



Scottish Local Government Digital Partnership

Case Study

Agile in Renfrewshire

Executive Summary

As part of a desire to improve overall efficiencies, Renfrewshire council identified process automation software (RPA) as a vehicle for reducing unnecessary manual processes by automating repetitive, rule based tasks. They decided to use an Agile methodology to facilitate the development of a number of process automations in a quick, controlled and successful project. The project not only increased use of process automations, and implicitly improved customer experiences, it also highlighted the benefits of using an Agile project management approach when dealing with new development techniques and technologies.

Background

The Council recognised their need to establish a small team within the council who could undertake robotic process automation (RPA) using specialist software from Blue Prism; the skills for implementation of process automations were entirely new to the council. The concept of RPA was introduced to the council by their consultancy partners at the time (EY) who had extensive experience of implementing RPA and found that an Agile/Scrum approach worked best as each automation could be planned, prototyped and tested in distinct sprints.

Drivers

The council recognised their need to develop expertise in a new specialist skill (RPA) and to create automated processes for simplest and rules based tasks which would free up staff time and streamline experience for customers.

Due to the complexity and uncertainty of undertaking this new project they needed to use a methodology which would provide quick prototypes, quick feedback and quick reassurances that they were able to implement the new processes – Agile was seen as the perfect methodology to provide such a safe environment.

Results

1. **Rapid development:** the rapid pace of development was soon apparent for what is a very technically specialist area to implement. Other local authorities who had attempted to automate their processes using RPA reported that it was a time-consuming process, using Agile definitely contributed to shorter development timescales within this project;
2. **Quicker decision making:** the project team were able to make decisions more quickly as they had access to decision makers so didn't have to wait for the more traditional board decision making process to take place.
3. **Increased appreciation of the benefits of Agile:** the team have taken to Agile like ducks to water and it has highlighted to the project management unit that it should be used more often within project and programme portfolios. The team are looking to widen their own knowledge of Agile and how it can best work alongside more traditional Prince2 project delivery

Agile Summary

Using Agile in the RPA project made a huge difference to the success of the project. The concept of RPA was entirely new to the council and no-one could foresee how well this would work. Agile techniques facilitated development of the process automations at a rapid pace with the use of daily scrums helping to continually review progress and make instant changes where required.

Agile Tools/Methodologies

The project team followed the Agile with scrum approach and used the following tools and techniques:

- Sizing
- Product definition documents
- Kanban – physical boards
- Daily scrums
- Burndown charts – electronic to back up paper Kanban
- Daily sprints
- Sprint planning/retrospective/review

Using the methods above enabled rapid progress to be made on a new specialist skill such as RPA at the same time as teaching a team of non-project staff members the fundamentals of Agile tools and techniques.

Implementation

Agile was agreed during the earliest stage of the project. This was a decision that could be made by the project management unit (PMU) and didn't need approval from the leadership team. The PMU has a toolkit of project resources and Agile had been used in projects in the past but not very often as the council tended to follow the more traditional waterfall approach of Prince2. Progress on the project was still reported to the appropriate boards within the council as they combined Agile techniques with more traditional governance approaches.

The process began with an intensive 12-week engagement with EY (June 2017) and during this time the newly formed RPA team of 3 learned about Agile methods from EY at the same time as being trained on how to automate processes using specialist RPA software. Their target during these 12 weeks was to automate 2 processes within Revenues and Benefits which had been assessed to be most suited to automation. The RPA team lead later undertook formal training in Agile to supplement the knowledge gained during the initial 12-week engagement with EY.

The team thought very carefully about not just using Agile tools and methods but also how to fully adopt and embed an Agile ethos into their daily activities. They carefully planned the creation of an appropriate workspace and cleared desk space to enable the creation and use of a physical, Kanban, board to control their sprints. Enough space was cleared around the wall to facilitate the team gathering around their board in their daily scrums to agree immediate priorities and discuss potential problems; every team member found these daily stand-up supported by the visual board to be incredibly valuable.



Figure 1 Team Kanban Board

To date, the team have automated around 6 complex processes, mainly within the Revenues and Benefits business area. The team have also completed a few one-off process automations such as an address cleansing exercise on the Council Tax system which would have taken a considerable time for staff to undertake with a higher risk of errors or omissions occurring.

The project team was built including staff from Revenues and Benefits; this ensured that specialists were always on hand to provide their expertise on a daily basis. Physically siting the team alongside the Revenues and Benefits staff also provided significant benefits as it meant that their customers were able to see the project being developed and could be involved in and provide feedback on every step of the journey.

The original team of 3 full time staff members has remained in place and they are running the project with minimal project management support. They have utilised business change analysts to help the team to plan their pipeline of work but that's more project specific help rather than Agile assistance.

The team were able to successfully continue using Agile methods once the EY engagement ended and continue to do so over a year later. The project will run for around 3-4 years and the team are currently in the second year of delivery.

The team have now evolved from using a physical Kanban board to using a digital Trello version. This has proven very useful in supporting flexible working arrangements enabling team members to continue working on the project remotely (for example during heavy snow when some team members continued to work from home). This shows that using Agile tools and methods is an evolutionary process; the team probably would not have considered that option at the start of their Agile journey but were willing to embrace it as their confidence grew.

Prototyping

Each of the processes automated were prototypes of sort as the RPA technology is new to the council and there were no guarantees of success. Some of the early process automations proved to be trickier to run in a live environment than originally planned and have required further optimisation post live. In one case a process was taken offline as the manual effort needed to support the automation outweighed the benefit of time saved by automating in the first place. The experience gained by the team has meant they are in a position now to revisit the more complex parts of this automation and to tackle redesign work to achieve the desired outcome.

Biggest Challenges

The project team has found that the Agile part ran very smoothly and continues to support project delivery. The main challenges faced related to the project subject itself and the team continue to identify ways to implement successful automations. Continued use of Agile techniques has been strongly recommended from the team for suitable future projects.

"YOU NEED TO HAVE COMMITTED RESOURCE INPUT FROM STAKEHOLDERS TO ENSURE A RAPID RESPONSE WITHIN THE PROJECT. INCORPORATING OUR STAKEHOLDERS DIRECTLY INTO THE PROJECT TEAM HELPED US TRANSFORM BUSINESS NEEDS INTO TECHNOLOGICAL SOLUTIONS."

Linda Muir, Project Manager.

Recommendations/Lessons Learned

1. **Use Agile coaches and mentors:** having experts in the use of Agile helped the team to get up and running more quickly than training alone so would advocate the use of coaches or mentors if possible for teams using Agile for the first time.
2. **Only use Agile where appropriate:** you should ensure that senior leadership teams understand that whilst Agile may be a quicker route to project delivery that it is resource intensive and not necessarily the right fit for every type of project.
3. **Agile can be resource intensive:** there is a misconception that Agile is quick and easy but to support the rapid nature of Agile the process can be very time intensive for staff. Updating the burndown and being reactive to the daily reflections and redesigns takes a lot of time and means staff can't wait a couple of days to update the plans for the project.
4. **Adapt when appropriate:** the ethos of Agile is about enabling people to work effectively together using their own preferences and as preferences change the project should adapt around those (where possible).

Participant Details

1. Linda Muir, Project Manager - Renfrewshire Council