

Agile Case Study

Telecom solutions company



Introduction

Client Overview

A leading embedded tele-com solutions company that offers a unique combination of research and development consultancy, wireless software products and software services, and works with Network OEMs (original equipment manufacturers), Semiconductor Vendors, Terminal Device OEMs and Operators across the world.

Business Verticals

Handset Technology Services, Network Technology Services, ASIC Design & Silicon Platform Software Services, Hardware Design & Testing Services

Scope Of Work

Agile Transformation and Enterprise Wide Deployment for ODC Team (300+ Members) ODC for a leading handset manufacturer for developing application software on connectivity media (Bluetooth, USB, WLAN)

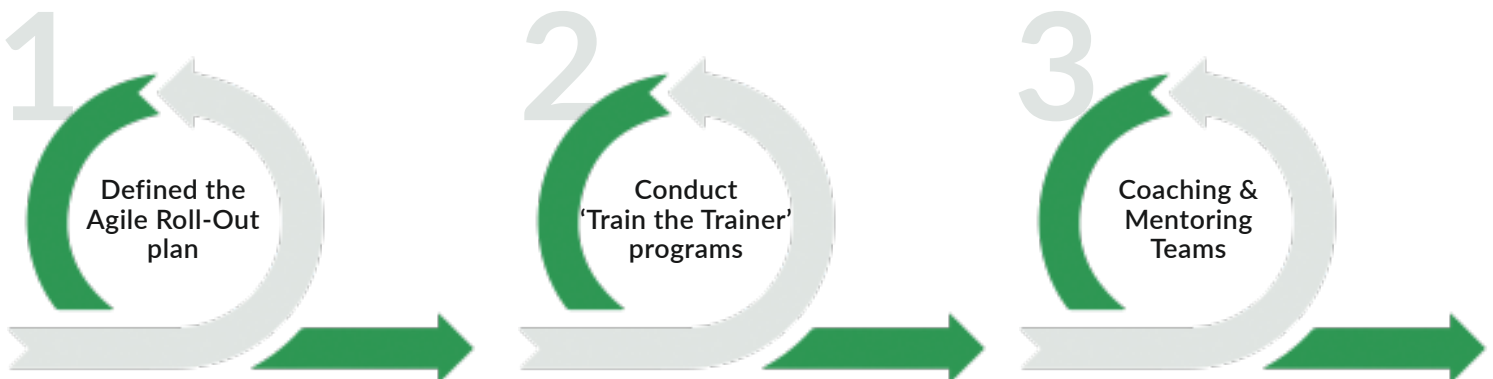
Business Motivation / Challenge to go Agile

The company faced the following challenges:

- To reduce time to market the products
- Constant validation of Product Quality to the audience
- Improve visibility on Product & Project progress

Activities

QAI undertook various activities keeping in line with the nature of work of the company and the requirements and challenges they were facing. These activities focused on deciding the path, rolling out a plan around Agile and ensuring training to the workforce was being imparted in the right way.



Created a framework within which the process of defining the plan of action had to be mapped out:

- Formulated Agile Process Framework
- Deployed Agile Process Framework
- Baseline the Agile Process Framework
- Formulated dashboards for stakeholders

Created knowledge base for agile deployment for individuals who were to lead and train, and deployed tools for activities. The trainers could then refer to the knowledge base and with the help of Agile-related tools, they performed better in training their teams in the right way.

Sprint Planning, Daily Standup, Backlog Refinement, Sprint Review and Sprint retrospective meetings were conducted in order to train the teams. They were explained the importance of these elements of Agile, how implementing these will help their business and how they will make productivity increase along with reducing the turnaround time.

Realized Benefits

The value-add that Agile brought to the table for this telecommunication company were plenty, and the results were both qualitative and quantitative.

Reduced Project Risks

This led to a more focused, identifiable and more accurate planning for the end result on behalf of the team. Budgets could be allocated better, marketing plans could be devised with a better understanding and targets were set with more accuracy.

Lesser percentage of rework (or COPQ)

The amount invested in estimating detection and prevention of product failures was reduced

Time to market improved by 20% in R3 & R4

The time to market products by the company was reduced

Product quality of features improved >25% in later sprints

The quality of products was improved by a substantial margin after processes improved

Overall improvement in technical depth and technical capabilities of team members

Roadmap and Approach

1. Inception

A plan was drawn and an approach was taken where broad guidelines were decided, the ones according to which the processes were to begin. There were various tools deployed and steps taken in this approach. Find them listed below:

- Defined the Agile Roll-Out plan
- Held trainings on Agile Methodologies and Practices (XP & SCRUM) and then re-organized the existing team into functional Scrum teams
- Used the ScrumWorks Pro Tool for Project Management
- Deployed CM Synergy for Configuration Management & Continuous Integration
- C# & .Net based automated testing framework was adapted
- Used the Coverity Tool for static code analysis
- Deployed the Purity & Testify Tool for statement & functional coverage
- Monte Carlo Simulation algorithm based Defect Prediction tool was also used
- Set up tool structure, performed customizations and completed user access management
- Conducted hands-on training on ScrumWorks Pro tool

2. Operation

- Formulated and deployed the Agile Process Framework – Identified the relevant Agile Practices
- Aligned activities to the existing QMS
- Formulated Sr. Management, Project Management and Technical Management dashboards
- Formulated “Definition of Done” for all the activities in the Projects
- Coached the Product Owners & Scrum Teams to map requirements to epics/user stories & derive release plans
- Coached and supported the Scrum Master to resolve impediments and Product Owner to maintain the product backlog
- Mentored the teams during Sprint Planning, Daily Standup, Backlog Refinement, Sprint Review and Sprint retrospective meetings

3. Retrospection

Whatever had been done by the company in the past and did not lead to any improvement in their business was dealt with now. Corrective action was taken to fix these processes and activities.

- Conducted course correction sessions for Management/ Technical/Scrum teams on the Agile Process Framework
- Refinement of Agile Process Framework
- Conducted trainings for knowledge gaps and skill enhancements

4. Continuation

The current activities, procedures and processes in the company that were beneficial for the growth were continued with and given a boost to be able to make performance better.

- Baseline the Agile Process Framework
- Conduct 'train the trainer' programs for Product & Process owners
- Create FAQs for process & tools support
- Create knowledge base on the entire agile deployment

Change Management

Challenges

- Adapting to the new way of working without affecting the ongoing project deliveries, timelines, targets and quality during initial sprints was tough
- Ensuring discipline in following principles of agile was difficult. Like ensuring daily updates of artifacts, transparency in highlighting impediments, co-ordination between developers & testers, etc.
- Lack of capabilities for adapting certain practices of agile like entire team estimating, self organizing, creating user stories, etc.
- Due to re-organization of teams, bonding/co-ordination among team members was not sufficient
- Requirements of automated testing and code coverage evolved over a period of time, hence inadequate product quality measurements

Benefits/Value Delivered

- **Reduced project risks** due to daily tracking and retrospective actions
- **Higher quality** and **lesser percentage** of rework (or COPQ) due to automated unit integration testing, continuous integration and constant monitoring of daily builds & coverage
- Improved the technical depth and broadened the technical capabilities and understanding of team members
- Decreased ramp-up time of new joiners
- Time to market improvements in terms of schedule slippage improved by 20% in release 3 & 4
- Product quality of features meeting user needs improved more than 25% in later sprints

About QAI

Set up in 1994, today QAI is amongst the world's top three firms in the enterprise wide deployment of process initiatives that contribute to 'Operational Excellence'.

QAI's mission is to facilitate enhanced competitiveness in Software, BPO and other knowledge intensive organizations through multifaceted interventions in the areas of process improvement, be it business, engineering, people management or IT, through its services in Consulting, Training and Advisory.

This unique blend of services enables clients, by using one service, to benefit from our experience, knowledge base, network and learning in other services.

QAI's holistic approach to process improvement consultation is based on the objective of integration People, Process and Technology, to help organizations achieve breakthrough performance.

QAI helps organizations to achieve their business goals better, faster and cheaper by facilitating operational excellence, through: Process Management, Project Management, Quality Management, Change Management, Human Capital Management, IT Service Management and Innovation Management, thus helping companies in the world over to reduce cycle time increase production and improve quality of service delivery and processes.

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