



Five Signs Your Web Project Needs Agile

Providing you with:

- ✓ An understanding of Agile
- ✓ Key indicators that your project could benefit
- ✓ Implementation advice



Introduction

“**Agile: an iterative method of determining requirements for engineering and information technology development projects in a highly flexible and interactive manner.”**

Wikipedia

At some point we've probably all been involved in a digital project that didn't run as smoothly as intended. Whatever the cause, an Agile approach can help you drastically cut the risk of missing deadlines, going over budget or delivering an ineffective product.

As Agile devotees, you probably expect us to be a little biased; however, with first-hand experience of delivery timescales reduced by weeks and visible improvement in client satisfaction the advantages are clear.

In this white paper, we've provided five telltale signs that your own web project might benefit from Agile along with recommendations on how to best introduce elements of the approach to help.

What is Agile?

Agile is a project management (PM) and software development methodology which provides an alternative approach to more traditional, waterfall-based frameworks. Whereas the majority of PM methodologies can often be applied to different contexts, Agile has its roots firmly in software development. Consequently, it is ideally suited to digital projects, with a core set of driving principles based around people, communication, collaboration, single cross-functional teams and lightweight documentation.

The goal of Agile is to add value by spending time on the creation of software, rather than the creation of documentation. While the waterfall approach prescribes breaking a project lifecycle into distinct phases of work completed in turn (often by different teams working from heavy specifications), Agile advocates doing 'just enough' upfront documentation and planning before breaking work up into timeboxed iterations (typically between one and four weeks) where multiple activities are carried out in parallel.

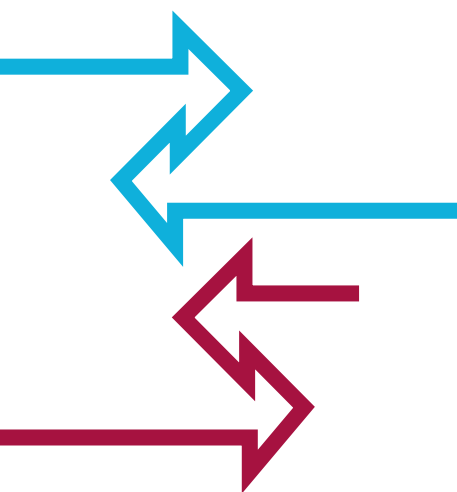
An important mindset change in Agile is that the direction of development is steered by market needs, as opposed to working against documentation created at the start of the project, which often quickly becomes out of date. While waterfall has heavy, slow change control procedures (which incur additional costs), in Agile new or modified tasks are effectively handled through continual prioritisation and re-prioritisation of requirements. This fast and reliable delivery method allows for greater creativity and flexibility within the production team - essential attributes when creating high performance software products in uncertain environments and constantly changing marketplaces - and ultimately results in higher returns.

Advantages of Agile

- Shorter feedback loops
- Increased collaboration and team working
- Greater visibility of project progress
- Flexibility to quickly react to change
- Support for distributed teams

What this means for your project

- More rapid development timescales
- Less waste
- Reduced financial risk
- Greater return on investment





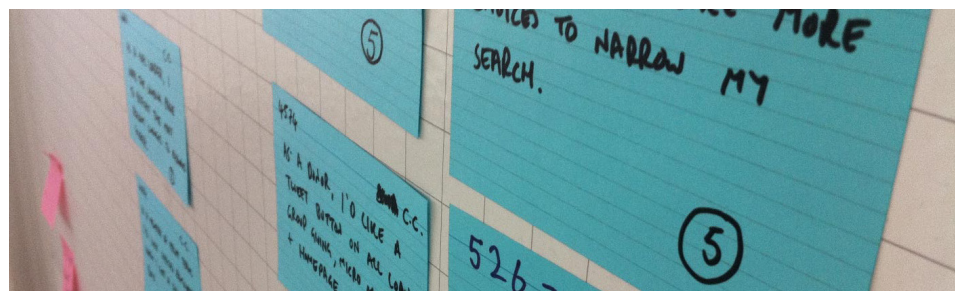
You have lots of heavy documentation which quickly becomes outdated

Is this you?

- Rapidly evolving market place
- Ever-changing requirements
- Quickly outdated documentation

A noticeable difference between Agile and the majority of project management methodologies is the reduced amount of documentation required at the start of development. Instead, the focus is placed on continuous communication throughout the project lifecycle. This increases flexibility, and is particularly useful in sectors which have to quickly respond to new technologies and changing user expectations.

Much success can be gained from replacing heavy initial documentation with a lightweight, 'user story' format that focuses on who the user is, what they want to do and their overarching aims. Approaching the necessary specification phase in this way encourages requirements to be written using clear, accessible language, enabling people across the company to understand why features and functionality are being included, leading to quicker stakeholder sign-off.



By combining user stories with online collaboration tools for tracking changes, it's possible to implement creative solutions through an iterative development process that is reviewed and refined as part of a close client/supplier partnership with regular demos of working software. Supplementing these with frequent communication through email, phone calls and video conferences provides a solution that is much more reactive to changing requirements and conditions.



Your distributed remote team working is breaking down

Is this you?

- Remote teams, often spread over a number of different locations
- Little to no possibility of regular in person meet-ups
- Unable to commit regular dedicated resource to managing project progress

Whether you're integrating disparate modules into a single platform or just require discipline specialists that can't be found in a single provider, multi-team projects present many challenges. Coordinating timescales and providing communication updates, all while adhering to various development constraints and coping with interdependencies around code integration, often leads to confusion, misunderstanding and inefficiency.

Agile's focus on constant communication might make you think it's not well-suited to remote working, but that's a common misconception. Sprint-to-sprint communication actually makes Agile ideal for managing a number of distributed teams as the required daily updates and regularly scheduled planning and review meetings keep everyone working to the same end-goal; however, you do need to be prepared and have the right tools in place to make it a success.

With technology such as IRC chat, shared Wiki pages and video conferencing facilities, communications can be easily managed between distributed teams, especially when everybody's aware of the driving aims at the outset of the project (through the sharing and review of user stories).

As work is completed through short, regular deliveries it's also much easier to identify and rectify possible issues before they become a problem, avoiding the kind of crisis management that really is difficult to carry out remotely.

Even if committing to this level of contact with your developers or development agency just isn't feasible (whether due to time differences, technical capabilities or workload), it doesn't mean that you should reject Agile. Throughout the project lifecycle business analysts from within the project team are responsible for representing the product owner (i.e. you) - a position not featured in waterfall methodologies. This means that, with Agile, you can be confident there's always someone looking out for your interests and ensuring the final deliverable meets your needs and expectations.



The admin surrounding your change control procedures is getting out of control

Is this you?

- Multiple stakeholders, with lots of change requests
- Lengthy change control processes
- Wrangling over budget and cost
- Missed deadlines to due to ongoing changes

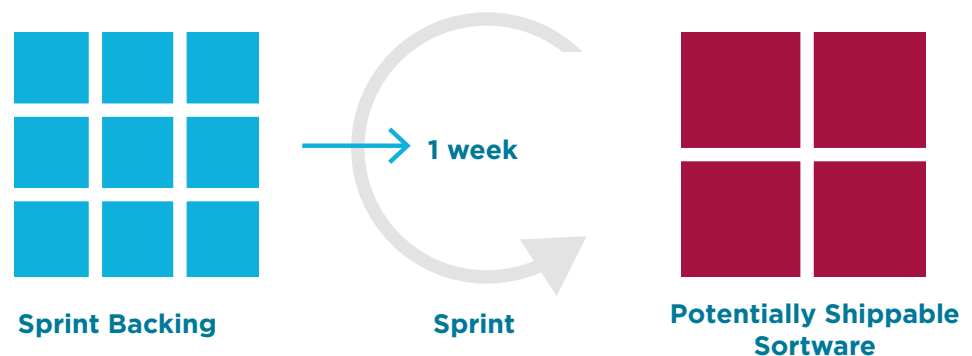
As well as being based around the creation of heavy documentation at the outset, waterfall methodologies advocate a development model that produces complete sections of a product in each schedule of work. As these only get joined up in the final stages of the project, working, test-ready software is usually not available until well into development, increasing the likelihood that changes will need to be made.

This process can be likened to the creation of shirts in a factory; while in Agile each period of work produces a complete shirt (or piece of working software) which is then refined and improved, waterfall produces a complete element after each phase, such as the sleeves or collar, which are only stitched together and delivered as full shirts at the end of the process. This means if the design of the shirt changes it requires all the pieces already delivered to be reworked.

While this may not be too much of a hindrance when required changes are minor or infrequent, for complex projects this can lead to much bigger problems. As additional features are requested by the (often multiple)

stakeholders invested in the final deliverable, the product in question will increasingly need numerous iterations before completion.

Compounding this issue are the rigorous change control procedures that a waterfall methodology brings, making implementing any updates a lengthy and bureaucratic process. With each change request carrying its own administrative overhead of documenting, estimating, and obtaining budget agreement, development is slowed down and workflow is disrupted. An Agile methodology streamlines this inefficient process, advocating as it does the use of short one-week sprints.



This enables you to accommodate a rapid rate of changing requirements, and shortens feedback loops between client/supplier so that change requests can be registered and scheduled in more quickly.

To manage this in the most cost- and time-effective way, it's common to adjust the commercials so that the output of each sprint is paid for in turn, in a 'pay-as-you-go' system. Based on the number of features being targeted for completion, this alternative costing model means that a formal change control procedure is no longer required, freeing up time to focus on development for higher quality outputs.

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Features being developed often remain unused

Is this you?

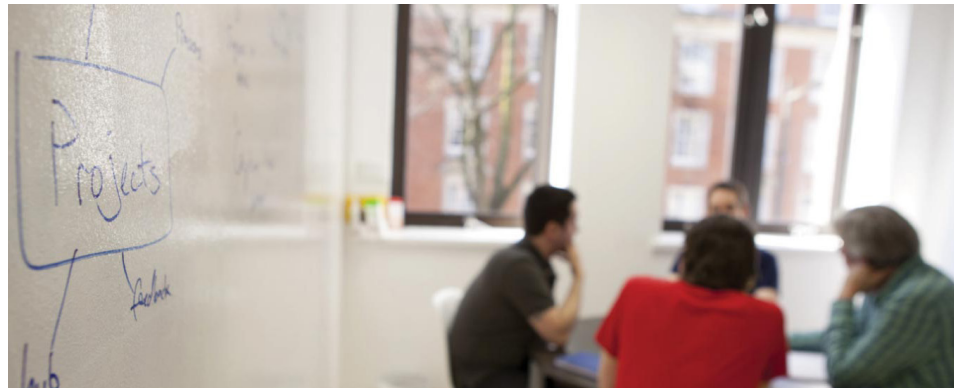
- New features that don't benefit the user
- Products which differ significantly from the brief
- No clear criteria to signal the end of the project

Agile reinforces a 'test early, fail early' mindset. While this may sound intimidating, it actually helps increase margins and return on investment, ensuring lessons are learnt before development commences and preventing the creation of unnecessary features that add significant development time and cost without delivering benefit.

As this problem tends to grow over time, it can occur in even highly successful partnerships. Websites, for example, are often constantly reworked with incremental changes being applied that layer new features on top of existing functionality. When these are unappreciated by users, not just waste but an inconsistent user experience is created.

The flexibility of Agile means that you can apply it to various phases of a project as required, including the early user experience design process. Favouring lightweight, cost-effective prototypes which can be rapidly tested and iterated, this approach allows you to validate assumptions with real users before implementing a single line of code.

Project stakeholders can communicate and contribute during this process (through online channels if they are not centrally based) to help drive the direction of subsequent iterations until all parties are satisfied.



This not only removes the risk of having to make expensive changes to working products but, again, shortens feedback loops and gives more structure to the development process, enabling production to begin more quickly while ensuring the user experience is reliable and consistent across the site.



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You're missing deadlines and going over budget

Is this you?

- Spiralling costs and timescales
- Forced to choose between quality and speed
- Small delays quickly snowball into major problems

While the previous points have shown the wide range of benefits that can be gained from Agile (increased collaboration, faster delivery, reduced risk), the primary success indicator for a project management methodology is whether it delivers quality software on time and within budget. If you find deadlines are consistently being missed and your costs revised to make up for the extended timescales the problem can often be traced back to the use of an undisciplined waterfall method. Without the clearly defined roles, responsibilities and targets a structured Agile framework provides key documentation can be forgotten and development mistakes may be made, significantly impacting performance and leading to releases being deferred.

Some organisations may be concerned about the costs of the initial switch to Agile, worrying that training and getting up to speed with the process will leave them always struggling to catch up. While it's true that some initial time and cost input will be required, the long-term efficiency saving that can be achieved by adopting a process based upon lean startup principles virtually guarantees that you'll get your investment back many times over, making it an attractive business choice.

Centred on creating a minimum viable product, releasing early with acceptable imperfections, validating assumptions at the beginning of the build and reducing waste in the process, this approach has proven to be successful for developing software products across a variety of industries.

Having a high level of governance in a project is another vital factor in keeping projects under control. The use of Agile helps manage this for you by putting a product owner and ScrumMaster in place supported by a behaviour-driven development strategy that translates user stories and acceptance criteria into automated tests. These are vital to promoting quality throughout the project lifecycle while proving business requirements are being satisfied, and helping drive the discipline required to ensure that deadlines and releases are being met.



Recognise yourself? Here's what you should do next...

If any of our five signs sound familiar, then you could definitely make improvements by adopting Agile techniques as part of your workflow. We've put together a summary of the key things to bear in mind when considering a switch:

Look for patterns in your existing way of working

Regardless of how your projects are being delivered, you should always start by reviewing your current processes. Focus on what's going well, what's not working, and, crucially, what you think could be improved going forward. Look out for recurring patterns, too; you'll often find repeating problems are symptoms of larger issues which may be affecting efficiency and performance. By identifying the most important concerns up front you enable yourself to target key areas first in order to make the biggest impact.

Implement changes incrementally

If you have any of the telltale signs then your process review will probably further signal that Agile is the way forward. A successful implementation is not, however, going to be an instantaneous transition, but should instead occur over time. Agile itself is based around iterative work and regular reviews, so why should the process of switching over to it be any different? If you're unable to work with an experienced Agile partner to guide and coach you through the process, trial smaller, lower-risk projects first to work out any issues and optimise your approach before eventually incorporating Agile principles into your overarching culture and mindset.

Don't be afraid to tailor the process

While pure Agile techniques can be ideal for small or start-up projects, it's often just not practical to stick

rigidly to the doctrine. At Box UK we have extensive experience of working closely with clients to tailor the central principles of Agile to their specific requirements and constraints.

We've had great success with using these modified approaches to improve performance and make us more efficient, so don't be afraid to stray from the path of pure Agile and mix up different techniques and elements to create your own unique approach.

Get expert coaching and guidance

If you're now certain that Agile is the approach for you and want to comprehensively update your processes but aren't sure where to start then the best thing to do is to speak to someone that's been through it themselves and seen all the potential issues! There's a wealth of resources online that will take you through an Agile implementation, and numerous companies that offer expert training and guidance. We offer [Agile training](#) at Box UK, either at client offices or in our dedicated training facilities; the process has become ingrained as part of our core values and company culture, and we love enabling other teams to share in the experience of creating high performance software projects delivered on time and to budget with increased regularity.



About Box UK

Simply brilliant thinkers making software brilliantly simple.

At Box UK our team of simply brilliant thinkers, consultants and application developers mastermind simply brilliant solutions to the world's toughest, performance-critical web and software assignments.

It's why blue chip organisations around the world, from airlines to car manufacturers, international banks to global charities, choose to trust us with the execution of their digital strategies, from the development of enterprise-level custom software platforms to the delivery of award-winning multi-channel experiences.

So if you want an effective, compelling software solution, talk to us.

Where next?

If you want to learn more about User Research, or the User Experience process in general, get in touch:

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