

The background of the top half of the page is a dark blue, textured surface. A hand is visible on the left side, with the index finger pointing towards a large, light blue plus sign icon that is centered in the upper half of the image. The plus sign is slightly blurred, suggesting it is in the background.

White Paper

Six Ways to Get More for Less from Your Legacy Software

Providing you with:

- ✓ Reasons to optimise your existing systems
- ✓ Examples of high-impact improvements
- ✓ Tips to define an effective, actionable strategy

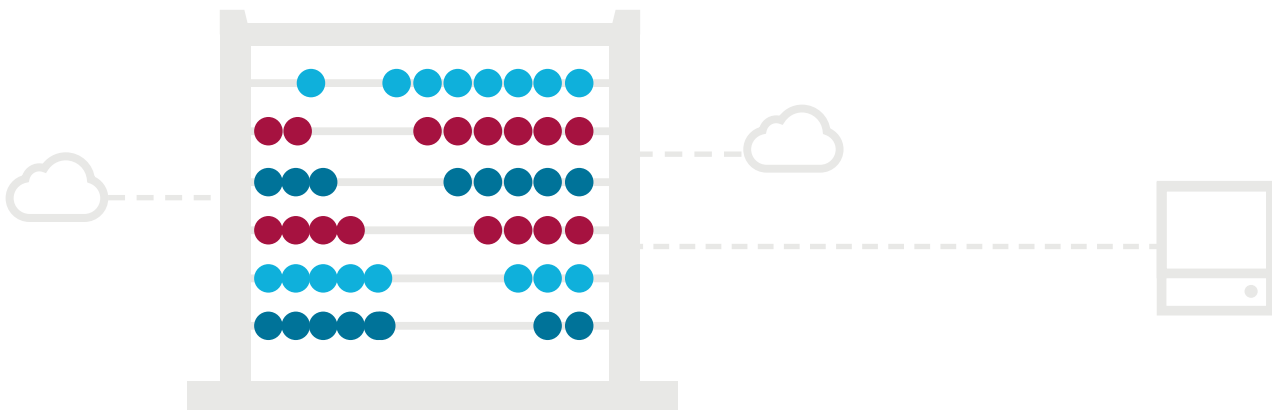


Introduction

Advances in digital technologies - such as the application of [big data](#), or the growing availability of [cloud](#) solutions - have driven substantial disruption across all industries. Subsequently, questions around maintaining market share and safeguarding the bottom line have become more pressing than ever - especially in light of additional political and economic factors (both macro and micro) brought about by events such as the [EU referendum](#).

As a result, there is currently a reluctance among many organisations to commit to large capital expenditure, ruling out initiatives such as the creation of new products and features or expansion into additional territories that may have a negative impact on Return on Investment (ROI) in the short-term. Of course, to maintain growth these projects will have to be completed at some point, but for the foreseeable future it looks like the question of just when this will occur will remain unanswered.

In the meantime, however, it's important that these same organisations don't lose their competitive edge as a result of the circumstances in which they find themselves, especially as smaller, more nimble counterparts - who are often better able to take advantage of the [disruptive opportunities](#) on offer - target their investments more responsively.



If you find yourself in this situation, then, the answer may lie in focusing inwards, and exploring opportunities to optimise and enhance your existing infrastructure instead. This is especially true if you've [previously invested in powerful custom software](#), which gives you an advantage over new players in the market by allowing you to take small, iterative steps to improve the user experience across digital touchpoints, reduce costs, and streamline processes.

It's these steps that we'll look at in more detail in this white paper - examining the idea of continual improvement from both a technical and user perspective to show how you can generate revenue and increase your chance of meeting your chosen KPIs, without requiring substantial upfront investment.

Part 1: users



User experience (UX) review

There's an enormous incentive to deliver a great user experience through your online channels, particularly in the current digital landscape. With customers becoming increasingly used to [high-quality experiences](#) that leverage multi-channel journeys, personalisation capabilities, and self-service functionality (such as those provided by B2C brands), even those organisations operating in industries that have traditionally been slow to be exposed to change must keep up with these trends, or risk losing sales and profits to competitors from both within and outside the industry.

For many facing this challenge, the first step towards optimisation comes in the form of a [user experience review](#). Evaluating key tasks and user journeys against UX and cross-industry best practice, this activity not only helps pinpoint areas for iteration and improvement, but prioritises them so that the greatest impact can be realised in the shortest possible space of time. For example unclear or conflicting calls to action, site journeys with unnecessary steps and areas of friction or confusion within [web forms](#) can all have a direct impact on conversion rates, meaning that making even small changes to these elements can have an immediate positive effect.



With so many potential areas of focus for your UX review, though, it's also important to define exactly what you're going to cover at the very start of the process. Your scope should be shaped around your organisational objectives, as well as your users' needs, priorities, mental models and contexts of use - drawing on any information or understanding that you may already have built up (something covered in more detail in the next section). Once you've embarked on your review, there are a number of different methods that can be employed to give you the insight you need. While the approaches that work best for you will of course depend on your own specific situation and goals, it's likely that a combination of all of the following will deliver the greatest value:

- **Usability evaluation:** this 'heuristic' (or best practice) assessment highlights usability issues by measuring your website or application against accepted guidelines. Key themes analysed in this evaluation typically include layout, interaction, navigation, content and visual design, while a complementary cognitive walkthrough can be used to identify further task- and/or user journey-based issues.
- **Analytics review:** being able to collect, measure and report on website usage data is a necessary business process, but is often not given the attention it deserves. An analytics review uncovers this crucial information, translating it into practical insight about visitor profiles and motivations to reveal possible problems in the goal conversion funnel and highlight crucial optimisation opportunities.
- **Peers, Innovators and Competitors (PIC):** a strategic exercise that evaluates the landscape around your organisation to identify areas of opportunity and threat, a PIC analysis provides a comprehensive view of best practice and innovation from a range of UX leaders in your industry and beyond - allowing you to benchmark your current efforts and take a strategic approach to improvements.

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User research

Knowing your users is integral to the success of any business - after all, if you're not responding to their real-world requirements, behaviours and constraints they'll be unlikely to use your services. However, many organisations fall into the trap of simply assuming they understand their audience and their needs, and so miss potentially valuable opportunities for improvement, optimisation and enhancement. This is often particularly true for large, established organisations, where there is often considerable distance between core business functions and the users they serve.

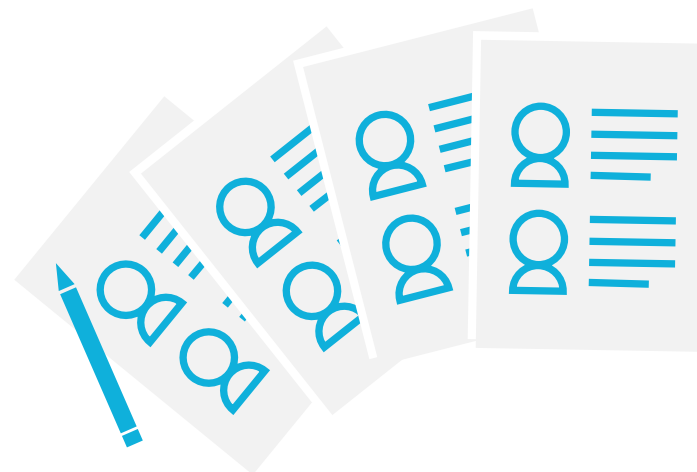
And even if you have conducted research previously, this doesn't mean that the picture you have of your users is still accurate and relevant. As mentioned in the previous section, emerging digital trends and technologies can have a major impact on common user preferences, behaviours and expectations; and you may also find that your audience demographic shifts and evolves over time. To take a prominent and pertinent example, the increasing number of 'millennials' interacting with your organisation's services may mean that greater investment is required in areas such as mobile/multi-channel strategies, or social touchpoints, in order for your organisation to remain relevant and useful.

Additionally, [user research](#) is a hugely varied discipline, so it may be that there are valuable activities available to your organisation that you may not have considered before, or even be aware of. These include:

- **Personas:** giving names and faces to your user groups, personas also typically include information such as role, key tasks, motivation, pain points and context of use, to help summarise any research conducted in a format that can be quickly and easily understood by all parties



- **User surveys:** these serve to provide both quantitative and qualitative data about users' thoughts and frustrations concerning your systems, and can often be completed simply through online portals
- **Focus groups/workshops:** involving key internal stakeholders and/or real and representative users, these collaborative sessions serve to highlight priorities, illustrate current levels of consensus, and inform decision-making about next steps
- **Usability testing:** revealing what users really think about your services, usability testing is ideally suited for optimising current solutions that may be underperforming, with options ranging from low-fidelity [guerrilla testing](#) through to [lab-based testing](#) to suit all requirements and resource levels
- **Card-sorting/tree-testing:** popular techniques for evaluating the 'findability' of content or functionality as well as understanding how intuitively key tasks can be performed, these activities see end-users try to complete critical user journeys using simplified text versions of your services, without the influence of navigational aids and visual design
- **User observation:** sometimes referred to as contextual inquiry or even 'shoulder surfing', essentially this is the observation of users trying to accomplish their goals within an existing system
- **Content strategy:** crucial to ensuring your customers are provided with the information they need, when they need it, an effective content strategy encompasses the activities and tasks behind the planning, prioritisation, creation, delivery and management of your online and offline content



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UX training

As has been shown, to deliver maximum return on investment user experience has to be an on-going strategic consideration, with user needs at the forefront of every decision you make regarding your digital products and services. And while partnering with a skilled external agency ([ahem...](#)) will help ensure that you grow in a way that's valuable, sustainable and user-centric, it's crucial to ensure that core UX principles are firmly embedded within your own organisation too.

Fortunately, there are a number of cost-effective solutions to help you achieve this, such as delivering dedicated user experience training to your team. While this should of course explain the 'why' and 'how' of fundamental UX activities, for the greatest value it's also important that your courses cover how each activity relates or can be applied to your organisation in particular. Be sure, therefore, to kick your programme off with a discovery session that uncovers your specific areas of interest and pain points, so that your chosen training partner can shape their agenda, and provide tailored advice and activities, accordingly.

Alternatively, a retainer agreement will give you access to specialist advice and guidance whenever and wherever you need it - information that you can bring into your organisation over time, and so support your journey to self-sufficiency. This is an approach that we've used to great effect for clients such as [Kallidus](#), with whom we worked closely to optimise their range of learning and talent software solutions. Through this collaborative process we also helped instil the principles of user-centred design throughout the organisation, to the point that Kallidus took the decision to install a full-time UX consultant to continue the good work that had been started - and even called on us to help them recruit the right individual for the job.



Part 2: technical

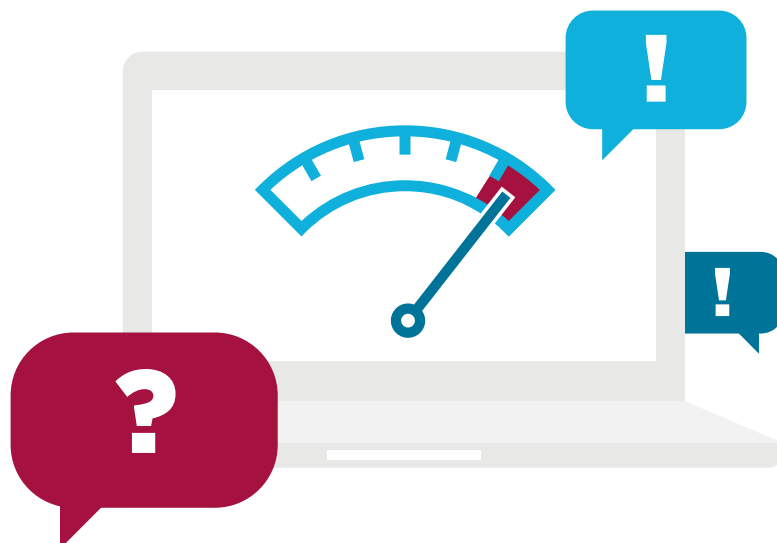
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Good technical practices

If left unattended, legacy systems have a tendency to become brittle and fragile over time - the consequence of a buildup of dangerous **technical debt**. This often leads to frustrated users and operational inefficiencies, as workarounds have to be found and more tests applied in order to safeguard quality.

Embracing good technical practices is a key means of avoiding this outcome for your software solutions. Not only are they a positive result in themselves - giving you a solid foundation from which to build - they provide a number of subsidiary benefits too. For example, by wrapping your systems in tests at the outset, you'll be able to target specific areas for improvement while maintaining the levels of security, stability, and speed your business requires.

Another area where adopting good technical practices can deliver big dividends is your release processes. By analysing your current processes and looking for potential opportunities to optimise and automate, you'll likely be able to realise significant efficiency gains while ensuring that human interaction and decision-making is retained



where necessary. Undoubtedly, these improvements will require an investment of effort, but they will ultimately give you a process that's targeted and repeatable and so ensure that any benefits increase exponentially over time.

Crucially, any changes you make also need to be reflected at a cultural level. For example, an understanding of the importance of [testing](#) should be embedded throughout your team, to the point where features and functionality are not considered 'done' until they have been signed off by someone with testing capabilities and responsibilities. With this kind of mindset in place, you can start to iterate your way to truly great technical practices - making sure to review your approach regularly to understand how well it's performing against your stated business goals.



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License review

Licensing is an area that's often overlooked when investigating opportunities for optimisation, straddling as it does the technical and business functions of an organisation. However, with many organisations purchasing unnecessary, excess application licences that result in overspending and inaccurate budgeting, the effective management of software assets and their licences has the potential to save these enterprises thousands of pounds a year, as well as helping ensure they're primed for future growth.

Licence optimisation is also often required to to meet standards in another critically-important area: compliance. Many organisations have discovered that their software asset records are neither accurate nor current, but while awareness of the importance of true asset management has increased, managing the risk associated with being non-compliant remains a challenge. This can not only lead to expensive outlays to rectify poor decisions made previously, but can also introduce significant security and performance issues, which come with their own attendant costs.



To avoid non-compliance risks and reduce costs, then, you should consider deploying a software asset management programme that includes processes to ensure all applications are appropriately recorded and categorised. This can be achieved by:

- **Automating the process:** as with good technical practices, automating core licensing activities can deliver significant efficiencies, by reducing the time spent managing software assets and eliminating manual reporting processes
- **Integrating with asset management:** to be cost-effective and easy-to-use, software licence management tools must be integrated into your overall asset management solution. Ensure, therefore, that your software licence management solution is part of a wider asset management plan, to help your organisation improve efficiency and remain compliant while reducing software purchases and support costs.
- **Preparing for vendor audits:** technology vendors have recently increased their efforts to curb the unsanctioned use of software by performing surprise audits. It's important, therefore, to ensure you can provide fast and clear access to application portfolios - something an automated solution can support by allowing you to generate detailed reports at any time.
- **Aligning software purchases, contracts, and support:** underutilised software wastes IT budget, so make sure you know not only what licences you have but how often they are being used and by whom, so that you can accurately define your future budgets, and plan your purchases, contracts and support level agreements accordingly
- **Looking for an easy-to-implement tool that offers one-year ROI:** when researching software licence management tools, be sure to assess usability (both with regards implementation and on-going usage) as well as the potential for rapid return on investment, as often providers are able to demonstrate this within the first year





- **Reconsidering your IT delivery:** cloud computing (covered in more detail in the next section) has opened up a world of secure, high-performance, available and scalable infrastructure, all without the overhead of upfront capital costs. Additionally, these solutions place the onus for licensing costs onto the cloud service provider - taking the effort and subsequent costs away from your internal departments.

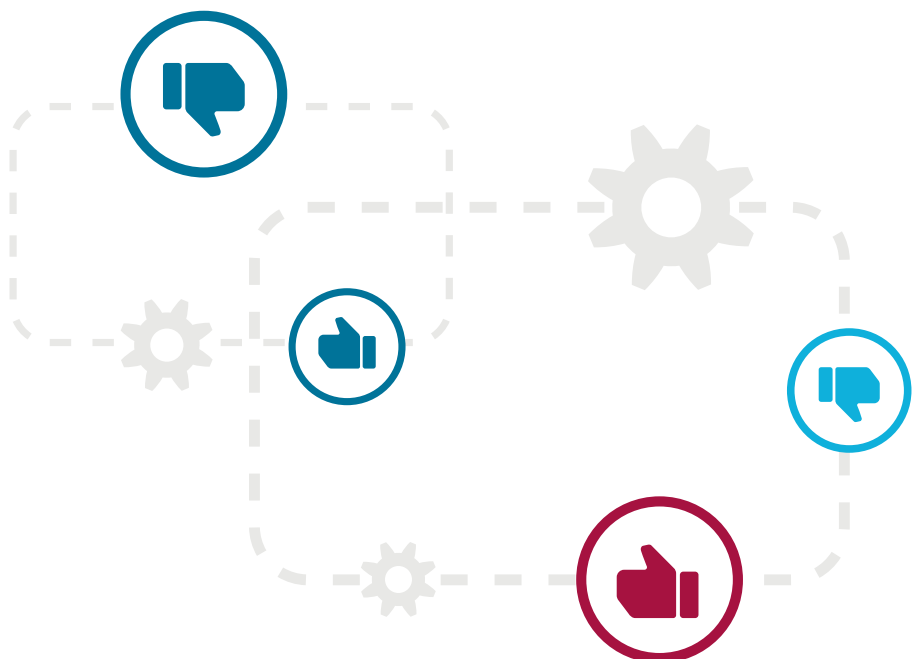


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Infrastructure review

Of course, it's also important to ensure that as soon as greater investment is released, you're able to start making improvements straight away. This is where an infrastructure review that analyses all of the technologies and services your organisation currently employs can prove particularly valuable. Providing you with an 'as-is' picture of your IT environment, mapped against best practice standards, this assessment reveals potential risks to your business, performance and availability shortfalls, and any areas where network development may be required to effectively meet the needs of your business, your suppliers and your customers.

Armed with this information, you'll be better able to understand the continuing suitability of your systems, and have the ideal foundation from which to plan for future development - knowing the likely investment required both to match common good practices within the industry as well as maintain an infrastructure that's able to support your business growth strategy.





The potential for achieving significant cost savings and performance improvements through infrastructure investment has also been growing in recent years, thanks to the proliferation of cloud-based technology offerings. While typically large-scale IT projects have required heavy up-front investment, cloud alternatives now allow organisations to minimise expenditure while benefitting from fast, scalable and available equipment (our client [Investec Asset Management](#), for example, cut their hosting costs by 45% by moving from steel servers to the cloud).

Additionally, competition among providers has helped drive the creation of ever higher-quality products (and to see how two of the leading providers compare, take a look at our [AWS v Azure blog post](#)). It's important to be aware, however, that as much care should be taken, and planning done, when moving your applications and services to the cloud as you would for any other business-critical IT project - a process covered in more detail in our [cloud migration white paper](#).

Depending on the configuration of your IT landscape, for example, there may be the opportunity to benefit from any of the following:

- **Software as a Service (SaaS):** solutions hosted on a cloud infrastructure by the providers themselves, and delivered directly to you
- **Platform as a Service (PaaS):** the ability to deploy your own created or acquired applications onto cloud infrastructure (provided the programming languages, libraries, services and tools are supported by the provider)
- **Infrastructure as a Service (IaaS):** the delivery of fundamental computing resources such as processing, storage and networks through the cloud, along with the ability to deploy and run arbitrary software including operating systems and applications

Next steps

While these solutions vary greatly in their approach and outcomes, something that they all have in common is that they typically require a much smaller outlay than investing in new custom software. Additionally, this kind of spend can usually be assigned at a department level (be it digital marketing, IT, customer support etc.), meaning that budget can be more easily spread across the organisation without confusion as to who is managing what - although this doesn't mean, of course, that activity shouldn't be coordinated at an organisation-wide level in order to maximise efficiency and effectiveness.

Don't think, either, that these optimisation activities are merely a sticking plaster, to tide you over until you can invest in larger, more complex projects. Your strategy shouldn't just be about maintaining the status quo but about making real improvements to performance, and while these may only be small projects they build up to something that's much greater than the sum of its parts. With a slicker UX, for example, you'll benefit from improved conversion rates and customer satisfaction, while technically you'll have faster, more efficient systems where code and functionality can be added more quickly and cheaply than before, through reduced technical debt.



To get started, we recommend taking an iterative and incremental [Agile](#) approach, with a prioritised backlog guiding which areas of your systems you'll tackle and in what order. And to create this backlog, you'll first have to build an understanding of where your biggest problems lie, and which of these are costing the most - not just in terms of direct revenue, but the potential cost to the efficiency and reputation of your business too. For example:

- Is your IT department constantly firefighting?
- Do your customer services representatives find themselves answering the same questions again and again?
- Have your analytics tools highlighted any specific underperforming areas across your sites and applications?
- Is the cost of adding new code/features/functionality too prohibitive?

From this you can create 'epics' defining the overarching themes that need to be addressed by your optimisation strategy. These can then be broken down into individual tasks that are assigned a specific return on investment or other gain - quantitative data that can be used to aid the prioritisation process, as well as during the regular reviews you should be carrying out to measure the success of your optimisation efforts.

At Box UK we've supported numerous organisations on this journey, guiding them through the initial discovery process as well as undertaking review and optimisation activities as needed to deliver significant UX and technical improvements. If you want to see what we can do for you then [get in touch](#) with a member of our team, or find out more about our full range of services by visiting the [What We Do](#) section of our website.



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