Crossing the T’s and Dotting the I’s

Growing T-shape people in your organisation

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Abstract

A cross functional team is essential for Agile to succeed. It fosters collaboration and reinforces one of the tenets in the Agile Manifesto: Individuals and interactions over processes and tools. Cross functional teams help to bridge the communication issues that exist in a traditional company with a rigid functional structure. It fosters a sense of ownership and focus where everyone in the team is aligned on the same goal.

In a typical cross functional Agile team, we might have some or all of the following: Developers, Quality Analysts, Business Analysts, Scrum Master/Iteration Manager, Operation Engineers, Tech Leads and Product Owner. Everyone has a role to play and everyone is working collectively towards the same goal. A typical output from a cross functional team is a product that has gone through considerations from different functional lenses, making it a product that has higher quality and better fit for use.

While a cross functional team is a much better way of working, it still poses some challenges. There are times when there is not enough work for a specific function within the team and there are times when there is too much work for a specific function within the team. This unevenness of flow makes planning hard and creates unnecessary stress for the team. For example, for those who are using Scrum, at the start of the sprint the QA typically has nothing to do because things are still being developed. For operations people, their workload suddenly doubles or triples during release period.

In my recent trip to Japan, I had the privilege of visiting several Lean Manufacturing companies such as Toyota and Rinnai. One of their philosophies is Multi-Skilled worker. They believe in teamwork in such a way that we all travel together as a team. No one is successful if the team is not successful. If one person is behind, everyone helps. In order to do that, everyone needs to be a multi-skilled worker. There is no role description for people who join these companies. Everyone is expected to help where help is needed.

What I want to share here is how at REA we are trying to achieve exactly that. To get to the next level of cross functional team by creating cross functional people within the team or generally known as T-shaped people.
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Background

REA Group owns and operates the leading real estate and commercial property advertising sites in Australia, realestate.com.au and realcommercial.com.au, as well as international real estate advertising sites such as the market-leading Italian property site, casa.it. REA Group is a public company with ~$5b market capitalisation, making it the biggest property advertising site in Australia.

REA Group currently operates 13 websites around the world, with most of the sites ranked first in their respective market. Together, REA’s multinational portfolio of websites is visited by over 11 million unique browsers each month. REA Group’s purpose is “Helping people live their property dreams by making the entire property process simple, efficient and stress free”. To achieve this purpose, across the globe, REA employs over 700 individuals who are passionate about digital media and the opportunity to deliver innovative real estate services to customers and consumers.

In 2010, REA Group went on an agile transformation journey. It took us 2 years to transform product delivery to work in an agile way. Prior to 2010, we had periods of more than 6 months where no updates were done to the website. We struggled to deliver anything out of the door. In 2012, we had 10 teams running concurrently delivering new features/products every 90 days. The speed of delivery and ability to react to market demand quickly underpins the financial success that REA Group has enjoyed in the last few years, where its share price rose from ~$13 (07/12) to $37 (01/14).

During the journey, we found that building the right team culture was the key to our success. The agile transformation helped us to break a culture where silos are encouraged and people are more interested in blaming others for mistakes. Agile helped us to foster a culture that is centered around collaboration, where everyone in the team works together towards the same goal. As a result of that, REA is now structured in multiple Lines of Business, where each line of business is like a child company within REA and has its own Profit and Loss to manage. This structure helps create the alignment that is very much needed within each Line of Business to ensure that every team is pulling towards the same direction.
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Personal Stories

Trent, Iteration Manager, REA Group

Trent started in REA about 5 years ago as a Site Operations Engineer. His main responsibility is to ensure that the systems are running and this means that he could be woken up at wee hours of the night when there is a production issue. There have been times where a Site Ops Engineer can get woken up almost every night.

On the other hand, we have developers who are quite happily committing changes every day and then pass the application to the Site Ops Engineer to deploy to production. At this stage, the developers wash their hands and pass the responsibility along with the accountability to the Site Ops Engineer. This poor Site Ops Engineer, having not been involved in developing the system, will now have the responsibility for deploying the system in production and ensuring that it is running 24/7.

While we know that this is a traditional role of a Site Ops Engineer, Trent believes that there is a better way of working for everyone. Trent and his Site Ops friends clearly felt the pain and he wanted to make things better. He campaigned for DevOps movement at REA. As a result of his campaign, REA trialled the rotation of Site Ops Engineers into the development teams and Developers into the Site Operations team. This really helped improve the situation. There is more communication happening between the developers and the Site Ops Engineers. The Site Ops Engineers have a better understanding of the application and what to triage when there is a problem. The Developers have more empathy towards their Site Operations Engineer and get better understanding on the
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world of Site Ops Engineer.

While this is all better, there are still problems remaining. Operations is still an afterthought in Software Development. The Developers do not take into consideration how monitoring and alerting works when this application is live in production. The Site Operations Engineer needs to retrofit Monitoring and Alerting once the Application is done. Where in the past we throw the software from one team to another, we are now throwing the software from one team member to another.

Trent wasn’t satisfied with this situation. He campaigned for DevOps 2.0 where the Site Operations Engineer would act as consultant within the team and helped the team to build Operations capability. The team would then be responsible for monitoring and alerting of the live production systems, including responding to any production issues. We piloted his suggestion on one team with the people that has gone through the rotations into the Site Ops team. The result was a resounding success. The whole team takes control of the production environment right from day one. They build monitoring and alerting right from the start. They ensure that everything that they build is deployed and tested straight in production environment. They build a fault tolerant system and ability to recover in the event of error. Trent was part of the team until midway through the project, when Trent left the team and helped another team because the team was happy to do everything on their own and Trent had the confidence that the team was able to do it.

Now, the team deploys multiple times a day, diagnoses problems in production, carry pagers and more importantly, the team has full ownership of the system from end to end. The Site Operations Engineer can now focus on being more strategic rather than reactive.
Nat, Business Analyst, REA Group

Nat joined REA around 2 years ago. Within 6 months in the team, she felt that things weren't quite right in the team. She felt that we were working in a mini waterfall. The Product Manager would only speak to the BA. Together, the Product Manager and the BA would come up with product solutions and create bunches of story cards for the team to do. They would walk through the story cards with the team in order to get their buy-in and the estimates. Those cards would be tucked away somewhere in the cupboard only to get picked up few months later. The estimation never got redone and the team was expected to commit to the estimation that they provided earlier.

Natalia was not happy with that situation. Not only that the team was expected to commit to something that they don't have much information on, the team was also not involved in the design of the solution itself.

Another problem is when a story was developed, the story would get passed from developer to QA. She would then spend a lot of time going back on forth on issues that she believe could be resolved much earlier during development if only the developer had a better quality mindset.

Together with Natalia, we identified two major gaps in the team, they are:

- The team is not involved in solution design and they are clearly frustrated at not being able to have more ownership in the product that they build.
- The ownership of quality belongs to a small number of people within the team.
Together with Natalia, we changed the way the team worked. We wanted the team to be more involved upfront. We asked the Product Manager to describe to us what the problem domain is and let the team have workshops to define what the solution is. The Product Manager was initially reluctant and thought that this would be a waste of time for the team, but to his credit he was willing to trust the team and tried it out.

Suddenly, the team felt empowered. We had more kick-off meetings than we ever had before. The team came up with brilliant suggestions, including one where the team wanted to do more user testing to understand usage pattern before developing the feature. This resulted in the team being able to inform the Product Manager about which functionality had better user engagement. The team also engaged internal customers on their own initiative. It was clear that the team had much higher ownership than they ever had before.

Following this, we changed the way we build our products. we now build in small iterations and release early to get feedback. The Product Manager saw improvements in the quality of the solution and is now a proponent of this way of working.

With the increase in the collaboration within the team, we took the collaboration to the next level by charging the team to fully own the quality of the team. We changed Natalia’s role to be Business Analyst and QA coach. She would coach the developers within the team on good QA practices without doing the work herself. She would then spend her energy to focus on ensuring that we build the right product.

Now, quality is the responsibility of everyone in the team. Natalia’s passion for more collaboration helped the individuals within the team to grow their capability and as a result the team’s capability grows. Not only we build right products, we also getting better in building products right. And to top it all off, we also grow better developers.
Ado, Developer, REA Group

As a software developer, Ado’s passion is to build high quality software that will bring value and smiles to his users. About 2 years ago, he felt that he cannot fulfill his passion because of the highly divided way of working in REA. Operations belong to another team and he was not allowed to touch production systems because he is not “trusted”. He wasn’t happy that he couldn’t diagnose problems in production quickly and he had to go through much red tape just to do that.

When the devops fever hit REA courtesy of Trent, Ado was one of the first developers to put his hand up to learn more about Operations. He spent almost a year in the Operations world to learn how Operations work. In fact, he was one of the first developers to be given the keys to production.

Ado’s skill and knowledge in Operations was instrumental in shaping the way devops work in REA. We were able to scale the production operations capability to the rest of the developers largely thanks to people like Ado. Now, production operations is everyone’s responsibility.

One year ago, Ado was involved in the rebuilding of one of our legacy systems. Ado’s knowledge in Operations helped the team to include Production Operations as a forethought. They were deploying to the Production environment right from the first iteration. They did monitoring and alerting right from the start. Everyone in the team carried pagers and responded to production issues directly. They interacted with our call centres directly and solved customer problems pretty much immediately.
Mat took a Marketing Communication role at REA 3 years ago. While in that role, he identified that the technology that was used in REA was limited and dated. He has many ideas on how Marketing tools can be used not just as a communication tool but also to explore ways and opportunities through a more targeting campaign.

In his role, he tried to influence each of the line of businesses to employ a more advanced marketing tool. He tried to educate each lines of business how an advanced tool can help create better opportunities for them. Unfortunately, each lines of business did not see what he saw and he wasn’t very successful in influencing them.

He proactively found time and opportunity to work and learn from Product Managers within REA to learn how to convey his idea more effectively and influence others. When opportunity arises, he moved to Strategic Product Development team and took on the role of Product Manager. This is the first time that he is operating that role. Within 6 months in that role, he had managed to convinced one of the lines of business to take on the new marketing technology. He is currently working with one of the delivery team to embed that technology within REA.
Conclusions

The key takeaway from this experience is that your company will only grow as people within your company grow. Growing T-shape people within your organisation is one effective way in achieving this.

Through a few of the examples of the personal stories, here are the benefits that REA has gained as a result of growing T-shape people:

- Through better collaboration between developers and operations, we can now deploy multiple times a day where it was once every fortnight.
- The whole delivery team takes ownership of the production system, resulting in less production issues.
- Through better collaboration and trust between product manager and the delivery team, the whole delivery team is now involved in discovery and definition phase of each product development, resulting in a higher quality system built.
- Everyone builds empathy towards one another and has better understanding of each others roles, resulting in better collaboration and communication inter- and intra- team.
- More empowerment and autonomy for the team. As a result of broken down silos, the team is empowered to do more than what they were able to do previously. They have more responsibility and as a result, they are more engaged and have higher sense of ownership.
- Most importantly, growing T-shape people helps each person to be more well rounded and have a better general understanding on the whole end to end process. Having more exposure to the overall process helps the individual to be more effective in communicating ideas and influencing change. This platform enables us to grow and identify future leaders within the company to help take the company to the next step in our journey.

As leaders, our job is to build a learning culture where mistake is an opportunity to learn and people are encouraged to question the status quo. In REA, we will continue to invest in growing our people and find every opportunity where we can challenge each of them to greater height.

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