

Page Redesign – An Agile Case Study

The diary of an agile project manager, mentor and coach

This following case study charts the progress of the travelsupermarket.com Page Redesign Project. Systematic One's role was to project manage the internal development team, and to introduce and embed agile development practices.

Richard Walls

Wednesday 17th December, 10.30am

A strange time to arrive, and I'm suffering from man flu, but they'd seemed keen for me to start, and it at least provides an opportunity to assess the situation and use the Christmas break to think up a plan of action for the New Year.

So what do we have? On the face of it things on the ground don't look too promising; a team in the final act of delivering their first release, behind schedule and with far too many bugs. However on the flipside, we have a team who'd given it a bloody good first attempt, a team that was delivering, a team demonstrating real commitment, and a team that recognised that they had to learn, change and improve. Fertile soil indeed!

Friday 2nd January, 8.00am

Grasp the opportunity! The need to fix high priority issues remaining from the first release allows the space to put some real effort into planning the next. We harvested an initial product backlog from existing use cases, vision documents and requirements documents, and over the course of the next week, played planning poker to assess size, and worked with Bob Atkinson, the product development manager, to prioritise each work item and agree an overall release strategy. After this we agreed that if it wasn't on the backlog it wouldn't get done. We had our scope, our points and our priorities.

We allocated the work items to fortnightly iterations, adding an iteration each time capacity was reached, then adding a fourth for contingency. We broke iteration one's work items into tasks, estimating in hours, and double checked our estimates against capacity. We agreed to capture actuals in order to improve our planning metrics. Each evening I documented the activities we'd been through, preparing mentoring notes that the team could use going forward.

Finally we prepared the task board. Tomorrow would bring the start of our first iteration.

Wednesday 21st January, Iteration 1 Day 1

Here we go, no battle plan ever survives contact with the enemy, and we're about to hit ours. The key of course is to keep our discipline, and use the tools agile gives us to adapt.

This is the leadership aspect of the job, not letting people slip into old ways when things get rough, but continue to articulate a clear and consistent vision and hold true to it. The objective for this iteration is to get the mechanics bedded in, attending the scrum, updating the burn down, updating the task board, performing peer reviews, getting ourselves disciplined because we'll need that discipline in times ahead.

Tuesday 27th January, Iteration 1 Day 5

The burndown is rapidly heading in the wrong direction, estimates are being revised upwards, we're fighting the build and configuration systems, time is seeping away and the thing about time is when it's gone, it's gone. Should we bring the iteration to an early close; go back to the drawing board? No, we'll fight on, see what can be salvaged and use our experiences to shape the next phase. No panic, keep our discipline, hold steady.

Tuesday 3rd February, End of Iteration 1

Our velocity is officially zero; no work items are complete; nothing is in a fit state to put live. Our work items were too large, our iteration length too short, our estimates too optimistic, our capacity calculations too idealistic, not a great advert for our initial agile planning effort!

But look again, look at how much knowledge we've generated after just two weeks of development, what we've discovered, what we've learned! True success comes from using lessons like this to drive you forward.

We demonstrate some key functionality and generate useful feedback that gets added to the product backlog, and in the background the agile disciplines are gradually becoming part of the fabric of development. A quick calculation, applying the rate of progress to the remaining backlog items, reveals our contingency all but exhausted but our delivery date still intact. The glass remains half full.

We adapt by switching the plan to three week iterations and finding ways to slice our work items into smaller chunks. No major surgery at this stage, no scope cutting, no additional resources, no need to panic, but instead continue to embed agile's high discipline, low ceremony approach, and maximise what we have.

Tuesday 10th Feb, 1 Week into Iteration 2

Progress is better and the team more focussed, but capacity still bleeds away and there's no turning back the clock. The burndown shows us slipping on a daily basis. I'm worried about team commitment; I'm worried about management commitment. Agile doesn't deliver projects, committed people deliver projects. The mechanics are now in place: the burn down, the task cards, the daily scrum; but real ownership, real commitment, that's the challenge, that's the need. We've hit the second phase of our journey. Team commitment becomes the theme through-out the iteration

Tuesday 24th Feb, End of Iteration 2

Much better progress this time! Car hire search and results is complete, flights search is in the bag, momentum is building; team commitment and ownership is building. Graham Donoghue, our sponsor, brings the team together to discuss the importance of the project, this is his vision, the AGM is looming, business is suffering from the credit crunch and the new solution is sorely needed. This isn't just an interesting intellectual exercise, this is real commercial life!

Our velocity indicates we're right on the edge.

In the evening I pick up the paper and read an article quoting Stuart Pearce, Fabio Capello's England coaching assistant. Pearce recounts a story about Capello. It's half time. England have been overrun down the left flank. On their way back to the dressing room Capello asks Pearce for his thoughts. Pearce has spotted the problem but advises to keep it the same for the next 20 minutes, then change if the problem persists. Capello stays silent, marches into the dressing room and immediately orders two substitutes to get prepared. This, reflects Pearce, is what separates the good from the great, the courage to take action early.

Courage, this is the heart of agile, the courage to adapt. Whether it concerns the code, the design, the process or the solution, the reason to generate knowledge is to use it. If we're to hit the date we need to take immediate action, we need to increase our capacity, we need to be prepared to deliver just the minimum, we need to get pragmatic, we need to get ourselves organised. We need to live out statements like "fitness for purpose" and "deliver the minimum". This is our challenge for the final iteration. I discuss the situation with Steve Briggs our Development Manager and Matt Stephenson the Customer Engagement Manager, they agree to find the resource we need.

Wednesday Feb 25th, Iteration 3 Day 1

This is it. This is the one where we need to bring it all together. We get ourselves sorted, deciding up front to get organised into mini teams and set interim targets. We're on our way to securing additional development and test resource (and I kick myself for not pushing this sooner). We switch the team around to leverage the experience of developing car hire functionally and apply it to flights. We agree with the

commercial team about the need to be pragmatic (rather than pixel perfect) with older web browsers. The commercial team are primed and empowered to make decisions. The team agree to work overtime to keep the burn down heading in the right direction if need be. I create mini burn downs focussing on specific areas like test preparation where we know we've capacity problems. We're all set.

Friday 6th March, Iteration 3 Day 9

Progress is good, but it's looking tight, too tight! We've given ourselves too much to chew. However there's a piece of functionality the business worth of which is questionable and the cost of development relatively high. This could make the difference. At the steering meeting the issue is raised. Graham Donoghue makes the decision, the functionally needs a complete review before investment is made, it's out of scope. This is the break we need. A sensible, pragmatic decision by the commercial team that in other organisations simply would not have been made. Fitness for purpose, deliver the minimum possible to go live. The last piece is in place and it's all to play for.

Tuesday 17th March, End of iteration 3

Bloody hell we've done it, we've even surprised ourselves. We needed to bring it all together and we have. A tremendous team effort, and we're not short on quality, bug numbers are minimal.

The final demonstration is hugely positive. I ask the question, "Is it fit for purpose?" and receive a resounding yes from the commercial team.

The software has still to wind itself through the release process and though we realise this will bring the odd shock and surprise, we're confident enough in the quality of our product to know it's in the bag.

No relaxing right now, no losing focus, but the pressures off.

Tuesday 31st March, Release Day

We're in early in the morning. Steve Briggs brings bacon butties, Matt Stephenson brings buns, I bring pastries and muffins. Files are copied, buttons are pressed, configurations are changed, permissions are granted and by 8am the site is up and running and all is well. Jonathan Smith the IT director attends the morning scrum and shakes everyone by the hand. It was an important delivery for IT as well as the business.

Wednesday 1st April, Retrospective

Our final retrospective is all positive, with talk of commitment, flexibility and high quality. Even the negatives are positive, with people being disappointed that quality couldn't be higher. There's a real buzz. Coming in on time; meeting our commitments; truly working as a team; that's a great feeling, and one to hang onto for the future. Once you're in the groove its best not to fall out.

Though there's more to do, my job is just about done. A new project manager is due to take over for the next release, and I've a new assignment to move onto. I fret and worry a little. I'm not sure how solid the foundations are, how engrained the agile disciplines have become in the culture of development. But there's only one way to find out and that's to let go.

As a final act I take the metrics captured and compare them to our original planning poker points score, only to find our relative estimates were way out. Using the actuals I re-calibrate the scores, hoping this will provide a more solid baseline for planning.

Postscript – May 2009

I happen upon the development pods playing planning poker in the canteen. They're using the re-calibrated scores as a baseline for scoring the new work items. It's these little pieces of evidence that I take heart from, the well organised task board, the new and improved task cards, the regularity of the scrums, the calmness of the development effort, the team disappearing off for a couple of hours to perform a retrospective. This is a team taking it forward, using their combined knowledge to adapt and improve. I can stop worrying.

This case study illustrates what **Systematic One** is all about. We don't just mentor and coach, we do. We bring a sense of **urgency**, we help **fix problems**, we help fix the context, we're fully **committed**, fully **involved**. While we recognise and deliver the **urgent**, we keep our eye on the longer term in order to leave a **lasting** and **sustainable** framework that can remain in place and be improved long after we've been forgotten. But we can't do this on our own!

In **moneysupermarket.com** we found the **ideal** client. A sponsor with a strong, **clear vision** of what he needed. A commercial team willing to be **pragmatic**, get **involved** and make **quick decisions**. Senior IT management willing to **change** the context and to provide **direction** and **support**. And last but not least a development team that remained **enthusiastic** through-out, prepared to **learn** and **apply** their new found knowledge to good effect.

Sure there's **improvements** still to be made (there always is) and the journeys just beginning, but I've every **confidence** that the team are rapidly heading in the right direction.

So many thanks to Development Pods 6 & 7 - **Rich, Paul, Dan Hall, Dan Hughes, Ian, Venkata, John, Jamie, Ant, Mo, Tom, Fran, Matt, Phil, Andy, Sean & Martin**, along with all those who joined us on some part of our journey. To paraphrase the Sun it was you boys **wot won it!**

And here's a link to the new site www.travelsupermarket.com.

And here is what moneysupermarket.com has to say about Systematic One...