

Case Study: The 18F July 1st Workshop

-- Robert L. Read, PhD

In a recent [blog post](#), we described a format we call the “3-Sprint Agile Workshop”.

When I recently ran such a workshop at [18F](#) as an internal team-building exercise, we had two teams. (This was a managerial mistake on my part, I should have had three, since one team was too big. If you run your own workshop, expect to have a few things go wrong.) I had previously recruited two volunteers to be Customers. The goal I suggested to them were these:

1. Create an educational game for children involving rectangles.
2. Create a trading game based on the [Game of Thrones](#) drama series.

These were ambitious goals for a 5-hour workshop, but such a goal can challenge participants to create surprisingly effective simple solutions and add complexity gradually.

The Customers and I intentionally kept the goals of the workshop teams completely secret, so that we would have a strict time-box and a cold start.

The Customer for the educational game took her team in a direction I had not planned: she aimed it at very young children, who did not know what a rectangle was. That’s the way Agile works: the Customers usually surprise you. By the Second Sprint they had a playable, if tiny, [game](#) (**warning:** this code link has been tested only in the Chrome browser) developed that would actually hold a young child’s attention for a minute or two:

click on the rectangle



[Caption: A friendly voice prompts the child to click on the rectangle and provides feedback.]

The Surprise Pivot had been planned in advance, and interrupted the progress toward an educational game. This was unfortunate, but it is not uncommon in software development and government work in particular where mandates are made over which you have no control.

The Surprise Pivot Mandate made to both teams: Integrate the *Game of Thrones* with something about Rectangles.

The Rectangle team responded by producing a beginning of a game which did fulfill the [mandate](#). A problem arose on the second *Game of Thrones* team which I had not anticipated: too many people (eight!) wanted to be on it. It is very hard for that many people to work closely in such a short, intense, sprint. The team naturally split itself into two distinct but cooperating teams. One began working on a paper-based game which was to guide the software team. The software team got a rudimentary trading game done under the guidance of the Customer.

The *Game of Thrones (Software)* team produced [code](#) that implemented the beginning of a trading [game](#) that looked like this:

Player 1, it's your turn to propose a trade.
Ok

Player x, you have been proposed a trade!
Review Trade

Trade details
Player X has offered to trade you 1 sword for 2 Dragons.
Accept Trade **Reject Trade**
Your Current Inventory:
Swords: 1
Dragon:
Ship:

Player 1: Propose a Trade
What to trade:

For:

With who:

Propose trade
Your Current Inventory:
Swords: 1
Dragon:
Ship:

The *Game of Thrones (Paper)* team produced a paper trading game that consisted of objects and and concepts from the drama. When faced with the Surprise Pivot, they met the mandate

by adding black bars to the concept cards and creating a game goal of forming rectangles of the black bars, as exemplified:



Since this was a trading game, the goal was to obtain the cards that fit together to create a rectangle.

Conclusion

Most, but not all, of the participants enjoyed the workshop. One person remarked that it was a good team-building exercise, allowing people to learn the skillsets and personalities of their teammates.

I believe the workshop was successful both because what was accomplished was impressive for a 3 hours of programming, and because it demonstrated the effective of Agile, iterative development and gathering and responding immediately to customer feedback.

Your Turn!

[18F](#) has recently created a new pilot line of business called [18F Consulting](#) which offers Agile coaching and other services at cost-recovery prices under the Economy Act. If you'd like assistance or you'd like us to run a workshop for your team, please email us at <18f@gsa.gov>.