



CATHAY PACIFIC AIRWAYS MAKES NEXUS THEIR OFFICIAL SCALING FRAMEWORK FOR IT INCREASES PRODUCT DELIVERY BY 200%

SEPTEMBER 2018

CASE STUDY



THE COMPANY

The Company

The Hong Kong-based Cathay Pacific Group offers scheduled passenger and cargo services to over 200 destinations in Asia, North America, Australia, Europe and Africa, using a fleet of close to 200 aircraft. Cathay Pacific is the group's international network airline while Cathay Dragon, a wholly-owned subsidiary of Cathay Pacific, focuses on providing services to destinations across Asia, including more than 20 cities in mainland China. Cathay Pacific is a member of the Swire group and is a public company listed on the Hong Kong Stock Exchange. The airline is a founder member of the oneworld® global alliance and Cathay Dragon is an affiliate member.

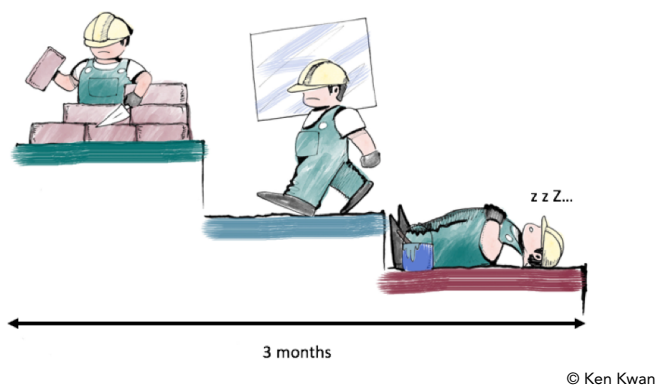
The Business Challenge

In 2015, Cathay Pacific had a major project on their hands which concerned the development of a new Internet Booking Engine (IBE). They needed a framework that would help them deliver within a specific time line.

The Cathay Pacific IT team is divided into IT Solutions and IT Infrastructure & Operations. They were primarily utilizing a waterfall approach with some elements of Scrum. At that time, they were experiencing a number of challenges with their ➤

software development projects, including long lead times for delivery which had the potential to threaten deadlines. They were only able to release integrated increments once every three months, which was not frequent enough to reach their desired targets. Additionally, there were difficulties in working with some external vendors, meaning a lot of re-work was required on specific projects.

Cathay Pacific had external teams for UX/UI and back-end development, and an in-house team for front-end development. Each team had their own Sprint to deliver the work and then they would pass it on to the next team to integrate. Clearly, they needed a more solid solution to execute the IBE project.



Solution - The Nexus Framework

In February 2017, Cathay Pacific adopted the Nexus framework developed by Scrum.org and Scrum co-creator, Ken Schwaber. They began scaling Scrum as their primary framework for software delivery to support their business initiatives. The IBE project was their first agile project involving multiple Scrum Teams working on the same product. As part of the project, Cathay Pacific descaled their team of 40 people into a product team of 29, with the aim of simplifying their processes and being able to work without using additional time or adding extra overhead.

They brought their UX and UI capability in-house alongside their front-end and middleware development and formed three new Scrum Teams in the Nexus. They have a separate Scrum Team in the Nexus for backend development, which is still an external vendor, but their team lead is now located at their Hong Kong headquarters. There is one Scrum Master for each Scrum Team and a single Product Owner for IBE.

Cathay Pacific Agile Coach and IT Practice Lead, Ken Kwan, said: "Nexus is lightweight and simple compared to other scaled Scrum frameworks in the market. Scrum has worked well for us, so there was no need to adapt to a new agile framework or new mindset – doing so would have added complexity to the Scrum Teams, who were already working on complex products. Nexus was the perfect fit for our organization."

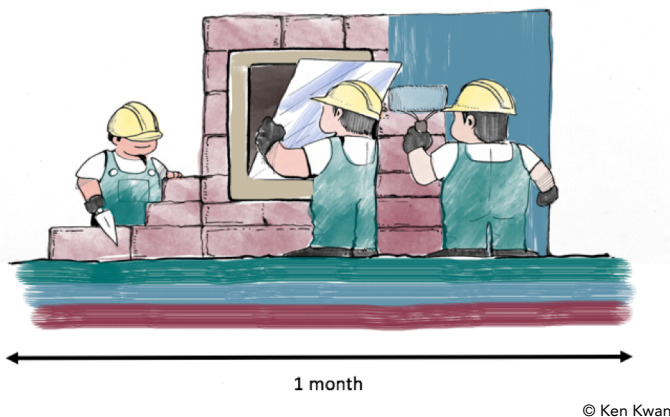
The Nexus Framework © Scrum.org

Using the Nexus framework, Cathay Pacific held cross-team refinement. With the increase in Product Backlog transparency, it made it easier for the Product Owner to order Product Backlog Items for IBE and other new projects. The Development Teams became fully aware of the dependencies and began to work more closely with other teams.

Results

Within two months of implementing Nexus for the IBE project, the Scrum Teams increased the frequency of when they were able to release integrated increments by 200%; from one ➤

release every three months to at least once per month, and up to two to three times per month, with an improvement in quality as well. Within the Nexus framework, a Nexus Integration Team (NIT) is accountable for ensuring integration across teams during the Sprint, which drove focus toward integration issues and defects to be identified and fixed earlier within Sprint.



After the IBE teams used the Nexus framework for six months, the results of the success of Nexus was presented to management. The team recommended using Nexus and the principles of bottom-up intelligence and self-organization for other products needing multiple teams. They also included a DevOps and Hybrid Cloud Strategy to help speed up the development and delivery processes within the Nexus framework.

Another positive development from Nexus was the increased insight of the Product Owner. At first, the Product Owner did not have adequate visibility, and therefore lacked understanding of the delivery progress and what was being developed. The Product Owner is now able to express what they are accomplishing and delivering in terms of value.

Cathay Pacific Head of Planning and Governance, Clarence Chung, said: "Our teams are very happy with how our projects are being done within the Nexus framework. After realizing the success of

the IBE project, we are implementing Nexus with other products. Nexus is now the official scaling framework for Cathay Pacific." ♦

www.cathaypacific.com

About Scrum.org

Based on the principles of Scrum and the Agile Manifesto, Scrum.org provides comprehensive training, assessments, and certifications to *improve the profession of software delivery.*

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

Ken Schwaber, the co-creator of Scrum, founded Scrum.org in 2009 as a global organization, dedicating himself to improving the profession of software delivery by reducing the gaps so the work and work products are dependable.

Visit www.scrum.org/nexus for more whitepapers and case studies about the Nexus framework in action.

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