

How to successfully undertake an agile digital transformation project

UK government departments,
agencies and other public bodies

Whitepaper

Welcome to
our Whitepaper
delving into
the process
to an agile
transformation
project.

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Restore
Digital

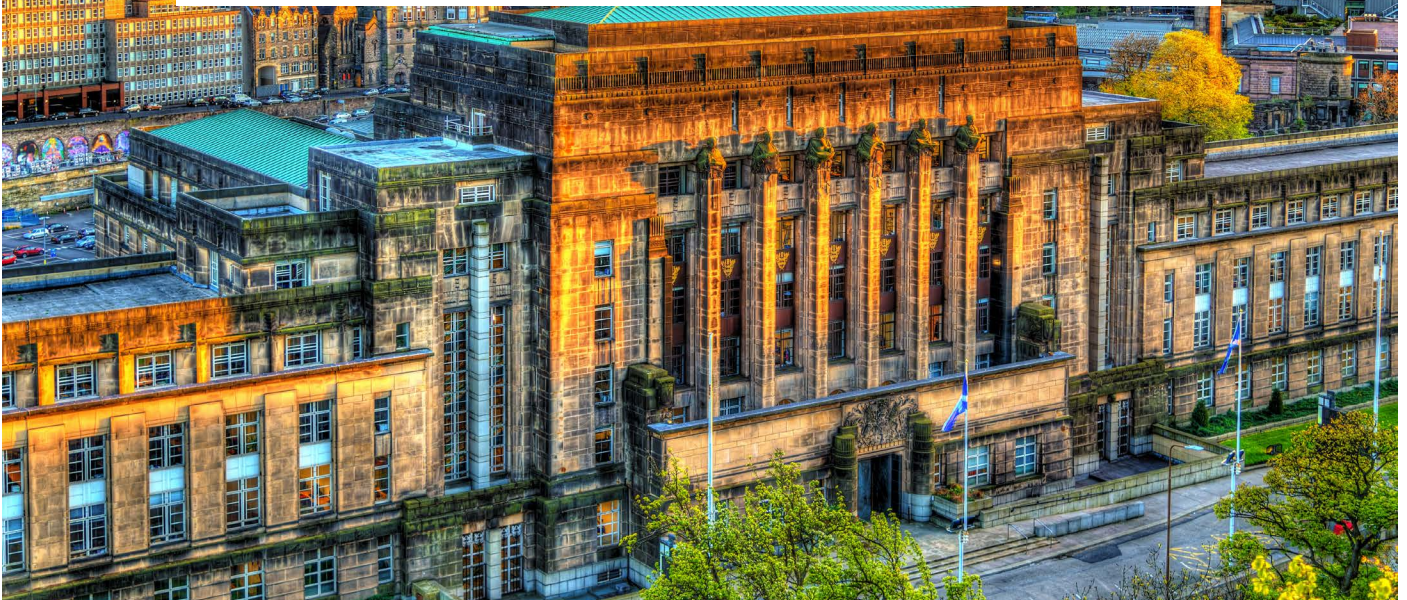
Table of contents

- 1. Introduction**
- 4. How to get funding for a digital transformation project**
- 18. How to manage the project following sign-off**
- 26. How Restore Digital manage their projects, to help you manage yours effectively**

Introduction

The UK central government has often led the way with digital innovation. Within ministerial departments and government agencies there are examples of advanced digital workflows. The Department for International Development uses AI and satellite technology for population estimates. This enables improved planning and delivery of aid and vaccination across the world.

Restore completed research with the public sector, including central government departments and agencies. We wanted to understand their digital transformation journeys. We looked at factors enabling some organisations to transform with speed and effectiveness. And where you face stumbling blocks. If you haven't read this research piece already, you can [access it here](#). ←



As part of the Government's Innovation Strategy there is commitment to:

1. Create data-literate civil servants through world-class training. This includes the GDS Academy and the Data Science Community. As well as the outputs of the Public Sector Data Science Capability Unit.
2. Establish a pipeline of digital talent at all levels of the Civil Service. This includes improving the presentation of government digital careers. To double the number of digital, data and technology apprenticeships recruited.
3. Empower leaders to understand and exploit technology innovation. Training provided by the National Leadership Centre.
4. Explore seconding senior Civil Service leaders into industry. Allow them to witness the benefits of a culture of experimentation. Thus, empowering them to adopt these practices when they return to government.

Delving deeper into the organisations supporting and training civil servants

1. **GDS Academy:** Teaches public sector professionals the digital skills they need to transform public services. The academy has training centres in Leeds, London, Manchester and Newcastle. As well as pop-up centres in Birmingham and Newport. They cover introductory sessions for non-specialists, specialised courses for people in digital roles and training for leaders responsible for digital services. One of the key themes underpinning these courses is "agile working".
2. **The Data Science Community:** Brings together data scientists to improve data science capability. Some people don't realise that they are data scientists. If you make decisions based on evidence, then this community provides great support. Online communities discuss data science, including the cross-government data science Slack and the UK Data Science GitHub. There are also meet-ups every two-three months.
3. **National Leadership Centre:** Delivers a leadership programme for around 100 senior public service leaders each year. A digital platform enables peer-learning. Research to develop better understanding of the relationships between leadership, well-being and productivity.

How to get funding for a digital transformation project

One of the main stumbling blocks for government innovation is money. Specifically, building the business case to get the funding. Restore recommends you reach out to suppliers to do this. Suppliers will be more than willing to meet with you. Meeting a supplier ahead of a tender process doesn't put them in a better position than a supplier you haven't met. The more accurate your business case, the more likely you'll get sign off.

The government's agile methodology needs to underpin your business case.

The word agile was a term to describe software development. It is an alternative approach to the traditional waterfall method (a sequential process with feedback at the end). With 'agile' you gather requirements, plan, design, build and test at the same time. You start with small discovery and alpha stages. Go live is once feedback and testing has been successful. The main strength to agile projects is it is much easier to adapt and change mid-project.

Waterfall vs. Agile Methodology

Fig 1. A typical waterfall approach

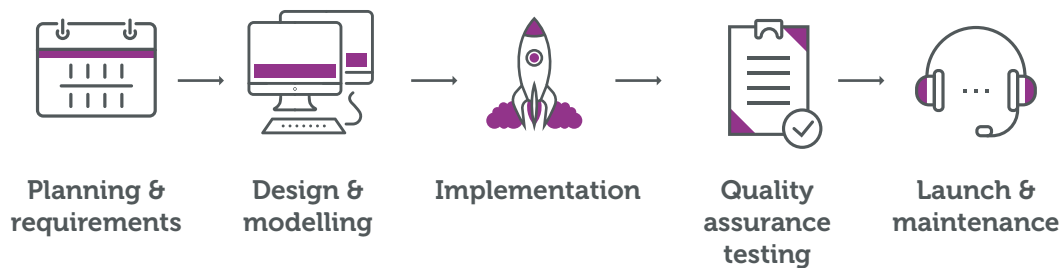
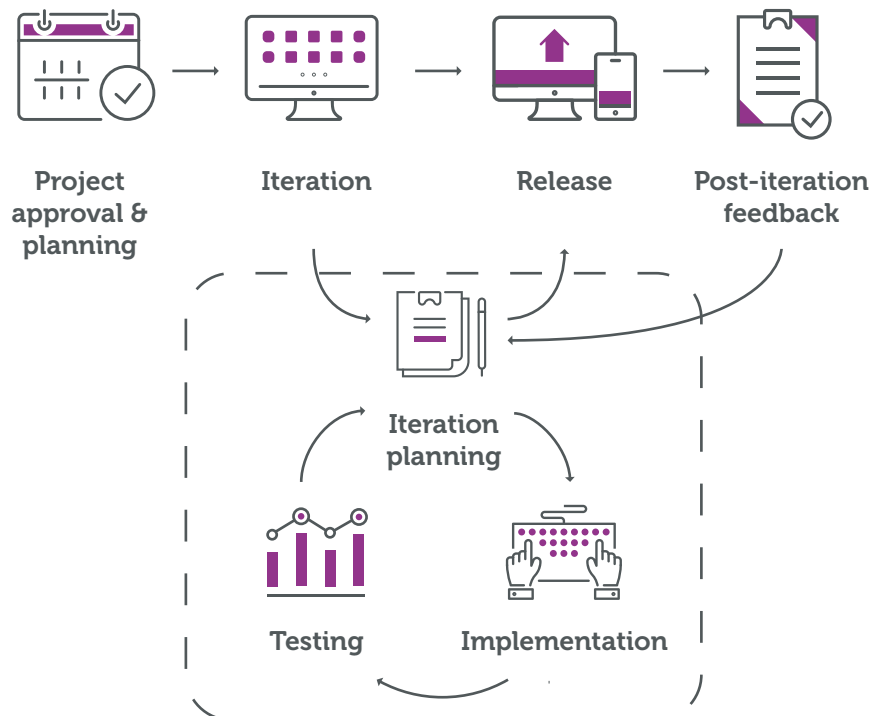


Fig 2. A typical agile approach



Treasury advice on the production and approval of a business case

The typical sign off process within government is:

1. Strategic Outline Case
2. Outline Business Case
3. Full Business Case.

Always try and write with agile project management in mind.

When signing off a business case, HM Treasury will generally release the funding in tranches. They will stipulate when reviews will take place. These reviews may be periodic or connected to milestones. If the later, a major review will take place shortly before Beta release.

There are three categories, each with different approval and business case processes.

Initial research and scoping – discovery and alpha

The government regards discovery and alpha work as initial research and is subject to a limit of £750,000. Before starting Discovery you need clear evidence that it is financially and strategically worthwhile. You then submit this business case via the Cabinet Office Control Form.

Cabinet Office Control Form

This form asks for key information including:

1. Any controls relevant to the project
2. High level summary of requirements
3. High level summary of technology
4. Any previous approvals
5. High level finances (including project costs; cost of 'do nothing' and total savings from implementation)
6. Attachments such as business cases or supplier quotations that have fed into the pricing
7. Detail description of end users to the project and their needs
8. IT approach and budget narrative

This business case will be evolving. As Discovery and other stages begin, you can update the business case. This will feed into the wider Programme Business Case.

The Programme Business Case needs to define:

1. The business scope
2. The outputs
3. Timings
4. Likely resource allocation.

HM Treasury and Government Digital Strategy have agreed that departments can spend up to £750,000 from their own budget on Discovery and Alpha with only Cabinet Office IT/digital controls. If it is more than £750,000 then the relevant authority, in consultation with the HM Treasury spending team, can sign off.

1. Larger projects costing above £10 million

The Treasury will approve projects with life costs above £10 million or pose a significant risk to the Programme Business Case. A plan of monitoring, with approval points will be within the Programme Business Case. Not the usual three-stage process.

2. Smaller projects costing below £10 million

Approval will be against the Programme Business Case if the project costs less than £10 million and is not a high risk to the overall programme. You will not need a separate Outline Business Case.

Focus on:



User
needs



Costs



Business
outcomes



Milestones

Strategic outline case; outline business case; Full business case

1. Strategic outline case (SOC)

The purpose of the document is to reaffirm the strategic context for the project. You need to identify the preferred way forward. Appraising your options against objectives and critical success factors, allows you can create a short list. State the indicative net present social values for each option.

2. Outline business case (OBC)

Complete a more detailed appraisal of the option which optimises public value. Outline the project, confirming affordability and management arrangements for successful delivery:

- Determine value for money
- Preparing for go-ahead
- Ascertaining affordability and funding
- Planning for successful delivery.

3. Full business case (FBC)

This is the procurement phase for the project, which results in the Full business case (FBC). This follows negotiations with potential service providers but is before the formal signing of contract(s). The purpose of the FBC is to record the findings of the procurement phase and to identify the 'most economically advantageous tender' (MEAT) with best public value.

The FBC also:

- Records the contractual arrangements
- Confirms affordability
- Agrees the management arrangements for the delivery, monitoring and post-evaluation of the project.

Process to obtain agile spend approval

Before writing the business case apply to the Cabinet Office for spend approval for Discovery and Alpha build) – include business outputs, timings, scale of funding and why it qualifies as research and will inform business case.

Discovery (8 weeks)



Notify HM Treasury spend team about agile work



Plan Major Projects Authority review

Alpha build (8 weeks)



Major Projects Authority review, approval plans



Digital service assessment (on Alpha build)



HM Treasury approve business case – their focus is on affordability, delivery and value for money



Submit business case to HM Treasury (at least four weeks before end of Alpha)



Apply for Cabinet Office spend approval (for Beta build) - their focus is on the appropriateness of the technology choices being made.

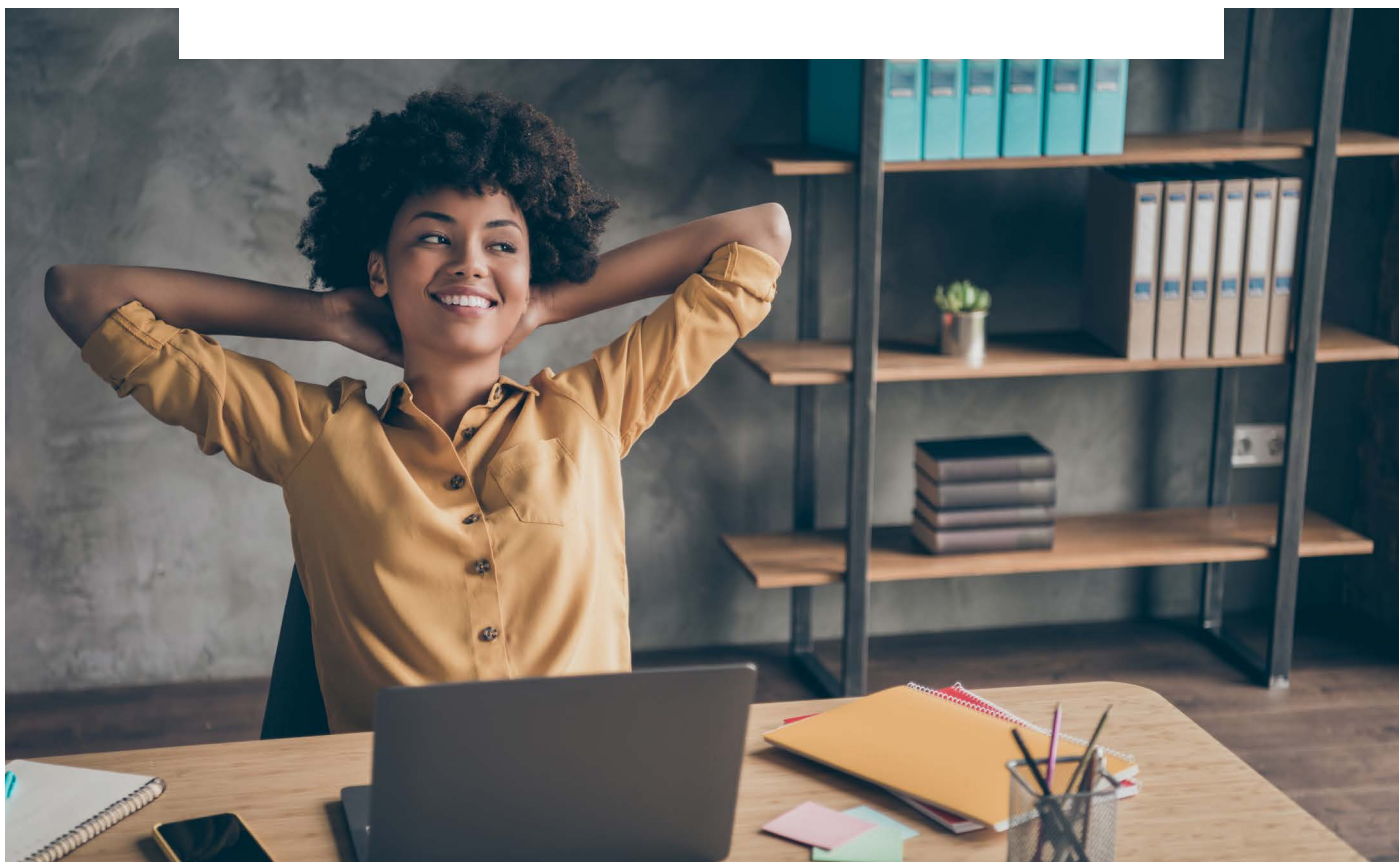
Beta build (business case required before starting Beta build)



Major Projects Authority
review before Beta
release



Digital Service
assessment



What is the Digital by Default Service Standard that Alpha projects will be assessed against? (www.gov.uk/service-manual/service-standard)

1. Understand users and their needs

Look at the full context of what is trying to be achieved, not just where users interact with the government. Test assumptions early, ensure you're creating the right thing. Do user research, build quick, throwaway prototypes and use web analytics.

2. Solve a whole problem for users

Try and create a service that solves one whole problem for users, collaborating across organisations where possible. Don't try and fix everything, start small and deliver incremental value. Plus be aware of any genuine constraints like legislation.

3. Provide a joined-up experience across all channels

Can you bring different channels together however they use your service? Don't forget that paper still exists and don't isolate people who don't embrace the change, make sure there is a way for them to interact with this project.

4. Make the service simple to use

Making things more complicated than they need to be undermines trust in government. Make sure you reflect all user behaviours, and the experience is consistent from start to finish.

5. Make sure everyone can use the service

This includes people with disabilities, or other legally protected characteristics, but also people who don't have access to the internet or lack the skills or confidence to use it.

6. Have a multidisciplinary team

The team might change throughout the project, but you need a range of skills and experience appropriate to what you are trying to achieve. The broader the roles are often the better.

7. Use agile ways of working

This approach allows you to get your service in front of real users as soon as possible, then observe and generate data to iterate.

8. Iterate and improve frequently

Focus on improvements that have the most value, making the solution constantly relevant until it's ready to be retired.

9. Create a secure service which protects users' privacy

Evaluate what data you will be collecting, storing and providing. Manage the security of this data, respect privacy and meets regulations.

10. Define what success looks like and publish performance data

Identify metrics which will tell you what's working and what can be improved, as well as user research.

11. Choose the right tools and technology

Ensure you are creating a high-quality solution in a cost-effective way. Minimise the cost of changing direction in the future.

12. Make new source code open

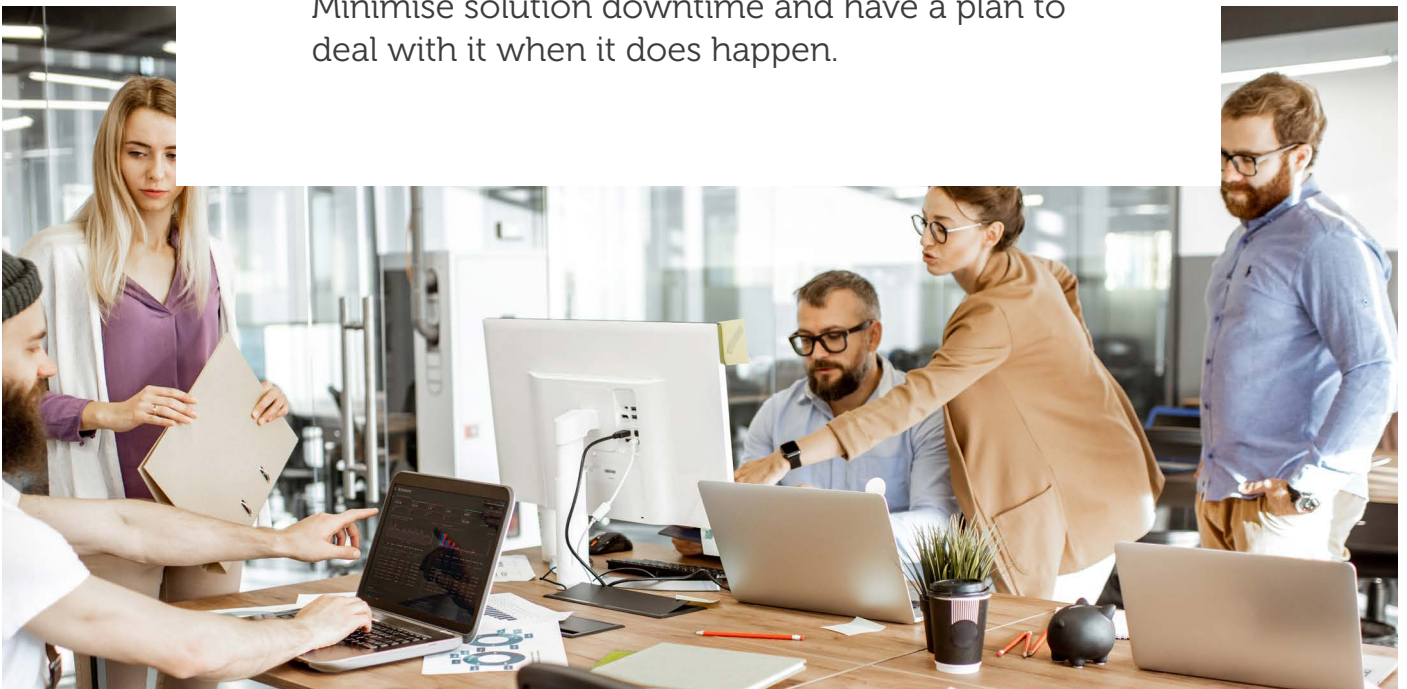
Make the code open and reusable and publish under appropriate licences. If it isn't possible provide an explanation of why for the specific subset of the source code.

13. Use and contribute to open standards, common components and patterns

Build on open standards and common components and patterns from inside and outside government.

14. Operate a reliable service

Minimise solution downtime and have a plan to deal with it when it does happen.



How to manage the project following sign-off

Main principles for agile digital transformation

The government has six principles ensuring an agile culture in digital transformation projects:



Don't slow down delivery



Decisions when they're needed, at the right level



Do it with the right people



Go see for yourself



Only do it if it adds value



Trust and verify

Make sure your agile delivery team includes a broad range of people, for example:

- Service owners
- Delivery managers
- Senior responsible officers
- Auditors and assurers
- Digital leaders, chief technology officers and other senior civil servants.

This ensures a team empowered to stop bottlenecks, make frequent, quick decisions, and focus on quality. If the team has clear goals and KPIs then they should be able to deliver.

Mandatory key performance indicators

The Government Digital Service has four key performance indicators. It's up to the project to establish a benchmark for each metric and plan to enable improvements.

1. Cost per transaction

Work out the total cost of providing the service and divide it by the total number of completed transactions.

2. User satisfaction

3. Completion rate

Count the number of completed transactions, divide by the total number of transactions (including failed).

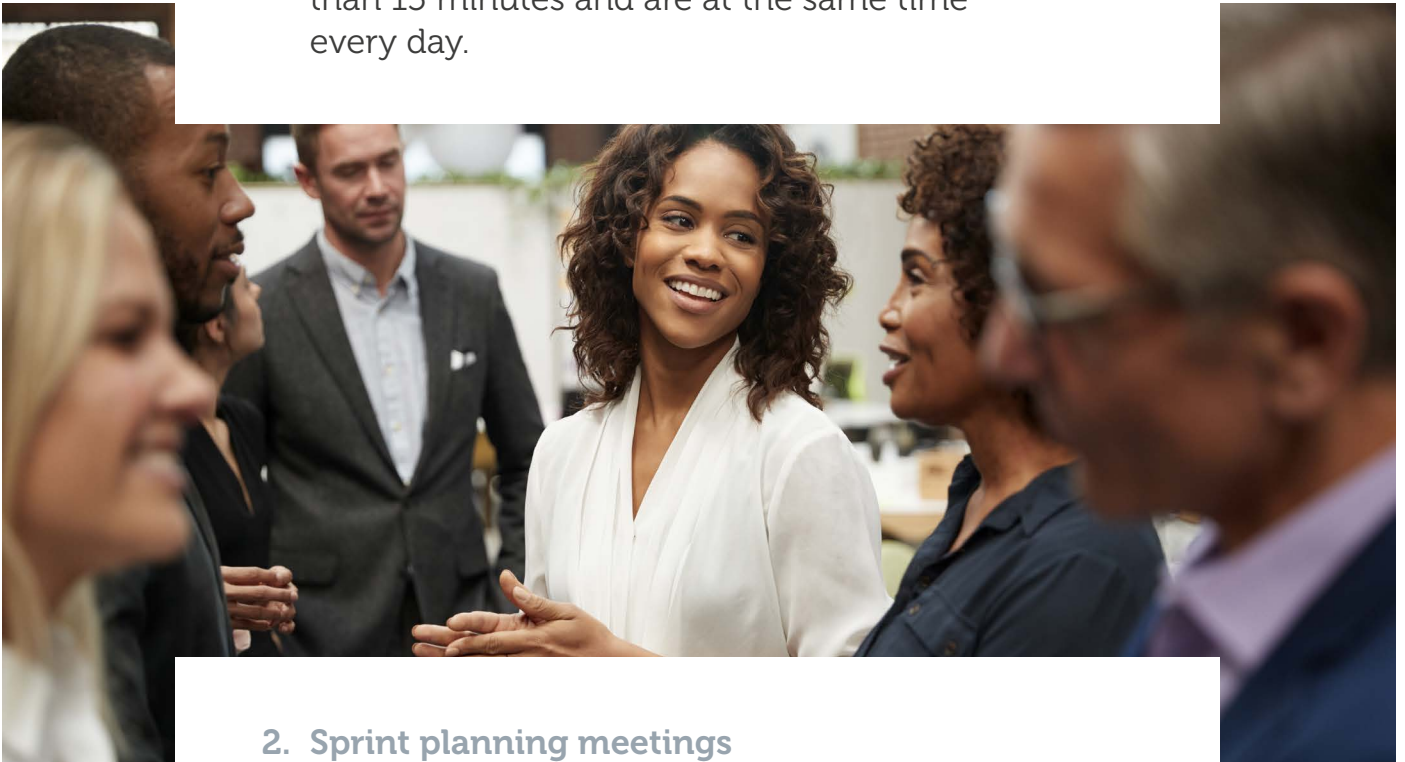
4. Digital takeup

Find the number of completed digital transactions, divide by total number of all channel transactions.

Agile tools and techniques

1. The daily stand-up

This is daily meeting for the team to discuss what they're working on and whether there are any problems to solve. The stand-up lasts no longer than 15 minutes and are at the same time every day.

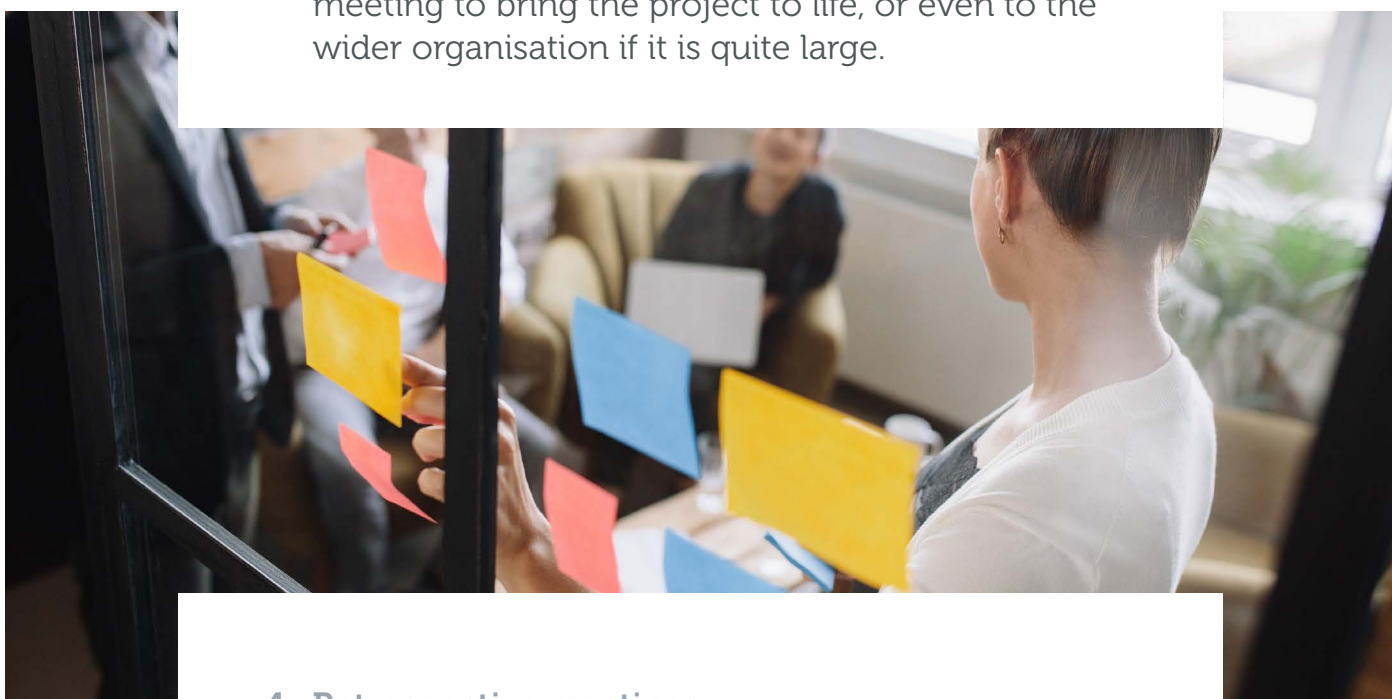


2. Sprint planning meetings

You hold these at the start of each sprint, deciding what to work on next and how you'll do it. The length of the meeting will depend on how long your sprint is.

3. Team review (show and tell)

A regular meeting for team members to share their work. You can invite key stakeholders to the meeting to bring the project to life, or even to the wider organisation if it is quite large.



4. Retrospective meetings

The whole team talks about what's going well and what isn't. Usually held at the end of a sprint, the aim is to fix any problems. One person usually hosts, and the agenda is broad. It's interactive and usually ends up with Post-it Notes over a wall!

5. End of phrase retrospectives

These are longer retrospectives at the end of a key stage like Discovery, Alpha and Beta. They can include people from outside the main team.

6. User stories

A way to record the things you need to do to build the service and make it successful and well used.



Robert, Customer

- 45 years old
- CEO
- Father of 3 kids
- Moving company of 20 employees

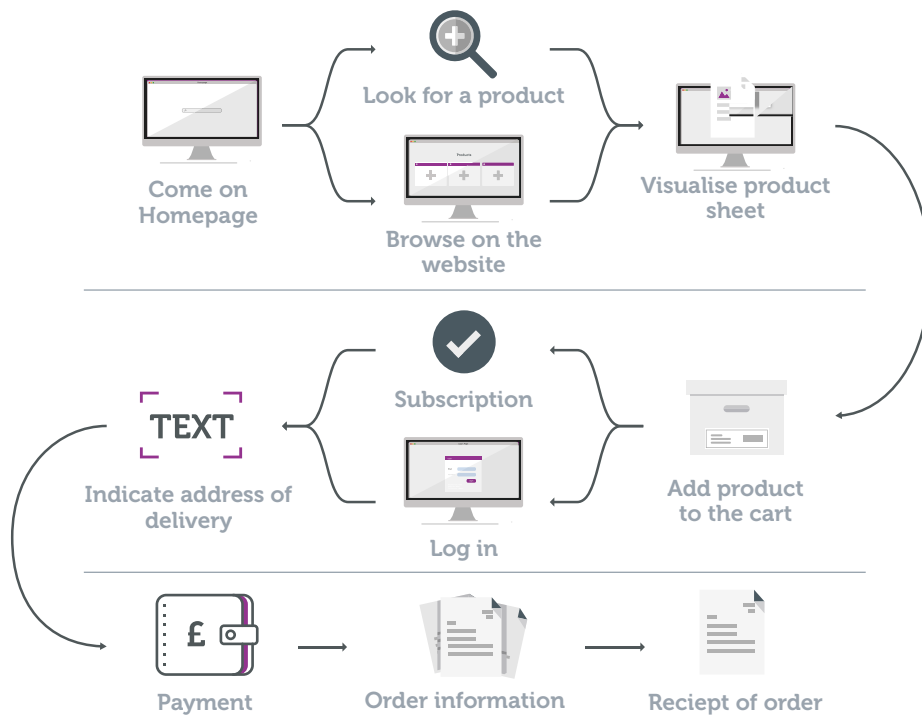
What does this entail?

Proving the quality & speed of the service

Goals & Behaviours

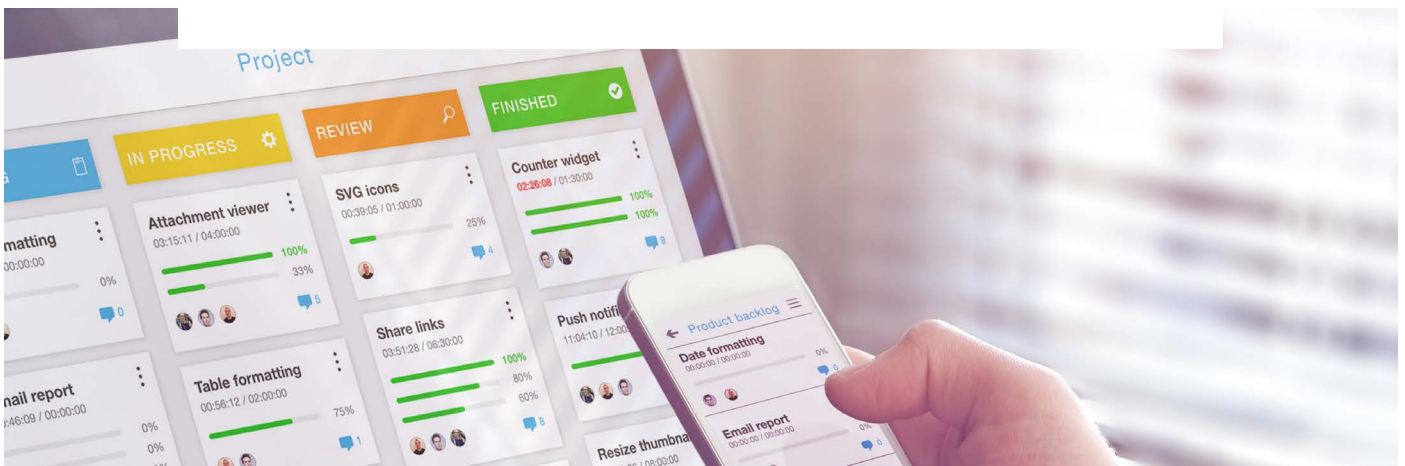
Seeks to lower costs without affecting quality

Customer Transaction Journey



7. The backlog

These are user stories that you haven't started work on, in order of priority.



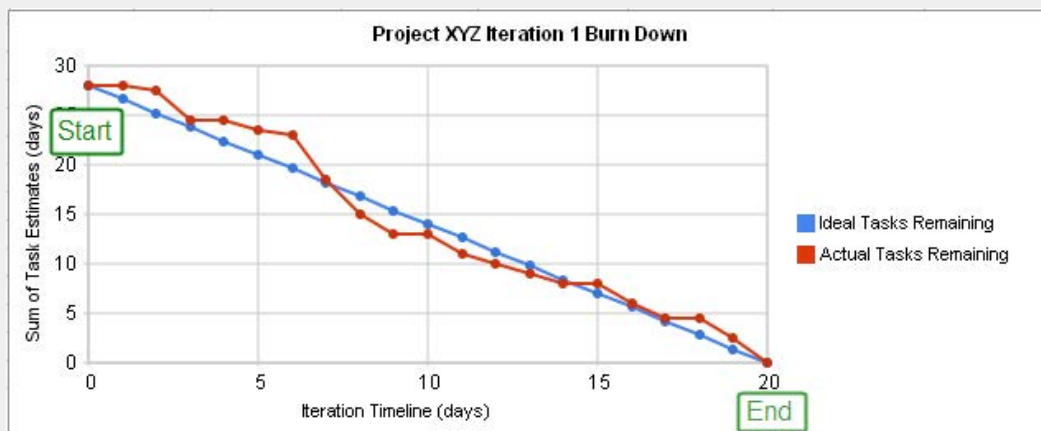
8. Team walls

This is a visual record of your work, showing what you've done, what you're currently doing and what there is still to complete.

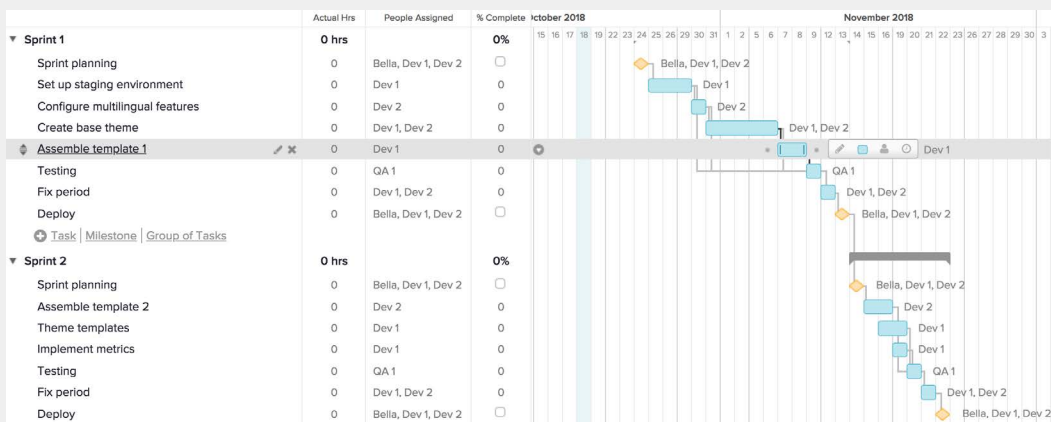


Burn Charts and Backlogs

A **burn chart** is a graphical way of showing work left to do versus time. The backlog is on the vertical axis and time on the horizontal. Agile project management software such as software such as Scrum.



Agile **Gantt charts** rely heavily on dependencies, which allows you to confidently run different parts of the project simultaneously. This only works with daily stand-ups and a constantly updated Gantt.



How Restore Digital manage their projects, to help you manage yours effectively

Restore work with government departments & agencies. We understand the importance of building a business case. Having transparent, agile project management combined with timely MI, allows project control.

1. We will work with you to build a business case – FOC

Before going out tender Restore can help complete internal forms to secure funding. We can also help you calculate the ROI. Engage with us early on and we can help you by drawing upon our experience. We can highlight the critical success factors of similar projects. And we can help calculate an accurate budgetary cost.

2. We can help you draft your Invitation to Tender (ITT)

To provide the information you will need to get full business case sign off. We will draft questions to ensure technical competence. We will test the suppliers' approach to agile project management. And draft questions to understand their controls. We'll make sure MI is clear, and whether it will be appropriate for your internal reporting.

3. Having a full agile project plan

If you choose to work with us, you will have a full agile project plan. Our joint meetings will reflect our own internal agile project management. Where possible MI will be real time, as well as the monthly formal reporting. You can be confident on the project's development. Our KPIs will be jointly agreed. They should reflect your internal KPIs. This ensures a partnership approach between our two organisations.

**Sarah Gunnell is
our public sector
specialist and is
happy to answer
any questions
you may have.
Give her a ring or
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