



Scottish Local Government Digital Partnership

Case Study

Agile in Angus

Executive Summary

Angus council have successfully used a number of Agile techniques to deliver automated customers forms and associated processes. They managed to implement a new automated form for a council tax change of address within only 8 days using Agile methods. They have learned that appropriate use of Agile can improve delivery speed, intensify stakeholder engagement and improve customer satisfaction.

Background

The Process Redesign Process Automation (PRPA) project looks to process redesign and, where possible, automate as many customer facing forms and back office processes as possible. Agile was not used at the project outset but the team quickly discovered that this would be the only practical way to deliver the kind of change that was needed, at the pace that the business expected.

Drivers

The main drivers for considering Agile for the project team were:

1. **Reduction of scope creep:** Agile can be particularly beneficial at ensuring delivery is focused and time-boxed into shorter units of delivery; this lends itself well to reducing scope creep, or adding additional functionality, which can often happen during larger waterfall deliveries;
2. **Ensuring the project remained outcome focused:** shared and clearly communicated goals across the project teams can ensure an Agile project remains firmly focused on the outcomes most needed for the stakeholders.

Results

Using Agile methods provided both hard and soft benefits:

1. **Speed of product delivery:** the fail fast approach to getting a prototype together and out for approval/rejection to the business as quickly as possible meant that less time was wasted on elements that wouldn't make the final cut;
2. **Increased customer engagement:** customers are clearly more bought into the build of the solution when they are involved from the outset;
3. **Improved stakeholder engagement and expectation setting:** stakeholders are kept regularly up-to-date not just with progress but are able to see prototypes from an early stage in the project. This ensures they are very clear on expectations around the final product as well as being able to engage them by listening to and implementing their feedback within each prototype.

"IT WAS GREAT TO HAVE IT IN FRONT OF US RATHER THAN JUST SPEAKING ABOUT IT"

"NOW THAT WE'VE SEEN IT, WE CAN SEE THE BENEFIT OF DELIVERING IT THIS WAY"

Stakeholder Observations on the Agile process.

Agile Summary

While still in the very early stages of implementing Agile, the difference made was clear in the first couple of sprints, a sprint is the Agile term for a single development iteration. Project teams became far more outcome focussed and less likely to fall victim to scope creep because of the clear time-boxes and shared goals. Having workable prototypes to show to customers at a very early stage, even if mocked up, made a huge difference to the contribution that they were able to make to the co-design of products.

Agile Tools/Methodologies

The team practitioners have been trained in DSDM Atern, at the moment they do not follow a prescribed Agile methodology, rather they lift the tools and methods they find most useful. The main Agile tools used within this project were:

- Estimating
- Time boxing
- Daily check ins with the customer
- Visual representation of outstanding tasks/products
- Sprint

Estimating, time boxing and daily check ins with the customer have proven effective and having visual representation of the outstanding tasks/products, whether in a proper Kanban type display or otherwise, has worked well.

Estimating, although extremely difficult, lets you set realistic sprint goals that are still challenging. Time boxing was effective at preventing scope creep as focusing effort solely on tasks that will deliver the sprint goal gives justification for ignoring distractions/non-critical work. Having tasks visually displayed kept pace and also helped with focussing work. The physical act of moving the tasks along the stages of the board creates a feeling of delivery.

These methods have ensured that time isn't spent on any work that doesn't directly contribute to the delivery of one of the products that will make up the solution. Removing the potential for scope creep, and empowering team members to challenge it should it arise, seems to bring success.

Checking in with the customer ensured that the team were working in the right direction and that any design/build changes could be approved as they went along.

Implementation

Prior to this project the team, and organisation, was aware of Agile but little practical application of it could be evidenced. This was addressed initially by sending the whole Digital team on QA's "Working in an Agile Team", which is a practical course aiming to show the benefit of Agile methodology. This gave a baseline level of understanding to all team members.

The project team did not have to seek specific permission to start using Agile but they had to quickly deliver a short sprint to show the benefits in order to give assurance to the executive, as well as their colleagues. The specific deliverable for this sprint was end-to-end processing of a customer request, from inception to back office completion. Stakeholders didn't believe this could be automated with the solution the team had, but at the end of the sprint the team demonstrated that they had successfully done it. With that, we got renewed buy in for Agile as well as increased confidence in the team's ability to deliver.

"AGILE ALLOWS US TO BREAK LARGE PIECES OF WORK DOWN INTO SMALLER DELIVERABLE CHUNKS WHICH ENABLE US TO DEMONSTRATE CLEAR PROGRESS TO THE END-USER WHILST VERIFYING THAT THE PROJECT IS PROGRESSING TOWARDS A GOAL THAT ACTUALLY MEETS THE CUSTOMER'S REQUIREMENTS RATHER THAN A SHARED (BUT OFTEN MISTAKEN) UNDERSTANDING OF WHAT THOSE REQUIREMENTS MIGHT BE."

Project Team Reflections on the Agile process.

The team recently completed a sprint to deliver full automation of a council tax change of address. This was technically complex as it involved an intermediary web service in between the customer service portal and the back office council tax system. Having struggled to allocate enough time to the build element of this, agreeing a defined set of deliverables across a fixed 8-day sprint meant they were able to deliver the form, integrations and automation to the customer in a format that was ready to be released in the live environment.

Using traditional methodology, the time taken to deliver this would've been consumed in coming up with the exact specification of what the team were expected to deliver. It's likely that if they had delivered in this manner, the end product wouldn't have been suitable and they would have a similar iterative cycle but over a more protracted period of time. Running in this manner would also mean that the resource allocated was far more likely to be multi-tasking across multiple products

A development team of 4 did the bulk of the work but they called on 2 more resources from the web team for user/accessibility assessment and had 2 members of staff from the council tax section available for the duration of the sprint.

The financial savings will be realised in FTE as key scenarios within this process now need no human interaction. Non-financial benefits have been realised in the form of ease of use for the customer and better data quality for the council.

Prototyping

The team fundamentally challenged the approach of our stakeholders in terms of how they expected a customer to interact with the council. Because the suggested approach was so different to what they were used to, being able to show them the team vision quickly meant that the team were able to secure buy in at an early stage.

In this specific case, colleagues expected that a customer would know which form and process they needed to follow. The new process built the decision making into the form which meant the customer had one starting point and was only ever asked questions relevant to their request.

Getting buy in from stakeholders at an early stage created an atmosphere where they trusted the team skills and approach but were also able to contribute in a productive way. The customers in this case were Revenue and Benefits colleagues, rather than citizens. They were involved throughout the sprint planning and the sprint itself - mainly for testing and approval of changes to the prototype.

Biggest Challenges

1. **Organisational perception:** the biggest challenge faced in using Agile is perception within the organisation. The term "sprint" is a dangerous one as it can create an idea that you're doing the same old projects you've always done, but more quickly! Making sure that you explain your methods and being clear about the expected deliverables will prove effective in terms of managing expectations;
2. **Agile can appear resource intensive:** as with all projects, Agile is no different in that it requires a dedicated resource, space and time to work on these tasks. With so much work on the go at once, it's hard to justify spending four days on one product. This can be overcome by demonstrating how much can be delivered, and the speed it can be delivered at, if the team

"TRYING TO JUGGLE MULTIPLE PROJECTS, WITH MULTIPLE STAKEHOLDERS, WOULD BE IMPOSSIBLE IF WE DIDN'T HAVE THE ABILITY TO BREAK EACH PROJECT INTO SMALLER REQUIREMENTS. IF WE ARE TRANSFORMING A SERVICE OR CREATING A NEW ONE, AT A BASIC LEVEL, THERE ARE ALWAYS TOO MANY OPINIONS AND VARIATIONS OF WORKFLOW TO BUILD IT WITHOUT CONTINUOUS INPUT – AND CONTINUOUS INPUT IS ONLY MANAGEABLE WITH AN AGILE APPROACH."

Project Team Reflections on the Agile process.

are given the appropriate space but can be a constant challenge when there are so many competing priorities.

Recommendations/Lessons Learned

1. **Planning is crucial:** these don't have to be lengthy formal sessions but time spent here pays dividends when it comes to delivering the sprint. This team had short sprints fail because the planning didn't identify missing technical elements. Proper planning would've identified these before the sprint commenced.
2. **Retrospectives are vital:** retrospectives are valuable in that it gets the learning from the sprint, successful or not, out in the open in a shared environment.
3. **Be realistic about using Agile:** think carefully about how far you can take this. Pick the tools that suit you and give it a go, you can always add more formality/tools/training as you get more confident.

Participant Details

1. Jonny Cormie, Digital Manager - Angus Council

Supporting Documentation

- What is scrum: <https://www.scrum.org/resources/what-is-scrum>