

### whitepaper

## The benefits of an agile approach to development

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ile businesses thrive during periods of ange. They respond quickly to new threats d opportunities. They break down siloes, rking across disciplines for the overall good the business.

ey're innovative, creative and empathetic.

d they are competitive because they evolve ckly to user feedback.

ey are built with agile at their heart.

ou're considering implementing an agile proach to development, this guide will help µ get started.



#### Waterfall and Agile: a tale of two approaches

Two companies are competing for the same group of customers. They are both mid-way through a development project that will fundamentally change how they interact with customers, creating an application that will let customers connect with them digitally, with an end goal of allowing them to scale and attract new customers, setting them up for the future.

The first company uses a Waterfall approach to the project. The end result of the project has been defined, and tasks are completed in sequence, one after the other. The development team works to a clear plan, but the result of the project won't really be seen until the full development is complete, so it's hard to know how it's going. There was a fixed timeline, but it's slipped slightly, as there is a bit of politics around who signs off each phase, and no-one seems to be completely in charge of it. It's overrunning on budget, too, as some of the early phases ran into problems. But, that's to be expected - the project lead explained to the CFO that it's a bit like building a house - you never quite know what you're up against until you get into the detail, task by task. (Sadly, he also has a sneaking suspicion that by the time the whole project is completed, it might be out of date - but the safest thing to do at this stage is to keep going, and hope for the best.) The project should be ready to launch in two years, and everyone is hoping the market hasn't changed too much by then.



The second company uses an agile approach. The product vision has also been defined, but instead of going through the development task by task, the team works in 'sprints', each of which has a clear goal, and its outcome assessed as each sprint is completed. There were a couple of glitches early on, but they were caught early, and corrected. Each phase of the development gets feedback from users, some of which has resulted in changes - but the team knows they're creating something that people actually want. The team had to be restructured to do this, to create a single working group from across business departments, so there's no working across siloes, and a single product owner is accountable for the value that each sprint brings to the overall product vision. Working in sprints means each sprint produces a working, incremental product change with a clear deliverable output, ready for the customer to use. That means the first iteration of the product will be ready in just a few weeks, with revenue expected in from it at that point. Incremental changes will be made to develop the project further after that, based on user feedback and behaviour. The team is guietly confident that if the market changes, the project can be adapted quickly, cutting anything that's not relevant, and focusing on delivering value.

#### Why choose agile?

The real advantage of agile working is it lets you make rapid decisions and pivot when you need to. Working in 'sprints' means you can assess outcomes regularly, so there are no surprises at the end of a project, and you can adapt quickly based on feedback or user behaviour, continually improving the product with incremental changes.

It's a very transparent process. All stakeholders are clear about what the project looks like at each stage, thanks to agile 'scrum' processes, including daily scrums for developers and regular sprint reviews for key stakeholders, as well as continual reporting and analysis. This approach means you take fewer risks - any errors or missteps can be changed quickly.

Agile allows you to future-proof. You're building something designed to evolve and improve as the needs of users change. It's a way to ensure that the product or solution continually strives to meet the current and future needs of end users. It won't go out of date, it will simply evolve. An agile system also ensures that projects are more visible to key stakeholders. When people get continuous communication on each increment and its progress and see that their suggestions are helping to shape the project's outcome, they're much more likely to buy in.





## The challenges of sticking with a Waterfall approach to development

Ongoing feedback is crucial if you want to develop something relevant to end-users' needs. A traditional, non-agile approach doesn't gather feedback throughout the project, so it can't course-correct if something is wrong.

In a waterfall team structure, working across siloes or domains can cause roadblocks. It's a slower-moving beast. Waterfall projects move in stages. The design team will hand over to the development team, who'll hand over to the QA team, for example. Development is done in stages, one after the other, and any bugs found in the early stages will only be resolved at the end of the development, which means they could be forgotten, or lost. A lack of user feedback early on means you could miss something that could easily be put right at the time, rather than waiting until the project nears completion.

As a result, there's a real risk of a development project not being fit for purpose by the time it is launched.

#### How to move from waterfall to agile

Moving from waterfall to agile can be challenging for some businesses. But it's worth the pain. Agile development has been gradually replacing traditional waterfall methods of development for years.

An agile approach to transformation starts with a clear vision, that defines the goal for the project.



## There are five core steps to moving to agile:

#### Step 1: Define your vision

An agile approach to transformation starts with a clear vision, that defines the goal for the project. The whole organisation should buy into this.

For example, you might want to grow and scale your business, expand internationally, or shift from a traditionally analogue industry to a digital one. Perhaps you want to reimagine customer experience to gain a competitive advantage, or develop new, innovative products and services that mean moving your existing portfolio into the cloud.

Whatever your objective, it should be shared, so everyone buys in.

#### Step 2: Structure and management

Rethinking organisations structure is probably the biggest barrier to agile working. Agile means abandoning siloes, reducing dependencies and increasing the autonomy of teams. It's a chance to rethink your teams, approach, processes, and even business structure.

It also means understanding what agile means to your organisation. There are a lot of different agile methodologies, and while they are fundamentally similar, there are differences. Be clear which one suits your organisation best.

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An agile structure is built around cross-functional teams with a common vision and the knowledge to complete each sprint, which will produce a working product increment. Teams may work together, or in some cases independently on different product functionality that relates to the same product vision. These pieces are merged together as they're completed. Dynamic teams have the freedom to be creative and the ability to respond quickly to data-based insights. They challenge and query existing processes and continually seek improvements. As a result, they have a much greater chance of being innovative and helping the business succeed.

Agile frameworks mostly have one team that takes accountability for project delivery from start to finish. The team should combine different skill sets and roles, and be empowered to make decisions, but have the ability to reach out to other divisions, departments or even organisations as needed. In large projects, multiple 'scrum' teams will collaborate to achieve one project, all working together to meet a common goal.

With silos removed, innovation has a chance to flourish. Agile encourages collaborative partnerships that see everyone working as equals towards a common purpose and sharing responsibility for the overall project – rather than just their part of it. Agile has no hierarchy.

#### Step 3: Review your organisational culture

This kind of structural change takes a culture shift. People are naturally resistant to change - it means us breaking with habitual processes and behaviour. It can feel threatening to people who are stepping away from what's familiar.

But if they understand that an agile approach allows the business to prepare for - and adapt to - change with minimal disruption, they'll come with you on the journey.

Becoming an agile-first organisation requires good communication. Be clear about how the development team and stakeholders will communicate feedback and progress.

Agile is all about incremental change rather than massive disruption. So, it should feel manageable to people if you communicate with them and they share your vision. Small changes (that add up to a big change) are less threatening and help people buy into the new way of working. They'll see the positive impact quickly, once agile is adopted in the organisation.

It's also possible to try out an agile approach on a small project, with a group no larger than 10 people, to reduce complexity. Doing this can help you to see the benefits of agile before rolling it out across the organisation.

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#### Step 4: Review how you work with third-parties

Once the vision, culture and structure are in place, you need to review how you work with external partners. That starts with contracts. Traditional contracts designed for delivering transformational technology often prevent organisations from being as creative and innovative as possible. Refocus contracts on the ultimate goal of the project, rather than the minutiae of how to get there. Redesign contracts to focus on the project vision rather than the processes used to reach it. Base them around incentives for creating effective systems rather than penalties.

Don't only measure outputs; focus more on measuring outcomes. You can have a project managed perfectly, hitting all your targets, yet the end product is ineffective because it no longer fits what people want. Constantly review the return on investment to see whether your outcomes are working correctly and delivering business value.

By refocusing contracts like this, you allow yourself to be truly agile – by having the freedom to adapt to changes and maintain a constant cycle of improvements in response to ongoing feedback.

## Step 5: Continually refine and improve both systems and people

It can take a shift of mindset to embrace change, listen to feedback and take the appropriate business action. Be open to the idea that you cannot plan the whole project from the outset. It will develop and change and evolve, and that's a good thing. Focus on key deliverables (business outcomes), not ticking the boxes on tasks.

This is really at the core of an agile approach. A great project is one that learns and adapts from data in real-time, course-correcting as user needs change and evolve.

Sometimes, that means dealing with the unexpected. As the transformation project develops, you may see challenges and opportunities that weren't in the original project plan. The beauty of agile is that you continuously learn from what the data is telling you, and revise that plan, always looking forward, so the result meets your ultimate goal.

To do all of this effectively, of course, you need the right people in place, who not only have the skills and experience needed but have a flexible mindset and can work in an agile system.





#### Waterfall and Agile: a tale of two approaches

We worked with one support and analytics provider that struggled to a wanted to due to fast limited resources. Zenitech worked with the bus adoption platform. Our team of six engineers had a strict deadline of s

#### How we did it

- We created an agile workflow. Our small team of engineers started by defining the shape of the project, defining solutions visually and breaking down tasks into smaller steps that the client could review as the project progressed.
- 2. We got to grips with the client's technology. We needed to manage the project in a way that allowed us to get the work done rapidly, while also causing minimal disruption and keeping control of the budget. To do this, we needed to understand how the client's existing technology infrastructure and coding language worked. Where possible, we used existing tools to get the job done.
- We started by worker of ckwards. The first thing we needed to a stand is what had to be delivered by the of of the project. Then we could break only each task into 'sprints' that our engineers would tackle. It's a flexible system that can adapt to changing circumstances.
- 4. We tested and refined the solution. The final stage of the project involved testing and bug hunting, leaving enough time for the OA phase. From there, we refined the solution until we had the exact end product that the client needed.

By implementing these small agile steps to meet our client's vision, we earned their trust, forming a long-term partnership once the initial project ended, to deliver even more exciting products for the future.

By implementing the steps to meet our of earned their trust, if partnership once the ended, to deliver ever products for the full



#### The Zenitech approach

Agile is at the heart of what Zenitech does for our clients, and how we behave as a company. We believe that the ability to respond rapidly to change is critical to our clients, to allow them to scale, to future proof their businesses, and to continually improve, based on changing customer behaviour, economic circumstances and societal shifts.

Part of that means reducing complexity: creating systems and processes that will improve efficiency and effectiveness both in the way we work, and in the solutions we create for our clients. We are obsessed with delivering technology that delivers the right business results, which means having the right skills in our team, and collaborating closely with clients throughout any project. It also means keeping a laser-focus throughout any project on how technology will help a company transform, scale and grow into the future, adapting quickly to market changes and delivering value and scale at pace. This is a true agile approach to development.

If you want to explore how you can transform your user experience, **contact us** to see how we can help.

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