

HOW LOLA TECH LEVERAGED NEXUS TO INCREASE ROI AND CUT COSTS FOR CLIENT



December 2020



CASE STUDY



THE COMPANY

Lola Tech, is a mature software company which provides highly capable cross functional teams to customers without the hassle and cost of recruitment, onboarding and training.

The Company

In this case study, you will learn how a major US Airline used the Nexus framework scaled across more than 10 teams in what is considered Nexus+ to kick start their agile transformation with globally distributed teams resulting in dramatically decreased time to market and increased ROI. The company featured in this case study is a US budget airline with over 4000 employees.

The Challenge

For many years, the airline used waterfall development methods for the creation and maintenance of their software products. It took months, sometimes years to deliver a product or even a single feature to market. There were products in which months of work were invested never to be released because the finished product was not what the company originally envisioned. Although waterfall was the method they used, the company incorporated some terminology from the Scrum framework such as Sprints, Sprint Reviews and Daily Scrums, into their work. They had a false impression that they were doing Scrum and were agile solely based on terminology and not how they actually worked.

For many years they worked with this partial agile approach. Lola Tech was one of the main vendors delivering software capabilities for the company and when the IT leadership decided to kick off an agile transformation in 2019, they saw a perfect match for Lola Tech's Head of Delivery Anca Tanase, who is also an agile coach, to step in and offer support in this initiative. The agile transformation started with the desired company impacts to increase revenue

and decrease costs because they felt they were losing market share behind their competitors and wanted to get to market quicker with their products.

The company had a family of products, including mobile applications and booking platforms. The major focus of this initiative was customer satisfaction and the following areas needed to be focused on to support it:

- Increase safety, which meant increasing product quality
- Reduce time to market, speed up delivery of value
- Decrease rework/waste
- Improve flow and responsiveness
- Reduce exposure to uncertain, undesirable outcomes and risk
- Increase team satisfaction & fulfillment

The Solution

After evaluating which agile framework to use, the company felt that Scrum was the best fit to handle their needed improvements. Although the framework seemed quite simple, the complexity lied in scaling it effectively. After evaluating their options for scaling, they decided to use the [Nexus Framework](#). Nexus extends Scrum to guide multiple Scrum Teams on how they work together to deliver an integrated product at least every Sprint.

The first step in their agile transformation was to form Scrum Teams based on technical skills and component knowledge to make them as cross-functional as possible in the IT organization. Next, they started training the Scrum Masters so that they could coach the newly formed teams. Management initially decided on the formation of the teams, but the teams self-managed themselves, adapting and changing their membership over time.

Their Nexus evolved to a Nexus+ containing 5 Nexuses in a product suite. In Nexus+, a Nexus is the unit of scale. They chose to do this because of the complexity of the workforce. Their internal IT department spread over different locations plus 3 vendors - all in all working across 3 continents.

“Nexus+ seemed to be the obvious choice because a lot of us knew about Scrum and were already following Scrum principles and working in Scrum Teams built on the Scrum Values,” said Tanase. “We were building a product family and our biggest challenges were reducing and removing dependencies and synchronization across teams.”

A number of challenges that they wanted to overcome were identified after they chose to use the Nexus framework; these challenges emerged when they started with Scrum initially:

- Building cross-functional teams to remove outside dependencies
- Transitioning from a Project Mindset to a Product Mindset
- Applying the Scrum framework effectively
- Building psychological safety
- Adhering to the Scrum Values

After assessing their challenges, the next step they took was to get Scrum training. Team members and vendors received the following training from Scrum.org Professional Scrum Trainers Ravi Verma and Nagesh Sharma: Professional Scrum Master (PSM), Professional Scrum Developer (PSD), Professional Scrum Product Owner (PSPO) and Scaled Professional Scrum with Nexus (SPS).

Next, they created an Agility Transformation Backlog and roadmap and ran experiments to overcome these challenges and create a customer centric culture. Here are a few examples of the types of items that they focused on to address some of the challenges.

Building cross-functional teams to remove outside dependencies

- Build (when possible) co-located cross-functional teams through cross-training to foster real human connections
- Integrate remote workers and create remote work programs and policies
- Build a strong community for the Scrum Masters to share knowledge and experiences; Build a strong foundation for Scrum Masters to act and develop as better coaches, mentors and teachers
- Build Communities of Practice for enriched development practices & increased quality
- Organize team events - get to know the person behind the role, build trust, foster collaboration

Transitioning from a Project Mindset to a Product Mindset

- Vertically slice stories (try to avoid Technical User Stories) - Work towards producing Done Increments
- Understand the Iron triangle with fixed release dates, but flexible scope
- Hold story mapping sessions and kick off workshops for new initiatives
- Hold cross-team Refinement Sessions
- Formulate relevant Nexus Sprint Goals that are not a collection of items but a business objective

Applying the Scrum framework effectively

- Properly understand the Scrum and Nexus frameworks through training
- Create a Definition of Done Facilitating Technique for creating and evolving the Definition of Done
- Play Retrospective games
- Use Liberating Structures for Scrum Events
- Constantly inspect and adapt the format of Scrum Events

Building psychological safety and adhering to the Scrum Values

- Shift from command and control to a more autonomous work style
- Enable teams to feel a sense of purpose
- Use Scrum Values of courage, focus, commitment, respect and openness
- Share aligned goals, mission and vision across the teams

The Nexus+ was made up of 18 to 23 Scrum Teams, fluctuating over time. They were grouped into 5 Nexuses with each Nexus consisting of 5 to 9 Scrum Teams developing a product family made of 3 main products - an e-commerce custom platform, an operations platform for handling products sold and another e-commerce platform for selling additional goods and/or services. Scrum Masters were split between 2-3 teams, the Scrum Masters on the Nexus Integration Teams were selected from the initial Scrum Teams that were formed, and had a 50% allocation. There were exceptions where teams formed out of Developers from different vendors had 2 Scrum Masters partially allocated. The Scrum Teams were split across 3 continents: North America, Europe and Asia. They worked in 2 week Sprints and each Nexus had a Nexus Sprint Goal.

“We tried to keep teams in each Nexus co-located, but that was not always possible so in some cases we ended up with teams from all 3 continents part of the same Nexus,” said Tanase. “Of course, a lot of challenges came with that so we had to continuously refine our remote working agreements, to find the best tools to keep the communication flowing and to organize in-person meetings when required. It was a lot more challenging to keep the events focused but the Scrum Masters were always searching for new techniques and tools, such as Liberating Structures to keep the teams engaged.”

In regards to Product Ownership, when the Product Owner's decisions were made transparent and visible, they were respected by the entire organization. They also learned that if they had committees acting as Product Owners together rather than a single Product Owner

per product, the teams became frustrated because of the change of focus and releases would sometimes be delayed.

“Looking back, empiricism might have been lacking in the Product Ownership area, and instead of inspecting and adapting we started with a setup and got stuck with it for way too long,” said Tanase. “This is something that we have learned from and adapted. We have realized that it’s important to select a Product Owner that is qualified to take on the role and it is not always an easy transition to place a project manager or product manager into that role and assume success. They need to have the Product Ownership mindset, care about the teams and be empowered by leadership.”

“Because the company started working more closely with team members and vendors in different timezones, they produced releasable increments and now have happier and more engaged employees,” said Tanase. “Additionally they have improved technical skills, product quality and reduced the number of defects.”



The Results

Implementing Nexus+ yielded a number of exciting results:

- **Decreased Time-to-Market** - The company went from delivering yearly or twice a year in a waterfall fashion to delivering better software products, every 2-3 months
- **Increased Revenue** - by decreasing the Time-to-Market, they achieved 100% ROI in just 2 weeks after going live
- **Speedier delivery** - The company went from getting the first releasable increment Done in at least 2 months to having a releasable increment after a two-week Sprint.
- **Stronger Teams** - from the Developers having no contact at all with the Product Owner to all the Developers having daily interactions with the Product Owner - and that meant removing the change request concept and decreasing the number of defects discovered throughout development
- **Reduced Costs** - Costs were reduced by automating deployments, features and releases

About Scrum.org

Founded by Ken Schwaber, the co-creator of Scrum, Scrum.org is based on the principles of Scrum and the Agile Manifesto, Scrum.org provides comprehensive training, assessments, and certifications to help people and teams solve complex problems.

Throughout the world, our solutions and community of Professional Scrum Trainers empower people and organizations to achieve agility through Scrum.