when needed was going to be the much more cost efficient option overall.

Really think through what you need and keep it as tight and efficient as possible.

Trust your people

We've lost count of the number of times that a client has said: 'we have to make it foolproof otherwise our people will get it wrong' - using it as an excuse to remove all the decision making capability from the users.

Clients can spend a lot of time before go-live putting in rules about who can do what (and where) and building the appropriate logic into the system. And guess what? Similar amounts of time are spent post go-live removing a lot of the restrictions. There are often legitimate circumstances where other permutations of process need to happen and/or different roles need access to different parts of the system.

Trust your people, it will take a little time and they may get it wrong initially but most have your company's best interests at heart and will try to get it right. Even if they don't, you can use the in-built audit trails to show them where they got it wrong and that will soon make them take more care.

Test, test and test again

The success of your project depends on you testing the system many times - until you are satisfied it's right. If you shortcut this process, you are stark staring mad and probably risking the survival of your business. You need to see and prove the system works by doing the following:

- Test the whole process through as early and as often as possible. Issues that you find and fix before go-live will have 1% of the impact that they do afterwards.
- Involve the people who will actually be doing the roles as early as possible in the testing and make them drive the mouse and keyboard.
- Use lots of different test data not just the same few codes every time.
- Make sure you create, and most importantly, evolve a test plan

that includes every key process permutation your business needs.

- Don't get hung up on the exceptions, far better to make sure that the normal 95% runs smoothly.
- Write a snag or issues list as you go nothing is too small - and circulate it to everyone at the end.
- Don't stop at the first issue; carry on through the whole process as far as possible even if you have to make assumptions to do it. A long issues list at the start will shorten the project timescales rather than finding them one by one.

Good data integrity is hard to achieve

In our experience getting the data right will be the biggest challenge and take the most time. In almost every project everyone assumes that if data can be extracted from the old system it can magically be transformed into perfect data for the new system. The bad news is that the magical bit takes a lot of software development that could well end up being the most complex and expensive part of the entire project. At the very least make sure this work is done as early, and as often, as possible to allow lots of time to fine tune it. Nothing is more important to a smooth running system than perfect data integrity.

The right tools save money, very quickly

We understand that new systems are expensive and that costs can mount up to painful levels but cutting corners on the hardware and software is very short term. It will probably cost more in consulting trying to engineer around the limitations than you save on the initial purchase cost.

The old adage of 'if you're going to do it, do it properly' applies. We are not saying you need to waste money but neither do we want the job made longer and harder than it needs to be and still end up with a compromised result.

Training is essential

Train your people and then make them practice. When go-live day comes, they will need to operate the system with similar speed and accuracy to the one they've been using for years. That simply doesn't happen with a couple of hours of being 'shown the system'. They need as much hands-on experience as possible. Training is often what gets cut when time runs out on a project – and it shouldn't! After data integrity, knowing how to use the system is the next most important issue for a successful project.

Just enough documentation

The right documentation is concise, easy to understand, covers the subject, clearly states how the system is going to work and the process required to get there. Failed projects often have either no documentation or, just as bad, masses of it - that has taken vast amounts of time to produce. Often the person that has produced such lengthy documents lacks the capability to do what's actually required, the document has not actually been read by the key project team (because it bored them to tears!) and the documents have rapidly become out of date as it's takes too much time to update them.

Don't change it without retesting

Don't make software changes late in the project without a critically good reason. Too many project issues are traced back to small changes made after the testing was completed. Once live, don't allow changes to be made - except in the most critical of situations. Store up the changes and release a batch together - once you've repeated your testing cycle.

'Nice to have' becomes rapidly critical

Technology has the habit of moving very rapidly from being an aid to being essential. With the commercial pressures that are present in most businesses today, new systems very quickly become critical to the way you service your customers. That means they need to be built properly and reviewed to assess the implications of them not being there if that wasn't part of the original plan.

Test your back ups

Assume that if you haven't tested it, it won't work. You do backups regularly but when did you last restore one? How do you know what's on it? And how much disruption would you have if a fire burnt all your servers (and maybe also your paper records) to a crisp?

We've been involved a few times over the years with loss of data because backup procedures didn't work and no one knew so make sure you test your backups before you do anything. That's why many businesses are moving to cloud computing as storing data in the cloud has numerous cost benefits but also, if you do have an issue, your data is always safe and you can get up and running anywhere.

Successful projects never end

Business does not stand still and your customers' demand more from you, year-onyear. So you need your systems to adapt, even if it's only helping drive down costs so that you can maintain your margins.

In our experience, systems only stop evolving and improving when they are reaching the end of their life so, that's where a good system will be capable of adapting to meet your needs now and going forward. Continuous improvement has been practised in manufacturing and distribution for decades but how often is it applied to your admin and IT systems?



"It was not an IT project, but a **business simplification** project..."

Rowan Crozier Chief Executive Officer, C Brandauer & Co

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Summary

Summary

- Get the right people in place for the right amount of time
- Sketch out the ultimate vision
- Start simple
- Use experienced consultants (suppliers), then trust them
- Agree clear objectives
- Don't use technology for the sake of it
- Adapt rather than invent
- Just enough documentation
- Don't change it without re-testing
- Ensure contingency and data security

- Regular and effective communication is essential
- Every bit of data costs you money
- Trust your people
- Remember, the best software doesn't fix poor processes
- Test, test and test again
- Good data integrity is hard to achieve
- The right tools save money, very quickly
- Training is essential
- 'Nice to have' becomes rapidly critical

And remember, successful projects never end; they continually evolve.





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