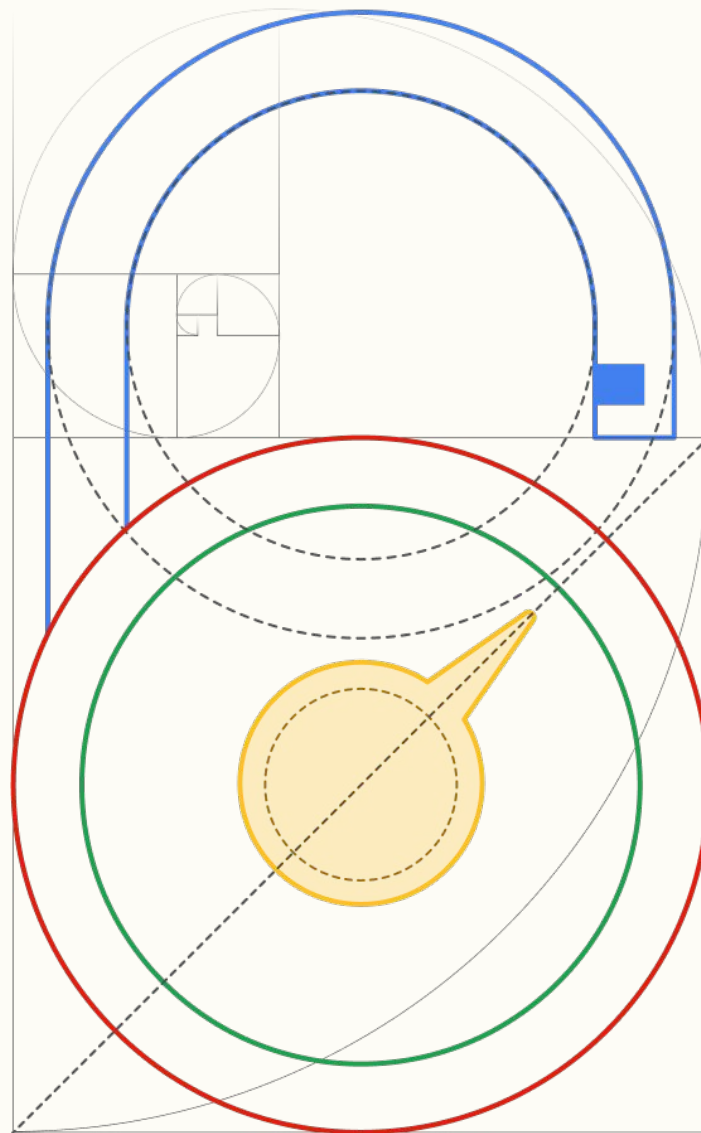


# White Paper: How OnPath Testing Unlocked a Stalled Software Project



## Overview

This paper offers proof of concept for a QA testing approach that introduces a “flow” management model into software development life cycles (SDLCs), as opposed to a “force” model, defined below.

OnPath Testing’s flow model provides independent QA testing, but also optimizes structure, organization, roles, and communications within and outside the development environment. This brings projects into alignment with business objectives while fostering optimal team productivity and innovation.

## Force Vs. Flow SDLC Management Models

Do all tools and models for software project management account for the human experience in software development cultures? Many have “**force**” characteristics, which discounts the human experience. “Force” model characteristics include:

- Undefined communication channels leading to communication breakdowns
- Mis-alignment of strategy and tactics
- Reactive “crisis” orientation
- Team burnout — stressed internal cultures
- Missed targets
- Over budget
- Time and budget pressure from above traveling through project management to developers and engineers

The “**flow**” model, developed by OnPath Testing over 15 years of practical experience, includes elements of QAOps with the following characteristics:

- Proactive planning, surprises minimized, increased predictability
- Strategy and tactics aligned
- Stable developer comms channels fostering healthy internal cultures
- Continuous QA testing, continuous improvement
- Targets achieved, budgets intact
- Team stress levels decline, productivity increased — increased morale
- Reduced context switching for developers
- Team skill sets appropriately deployed
- Fast, focused, productive team meetings
- Reduced client oversight and management of QA.

## BACKGROUND

The client was in the beta stages of a project that included a device and a platform designed to work in tandem, providing supportive health and wellness product/services to an aging demographic.

At the time of onboarding OnPath, this project was in beta phase, and experiencing:

- **Inconsistent quality of deliverables**
- **Lack of alignment with offshore/onshore teams.**
- **Poor QA testing practices**

## INITIAL PROJECT SCOPE

From the client's perspective there were three objectives for a third-party QA vendor:

1. Perform a high-level gap analysis
2. Harden existing QA test cases while creating new ones and introducing best practices.
3. Improve the ability to deliver a quality product to support a high-touch B2C/B2B service.

OnPath partnered with the client to evaluate QA needs and assess the project, but it became clear that to address the third objective, a revised plan was needed to steer the project forward.

## ENLARGED PROJECT SCOPE

The initial project scope did not fully address the client's business needs. Partnering with the client, OnPath developed an enhanced project scope with the following elements:

- **Introduce technical project management support** that would eliminate staffing gaps on the client side and bring the teams into accountability.
- **Establish transparent, sustainable communication channels** including, but also beyond, QA testing.
- **Implement data-driven decision making.**

## SOLUTIONS

**Software Development Life Cycle Restructure:** OnPath brought work flows into best practice standards and introduced testing prioritization protocols.

**Built Essential Communications Structures:** The client project had a communications gap between the project manager and the offshore team. OnPath identified comms disconnects then implemented structures to ensure a flow of timely, essential information. By design, the transparent, sustainable comms structures brought the offshore dev team into alignment.

**Built an automation framework:** OnPath quickly developed a BDD test case methodology with offshore and onshore teams, using those cases to build out an automation framework to tick the necessary boxes to move the project forward.

The client requested that existing scripts be moved into Katalon — the team was able to incorporate them into the Katalon ecosystem in a matter of weeks. With little time to invest in architecture, OnPath worked in parallel with existing manual execution efforts while automating existing and new test cases. The result was an automation framework which executes all regression tests in a matter of hours.

## OUTCOMES

- In less than 30 days, the project moved into the flow state when communications structures were established and adapted.
- Offshore and onshore players moved into alignment, ushering in a new phase of productivity.
- Strategy was hardened, then planned tactical solutions were implemented.
- Teams hit targets while the project stayed within budget.
- The sustainable comms channels reduced team stress levels for and freed developers and engineers to innovate practical solutions.
- A continuous improvement approach raised output quality.

OnPath continues to engage with the client, providing professional services for future roll-outs.

## TECHNOLOGY AND TOOLS



Atlassian Suite



Katalon



BrowserStack



TestRail



JavaScript



Postman



Figma



SugarCRM



Cucumber



Selenium



Apache JMeter



AWS



SharePoint



G Suite

## RESULTS

2

Years duration

3:10

Ratio of test  
engineers to  
developers

250

Number of  
automated test  
cases

500+

Manual test cases.

70%

Decreased validation time  
for sprint releases

188

Critical Bugs Discovered

40%

Increase in turn-around time  
for defect validation

