



crimson®

**THE KEY TO SUCCESSFUL APPLICATION LIFECYCLE MANAGEMENT**

UNITING PEOPLE, PROCESSES, AND TECHNOLOGY

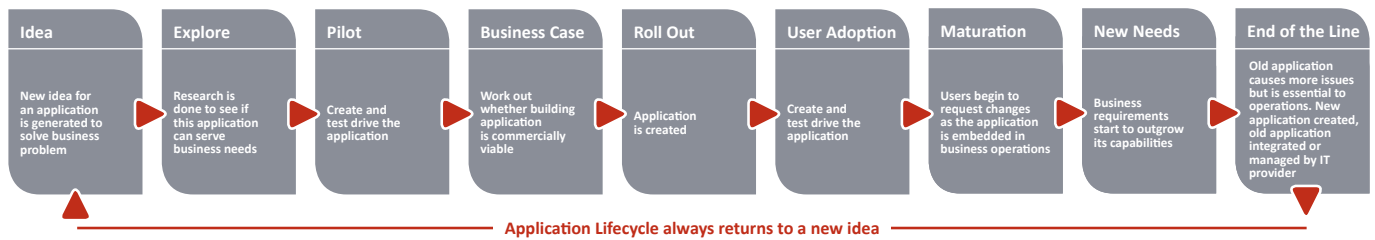


# CONTENTS

EXECUTIVE SUMMARY	3
<b>ALM PHASE ONE: NEW TECHNOLOGY</b>	<b>4</b>
Signs You Need New Technology	
Selecting An Application And Technology Partner	
Implementation Of New Technology	
Kotter's 8 Steps To Change Management	
<b>ALM PHASE TWO: CUSTOMISATION</b>	<b>9</b>
Processes To Aid Customisation	
Stakeholder Engagement	
Processes Post-Customisation	
<b>ALM PHASE THREE: LEGACY</b>	<b>13</b>
The Power Of People	
CONCLUSION	16

# EXECUTIVE SUMMARY

## APPLICATION LIFECYCLE



Within today's modern business environment, technology underpins everything. Technology is the catalyst behind any successful business, ensuring business operations run smoothly and also driving organisational growth. In fact, if you stripped away all the technology in any modern business, the end result would undoubtedly be more complex operations, greater administration tasks, larger resource requirements, and, in some businesses, supply chain chaos.

**BUT HOW DO YOU MANAGE SOFTWARE LIFECYCLES FROM SELECTION RIGHT THROUGH TO RETIREMENT, BEFORE THE CYCLE BEGINS AGAIN?**

**WHAT ROLES IN ALM ARE PLAYED BY PEOPLE, PROCESSES AND TECHNOLOGY?**

**AT WHICH POINT DO YOU NEED ALL THREE TO COME TOGETHER TO ENSURE YOU ARE EXPERIENCING MEASURABLE LONG TERM ROI FROM YOUR BUSINESS SYSTEMS?**

However, while many businesses are quick to understand the benefits technology can deliver to their organisation, unfortunately many are still unable to calculate a true Return On Investment (ROI). And while many businesses are quick to blame issues with their chosen hardware and/or software package as the reason ROI isn't achieved, there are a range of other factors involved that can lead to similar problems.

Every new technology product has a natural lifecycle and the key to getting the most out of your software investment is understanding Application Lifecycle Management (ALM) – a process which begins when a new system is purchased, not once it is successfully implemented as many believe. The typical lifecycle of an application follows a governance, development, and maintenance format, and throughout these stages there are a number of supplementary factors that contribute to greater ROI. This white paper will explore the role of people, processes, and IT in application lifecycle management, analysing the key role that each contributing factor plays and the importance of taking a holistic approach to ALM.

By staying on top of application lifecycle management and uniting people, processes and IT, organisations can significantly increase the accountability and productivity of business critical systems and leverage them to deliver even greater value to their business. Effective ALM can also help improve company compliance, traceability of audit trails, and ensures that user adoption of any business system remains high.

An IT investment can be expensive and even with costs aside, just implementing a new way of doing things in your business can be a huge risk. ALM can be used to manage the risk of change in your business and as a key leverage of your overall digital strategy. So how do you avoid your technology becoming a constraint to your digital strategy? How do you unlock even greater value from your critical systems beyond initial go live? Some pain points experienced by a business throughout an application's lifecycle can include, but are not limited to:

- **Technology no longer supports the way the business operates;** as a result the business has changed a number of its operations to support the running of the application, instead of the system evolving in line with changes in business processes.
- **The technology does not integrate with other business applications;** this can lead to processes being labour intensive and difficult to automate.
- **Though technology was readily adopted initially,** as the way in which the business operates has shifted, this in turn has had an effect on how the application operates.
- **Knowledge of the system has not been transferred throughout the company,** resulting in a workforce which is unable to operate the application to its fullest.
- **Key Performance Indicators (KPI) outlined at the beginning of the project are being missed,** making reporting difficult, or even, KPIs which were not realistically outlined at the beginning of a project, causing measurement and evaluation of business systems to be a very difficult process.



ALM PHASE ONE  
**NEW TECHNOLOGY**

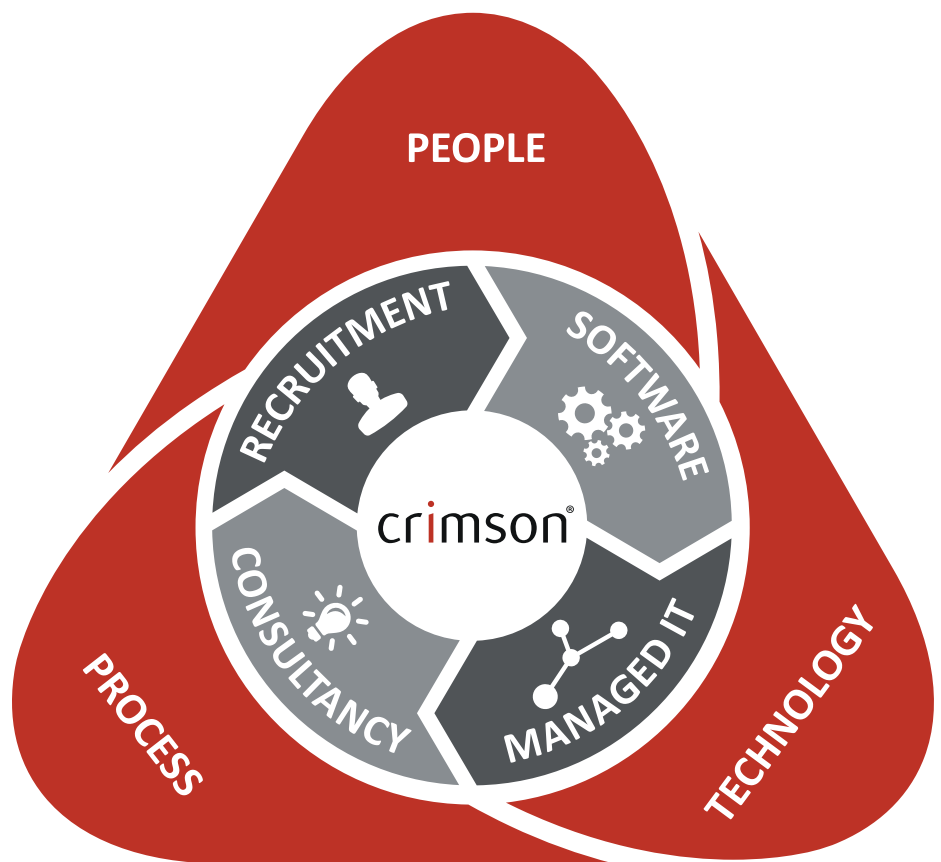
01

## INTRODUCTION

In any business environment IT is instrumental in supporting and automating key operations, and underlines a number of business processes.

However, while businesses are quick to realise the importance of IT within the day-to-day running of their business, fewer are able to identify when a new IT application is actually needed.

A typical scenario sees businesses continue to operate the same IT system that was designed for their business a number of years ago, even as far back as when their business started out. However, while the system may have provided benefits in the first instance, as your business has naturally evolved, your IT system has fallen short on delivering a number of your initial objectives.



## SIGNS YOU NEED NEW TECHNOLOGY



*Legacy, or poorly managed software, can become a huge constraint to achieving your future business strategy. It can make it difficult to collect and analyse real time data and significantly limit your digital capabilities.*

Eddie Howe.



There are a number of indicators your business should consider new technology. These may include, but are not limited to:

- **Your IT system no longer integrates with your other existing IT systems.** As a result, data is often duplicated and its integrity can become compromised.
- **Your IT system has become legacy and is no longer supported by the vendor.** This can mean your business incurs heavy support costs.
- **Since implementation the system has been heavily customised.** This now means that the operation of your system cannot fully evolve to support your business, and often sees its operation rely heavily on the knowledge of a few key users.
- **The IT system relies on a number of manual processes,** and is labour intensive.
- **The system was designed a number of years ago,** and no longer supports your business processes.

The above pain points are often indicative of a company which ought to be considering selecting new technology.

These points are representative of an end-of-life application, and the disruption that an end-of-life application can cause to a business can be immense. Technology that no longer fits your business's competency strategy, or no longer makes sense in the wider context of your other products, systems or processes quickly becomes a cost to your business, rather than an investment, and risks causing major disruption to your operations and bottom line.

Once your business has identified a need for a new technology application, it then becomes imperative that your team takes the time to outline key objectives for the new application. Implementing any new IT system should not be rushed, and it is important to ensure you select the right software and vendor. But how do you know what you are looking for?

## SELECTING AN APPLICATION AND TECHNOLOGY PARTNER



*Selecting an IT software supplier and technology partner can be a difficult task, but ensuring your business objectives are clearly defined beforehand, will ensure that you find a solution that complements your business. This is the start of your application lifecycle and requires just as much attention as any other stage in the cycle.*

Eddie Howe.



Investing time in carefully mapping your business processes, both as they are currently and how you envisage them in the future, will ensure that they are reflected in the functionality of your new application.

You should also ensure that your new technology partner's relevant certifications and credentials are in place to deliver the solution. To save time later on in application lifecycle management, it's important that you invest in software that works for you, instead of having to constantly re-organise your own business to suit the infrastructure and functionality of your software.

Any business considering new technology should clearly define both the current issues, and the objectives of the new system. Explore core elements of the new system such as the relevant hardware and software platforms, and carefully map business processes to ensure the new technology is able to support them. Information flows should also be outlined,

and understood by all stakeholders involved. It is important that the above are understood by both your business and also by your technology partner to ensure the solution best fits your business requirements.

Once the new system is selected, the end user must be informed of the clear advantages that it will bring, including benefits to both end users and the business as a whole.

A new technology system is just that, technology. In order to gain ROI from your technology investment it is important that your business has the internal structure in place to support it.



## IMPLEMENTATION OF NEW TECHNOLOGY

Once you have identified a solution and chosen a technology partner to deliver your new technology, it is vital you ensure processes are in place internally to not only support its operation but, more importantly, to ensure it is implemented successfully, and with minimal disruption.

The most cited reason a new technology solution fails is due to poor user adoption. IT is as much a project about processes, as it is a project about technology.

In order for implementation to run smoothly, and user adoption to be high, you need to ensure your team is fully supportive of the new system; from senior management level through to grass-roots, your entire internal team should hold a vested interest in the project, with everyone driving its success.

From the initial onset of identifying why your business needs new technology, it is important to identify a team of key users. Your identified team should include a mix of different team members with a range of skillsets; from those who use the system daily, to those who will be instrumental in its delivery, to managers who understand how the solution will enable the business to meet key performance indicators.

It is important that this team is involved from the outset, and is aware of why new technology is needed and the benefits it will bring to the business.

Your project management team is able to identify the existing shortfalls of your current system, helping ensure that the solution you select works for your business and complements current business processes. Your project management team will also be instrumental in ensuring the successful implementation of your new technology, both initially and in the long-term.

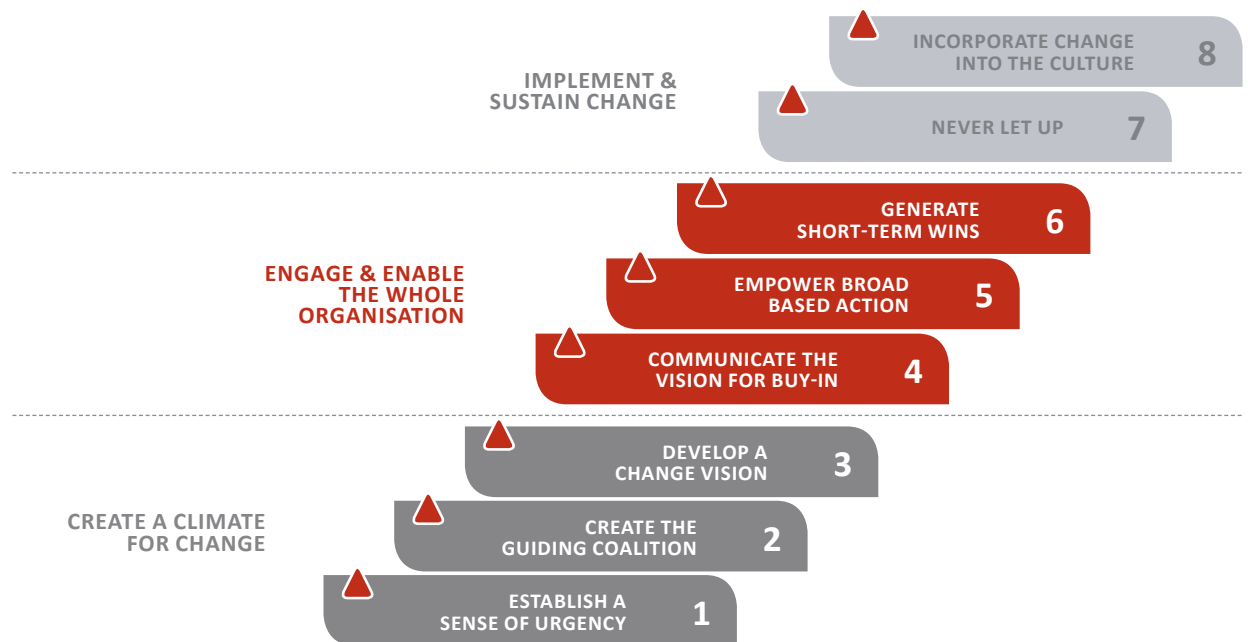
**Each team member will have their own designated role. Outlining roles and responsibilities of each team member from the outset clearly conveys your expectation and responsibilities.**

**A typical project team may include:**



The role of your internal team should be supported by in-depth technical training from your technology partner. It is advisable to invest in hands-on, in-depth training, which starts pre-implementation at beginning of your application lifecycle and continues throughout the project. A good partner will be on hand to provide detailed knowledge transfer, helping you get the most ROI from your investment for the entire lifecycle of your application. Getting people to support a project seems simple in principle, but how do you convince those in your organisation that aren't fully embracing change? How do you demonstrate that a new application will enhance their job, rather than replace it, and how do you ensure that the people in your business understand your processes well enough to be able to fully support your new technology?

## KOTTER'S 8 STEPS TO CHANGE MANAGEMENT



There are a number of academic theories available which cover issues of change within a business environment, the most notable being Kotter's eight step change model. Kotter's model, which covers both people and processes, outlines a linear process for successfully managing change within an organisation.

Kotter's theory focuses on creating a unified vision for change prior to implementation, which is clearly communicated. Kotter also suggests that in order for implementation to be successful, positive user adoption is critical. In order to empower this, Kotter also suggests that managers should celebrate small successes, boosting morale around change before embedding these new changes into company culture.

In most cases, it is advisable to use your identified project management team as a steer group which will work closely alongside your technology partner. Your partner can work with your team to ensure they are familiar with the new system before it is implemented. This information can then be disseminated from your trainer, to your key users, and then on to other members of your team, throughout the entire business. It is best practice to ensure this knowledge transfer is also clearly documented and accessible for everybody in the business, should an issue arise.

A detailed communication plan will ensure everyone knows their responsibilities

throughout implementation, and this detailed document will also serve to prepare for any issues that may arise, detailing the processes that will overcome them throughout the lifecycle of your application.

A training plan should also be developed that encompasses both how the new system operates and any cultural or procedural changes that have also taken place. It is important prior to your 'go-live' date that your project team is familiar with the new system, ensuring it operates as it should and complements your existing business processes. Any challenges here should be raised with your technology partner who will work with you to overcome them.

Again at this stage, it is imperative to relay why your business is implementing the new system and the benefits the new solution will bring to your business. Ensuring buy-in throughout every stage of implementation will not only increase user adoption, but can also serve as a metric to define whether the project has been successfully delivered at later stages within application lifecycle management.



**Best practice would suggest that implementation should take place in a phased approach in order to be most successful. A clear communication plan is essential, and should detail what staff, suppliers and investors (if applicable) need to know, timescales, and how they are to receive this information.**

Eddie Howe.







ALM PHASE TWO  
**CUSTOMISATION**

02

## INTRODUCTION

Businesses rarely stay still; they progress through their own natural lifecycle which will see them expand and contract. It is important your technology can support this.



As any business evolves, its processes change, both internally and externally. With more and more processes becoming automated, it is important that your technology has the functionality and scalability to be able to keep up.

While you may have a certain level of control over internal factors, the same control can't be afforded to external factors. Managing application customisation effectively can be the difference between a technology system that is still able to complement your business processes, and one that has been significantly outgrown.

Evolution is part and parcel of any business, and it is expected that throughout the lifecycle of your application, some customisation will be required. This may be carried out by your internal IT team, or by your technology partner. Businesses can mistakenly see customisation as a spiralling cost to their business, but without it, how can you ensure the longevity of your technology investment?

Of course, customisation is a balance. While it can be a key driver in defining business differentiation, it does require considerable commercial justification. Any customisation to software must be driven by clear business benefits, you need to make sure you only customise where you need to, and don't try to rebuild or remodel an entire system.

Technology customisation does not need to be painful. Most technology solutions now are built with a certain degree of customisation in mind; in fact, by empowering your internal IT team with the advantages of your new solution there are a number of small customisations they may be able to carry out in-house and with no extra cost incurred.

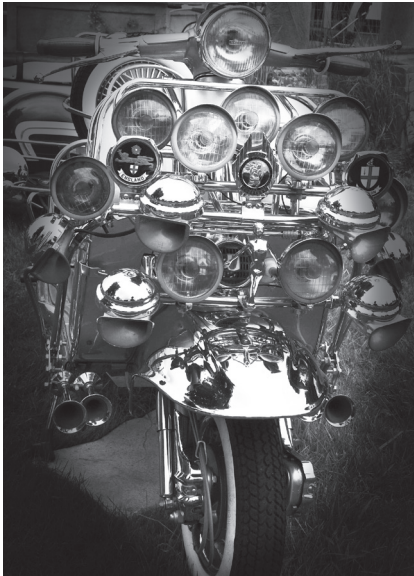
These small customisations are a natural process, and reflect small changes your business may take in altering its own processes. Introducing a separate new technology solution for example may see customisation take place to ensure both systems integrate seamlessly.

Of course, sometimes customisation requirements will extend beyond your internal IT resources, at which point there are a number of third party technology development companies that can carry out the customisation for you, and train your team to how to use the new functions and systems to maximum effect. And if you took the right approach to investing in technology in the first place, then your technology partner should be able to step in and support you through this juncture of the application lifecycle.

As your application progresses through its lifecycle it is not uncommon for incumbent suppliers to remove support for some of their older systems, in an attempt to encourage existing users to consider new technologies or upgrades. However, when your business reaches this point in the application lifecycle, you will have a solution that has been heavily customised to match your individual business requirements, so looking elsewhere for an alternative out-the-box system will not be an easy thing to do.

Instead, a third party company can work alongside your business to establish your requirements, processes, needs, and the intricacies of your current application, providing tailored and strategic support that ensures you continue to gain maximum benefits from your investment.

## JUSTIFYING CUSTOMISATION



While customisation lies heavily in the hands of your internal IT team, your technology partner, or your third party technology development company, there are a number of internal factors that should also be considered within your wider business to ensure customisation pays off, and your application continues to be a powerful tool for your business.

Internal processes play an instrumental role in ensuring your team is consistently updated with any changes being made to the system. And as with implementation, it is important that you clearly communicate why the customisation is required, along with the benefits that added or amended features will bring.

Of course, processes are not just important in the transition stage of customisation; clear processes can also be integral in identifying signifiers that customisation may be needed in the first place. Everyday users of your system are best placed to monitor the success of your application, highlighting any issues that may affect its operation. Regular debriefing with key users and your management team will highlight any issues

where, for example, business processes are being forced to fit technology in a timely manner, ensuring that any negative impact this may have on your business is minimal.

Increased customisation may mean that your technology can function effectively for your business, but increased customisation if not managed correctly can mean that user adoption falls.

To overcome decreased user adoption it is important that businesses work to continually engage with stakeholders. These processes should extend beyond implementation, working in partnership with your vendor to outline a clear structure, which includes planned sequencing, and stages along with levels of involvement required from all parties.

## STAKEHOLDER ENGAGEMENT

Stakeholder engagement is a process that should be intertwined within your overarching communications processes. In order to be most effective, it should form the basis of its own process strategy to drive the continued success of your application.

For stakeholder engagement to remain high it is important that outlined objectives of the project are determined from the outset. This can ensure your management team cascades a clear, concise and consistent message down the organisational hierarchy. Confusion here can lead to your team disengaging from the project because they are unclear about its objectives. Along with such messages, it is important your team understands all relevant timescales, should customisation be occurring, and alternative methods for business operations should they be disrupted.

Communication channels should also be consistent, with stakeholders receiving information in a timely manner. Furthermore, this communication should invite and facilitate conversation. Should someone have a question or issue, it is

important that they firstly feel they can raise it, and secondly, understand the ways they can communicate with the relevant department or team.

Further to an open dialogue, regular feedback should also be sought. This can take the form of steer groups, informal review meetings or, for data collection on a large scale, surveys. This feedback not only highlights how your team perceives your technology solution but can identify any areas which may need additional support in the form of further training or patches from your technology partner.

What is most important is that stakeholders are engaged and that you provide them with the information and support they need to be successful champions of your application throughout its lifecycle.

## STAKEHOLDER ENGAGEMENT (CONTINUED)

Alongside stakeholder engagement other processes should also be adopted to ensure the success of your technology. Regular review meetings with your project management team will confirm your original objectives are being achieved and your businesses KPIs are being met.

Continued communication with your vendor to provide feedback on the solution, also highlighting any issues you may encounter, is another process which should be adhered to regularly. A good technology partner will work closely alongside you long after implementation, engaging in a proactive relationship, providing extended and tailored support to ensure your application investment continues to perform.

## PROCESSES POST-CUSTOMISATION

Once customisation has occurred it is vital that you have processes in place to support user adoption. Often businesses carry out customisation before training key users on the new functionality, it is important here that effective knowledge transfer occurs.

This is a practical process, with key users cascading training throughout the business. Effective knowledge transfer should be continually evaluated ensuring it reaches its aims of organising, creating, capturing and distributing information to ensure its availability for future users. To support this knowledge transfer, it is best practice to

build a 'live' strategic training plan, which is continually updated and easily accessible by your whole team.

Much of a company's assets are locked up in their knowledge so ensuring you understand who knows what, who needs to know what, and how to transfer that knowledge is critical.



ALM PHASE THREE  
**LEGACY**

03

## INTRODUCTION

The third stage in any application's lifecycle occurs when your technology reaches legacy status.

To date these technologies have given you a competitive advantage with your application closely aligned to business needs. Your system has been nimble enough in the implementation stage to leverage the latest trends and strong enough after customisation to fully evolve, but now it's almost dormant. How do you maintain the system and keep up with changing business demands without putting strain on your business? How do you ensure that your software investment does not start to undermine your efficiency and competitiveness?

Legacy software is commonly referred to as a piece of software that has become out of date, is no longer supported, or has been customised to an extent that it has become unique to your business.

**As touched upon above, there are a number of reasons your technology may be considered legacy. Such reasons include:**

- **Your solution has been over-customised.** **Continued customisation**, to modify your solution can result in user adoption decreasing. The more customisation you make to your solution, the greater risk you run of losing user adoption, which can result in your entire knowledge of your technology being locked up in a single source. This can lead to difficulties in finding staff to effectively manage your system.
- **Another result of over-customisation of your technology solution may see your business alter its processes to fit the solution**, undermining the entire reason for implementing the solution in the first place.



*Continually updating your software can become expensive, and buying brand new software can be even more so. A lot of the time, businesses rush straight into buying new technology solutions, or abandon their solution entirely, without realising that they may not need to. Sometimes, seeking external support can help prolong the life of legacy applications.*

Eddie Howe.



- **Technology has naturally reached its end of life and is no longer supported by the vendor.** Extended support can often be purchased, however the associated costs can quickly spiral.
- **The original objectives and key performance indicators outlined in your project brief are no longer being met.**
- **Your application isn't nimble enough to leverage the latest technology trends demanded by customers**, such as Mobile or Cloud.
- **As your business has evolved you have implemented a variety of other technologies**, which do not integrate, compromising both data quality and visibility.

Any of these reasons can result in user adoption decreasing, meaning your system is no longer delivering ROI and is running at a cost to your business.

Many businesses often mistakenly believe that legacy software should be retired and replaced, however there are a number of steps you can take to extend your solution. Seeking third party managed services can aid in providing support to both your solution and your team, ensuring your investment continues to meet its chief objectives. Of course this support comes at a cost to your business, but the potential cost that running a dysfunctional solution can have on your business is far greater. At this point, you've evaluated your technology, you've continued to evolve your processes, and are now in need of attracting the right people to your business to get the most out of your legacy system.



## THE POWER OF PEOPLE

Key to overcoming the issues that can arise with legacy systems is people; both your internal team and the tailored support of a third party managed services provider.

Business culture is of upmost importance to ensuring your support unlocks its full potential. Recognising your business needs additional support is only half of the battle; next, you must ensure you have the resources in place amongst your team to successfully embrace it.

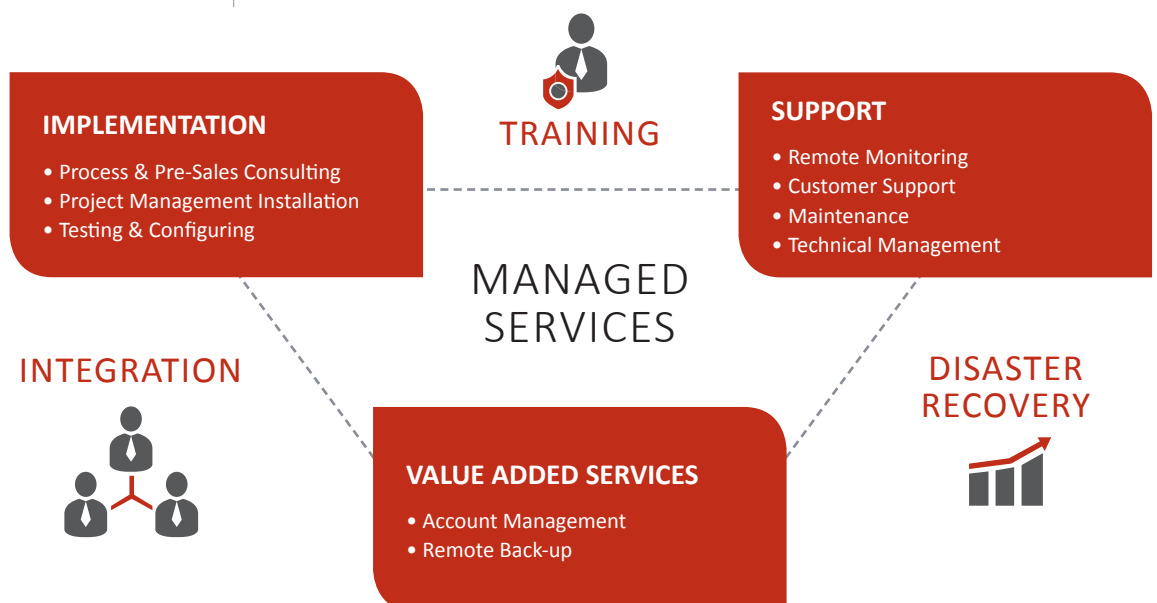
Again, communication is key to achieving this. Keeping stakeholders informed throughout this process as to why support is needed, and the benefits it will achieve just as you did in the initial stage of the application lifecycle, is important to ensuring minimal disruption to the status quo.

Buy-in from your team needs to be sought at the earliest opportunity to achieve continued support for your ageing technology solution. Tailored third party support should aim to train your team, and this information should be clearly documented and added to your existing knowledge base, further aiding effective knowledge transfer throughout your business.

Your chosen managed services provider should work closely with your existing team throughout the project, spending time with your initial project management team and users to uncover why your solution is no longer performing as it should.

A trusted managed services consultancy will be able to work either on site or remotely to ensure your application continues to operate smoothly. It should provide you with the expertise to support you through all facets of the application lifecycle, working to achieve your clearly defined consulting engagements, steering you towards clear strategic goals that future proof your systems, delivering greater efficiencies and supporting broader organisational objectives.

And if a skills gap exists within your business, a third party partner will be able to identify where this is and help you to recruit the right calibre of individual to plug this skills gap. Of course, you will need to make it clear to your existing project team, who have experienced the application lifecycle up to now, that this individual is not a threat to their role, but a resource that will supplement the role they play. Typically, highly skilled technical people are required at this stage of the application lifecycle and unless you know what you're doing, these can be difficult to find.



# CONCLUSION

Investments in technology should not be rushed, or taken lightly. Businesses should understand the role played by IT, people and processes throughout the application lifecycle, not just pre-implementation. Clearly understanding these functions and how they work together is key to your project's long term success. And if managed effectively, there is no reason why your investment can not continue to support your business long after implementation.

The key to experiencing long term ROI from a new business application is in successful application lifecycle management, continually evaluating people, processes and IT. Stakeholder engagement is an essential aspect of any technology project, both at the start of a project and at the end. Lose just one facet of support and your entire project can quickly crumble beneath you. Having the most sophisticated technology product in the world is not enough if your people don't know how to use it, and it doesn't match your business processes.

A successful technology project is one where the business has a strategic plan, closely aligned with the needs of the business. IT needs to be considered a true business partner by all departments of your organisation and clear KPIs must be set out from the start of a project and continually evaluated. And when you do make customisations and enhancements to your software, these need to be done according to your business processes, and that stakeholder engagement must be reaffirmed.

A useful application is one which is being effectively managed through the application lifecycle to enable, rather than restrain, today's business needs. As soon as technology becomes a cost to your business rather than a benefit, it is time to re-evaluate your options. Sometimes, this can still come at a cost, but a lower cost than a complete overhaul of critical business systems. Technology requires constant attention, time and investment in order to ensure that it is continually providing value to your business. Make sure you understand the future roadmap of your product and implement a plan to mitigate the risks associated with ageing business applications.

It is only once your business recognises the role that people, processes and technology play in the implementation and adoption of new business systems, that you can experience measurable ROI from your investment and benefit from a solution that supports your evolving business operations in the long term. Always remember that any new technology product has a lifecycle and the application lifecycle is just that; an infinite circular process.



Crimson's leading IT consultants have more than 20 years' experience advising on application lifecycle management in conjunction with business strategy. We work alongside the IT teams and stakeholders of major UK companies.

**If you would like a FREE consultation about application lifecycle planning please contact our sales team on 01675 466 477 or email [marketing@crimson.co.uk](mailto:marketing@crimson.co.uk)**

## **CRIMSON**

2640 Kings Court  
The Crescent  
Birmingham Business Park  
Birmingham  
West Midlands  
B37 7YE

T: 01675 466 477

[www.crimson.co.uk](http://www.crimson.co.uk)

**Microsoft Partner**  
Gold Customer Relationship Management  
Gold Application Development  
Silver Collaboration and Content

**REC**  
Member

**ARC**  
THE ASSOCIATION OF  
RECRUITMENT CONSULTANCIES