



**CubeMatch**  
Powering Change

# A DIGITAL JOURNEY, How CubeMatch Can Help

November 2020

Fergal O'Riordan | CubeMatch Ireland Ltd.

# TABLE OF CONTENTS

---

## Introduction

### Nature of engagement

- *Stakeholder engagement*
- *Key challenges for the client*

### Key findings

- *BDD framework*
- *Automation*
- *Team challenges*
- *Regression testing*
- *Development process*
- *DevOps*
- *General and process hygiene*

### Proposed solution

- *Roadmap and next steps*
- *Further conclusions*
- *Time to market improvements*

## Conclusion

# INTRODUCTION

---

CubeMatch engages with companies embarking on their digital journey and companies already on-route. The below case-study is an amalgamation of a number of clients in the Fintech area.

CubeMatch delivered an Agile Maturity Assessment service tailored to take the client team to the next level and set out a roadmap to excellence. The Agility Maturity Assessment is a unique service which can serve decision makers in transforming their development organisation.

This service evaluated the following focus points :

- Delivery Culture
- Methodology (SCRUM, BDD, etc.)
- Development and Release
- Cadence DevOps Path to Live enablement
- Organisational structure and skills matrix
- Toolset Fit (Current and Future)
- Planning and Execution capability
- Collaboration enablement
- Quality Governance

DIGITAL

## NATURE OF ENGAGEMENT

---

### Stakeholder Engagement (2 hours)

CubeMatch engaged with the stakeholder to understand the current challenges that led to the request for review and used this to shape the approach.

### Engagement and Execution Approach (6 weeks)

The engagement conducted through a series of face to face meetings (one physical and the majority virtual due to Covid-19) also included a tool set review (including implementation and configuration approach) and documentation review.

The approach was broken into two phases:

#### 1) Discovery phase (3 weeks)

Walk-in-my-shoes session with Development and dedicated QA resources. Tools Review and documentation (process maps, workflow in Jira, Kanban health etc.).

#### 2) Delivery and conclusion phase (3 weeks)

- Report creation
- Report presentation

Due to the current Covid-19 situation, video and audio calls were used as a method of communication as it was best to work directly with the core team members to assess the situation on the ground. It helped to identify how people felt about the current work settings and the issues they faced.

Having conducted team and 1:1 reviews with the client teams, a heat map was developed showing where existing processes and practices could be quickly improved for Application X & Y.

This work culminated in a final report which suggested the future direction and prompted change.

The engagement consisted of several days working with client resources to better understand the current processes:

- Face to Face Sessions
- Short interview of key personal
- Group meetings with QA and Dev team
- Attended daily stand ups
- Lessons learnt from the last release
- Review of documentation and current lifecycle practice.

- **Stakeholder Engagement**

Outcome is key and this session was designed to meet the objective of the client. This was achieved through active listening during the Stakeholder phase where we gained a clear understanding of their needs.

Some clients come to us because of perceived structural weakness in their teams or organisational structure.

The client wanted to take stock and review their journey and build consensus on taking the next steps into Dev/Ops. CubeMatch conducted a review of development, testing practices and process. The initial engagement focused on Application X, Y and Z SCRUM teams and this prompted a further, more detailed review to be carried out.

For existing applications X & Y focus was on identifying “Quick Wins” through improved use of automation & additional manual test capability to allow more time to focus on Automation. Application Z, a new development project was a target for new practice from day one.

- **Key challenges for the client**

- 1) Incomplete automated regression testing. "Test after" approach requires considerable support from manual testing.
- 2) Insufficient investment in team skill set.
- 3) DevOps in notion rather than practice.
- 4) Regression testing burden was large.
- 5) Agility mixed with older practices.

## KEY FINDINGS

---

- **BDD Framework**

BDD framework was proposed as a "good hook" to hang process and workflow improvements on, while not being a slave to it.

- **Automation**

The highest priority, and key takeaway from discussions was the urgent need to introduce properly constructed and configured test automation to reduce the regression overhead which was consuming many man days ahead of every release.

Lack of automated test scripting skills prevented the regression testing suite from being maintained to cover existing production functionality. Reliance on hybrid automated/manual regression test execution also placed strain on resources.

Automated testing was not prioritised and at times was sacrificed in favour of making progress using manual test methods. Automated testing was not mature and was not being maintained allowing for gaps to appear in the regression set. No dedicated resource for automation and when resource was allocated, it was taken off to manual test when pressures arose.

A Test first approach was proposed as an answer to this.

- **Team challenges**

The team were keen to explore new combinations of test methodologies and tooling to optimise their performance.

Three Amigos meetings - while the team were familiar with the model, the feeling was they were being used in an ad hoc manner and without the requisite degree of discipline.

- **Regression Testing**

Estimation of regression per release with a risk-based impact is a clear requirement. Not enough time to prepare; not enough time to execute; erratic bug fix delivery; extensive manual regression required between builds.

- **Development Process**

Greater involvement from the Product Owners was necessary to improve the understanding of what was being built and tested.

Scrum teams were not operating as feature teams.

“Silos” between front and backend development capabilities led to “long arc.”

Identified an urgent need to introduce service virtualisation, mock endpoints, and stubs to allow for the testing of the front end in isolation from the backend.

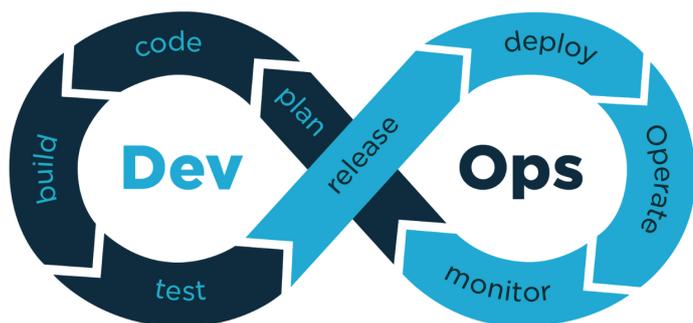
Introducing Acceptance Tests into the Jenkins build pipeline to ensure functional regression testing is carried out nightly was something that the QA team was very excited about.

It was felt more structure was required around their Agile SCRUM processes.

- **DevOps**

DevOps in pipeline performance testing is recommended to alleviate the pressure of carrying out performance testing immediately prior to production release. Not budgeted or resourced correctly.

New Development Methods:



- **General and Process Hygiene**

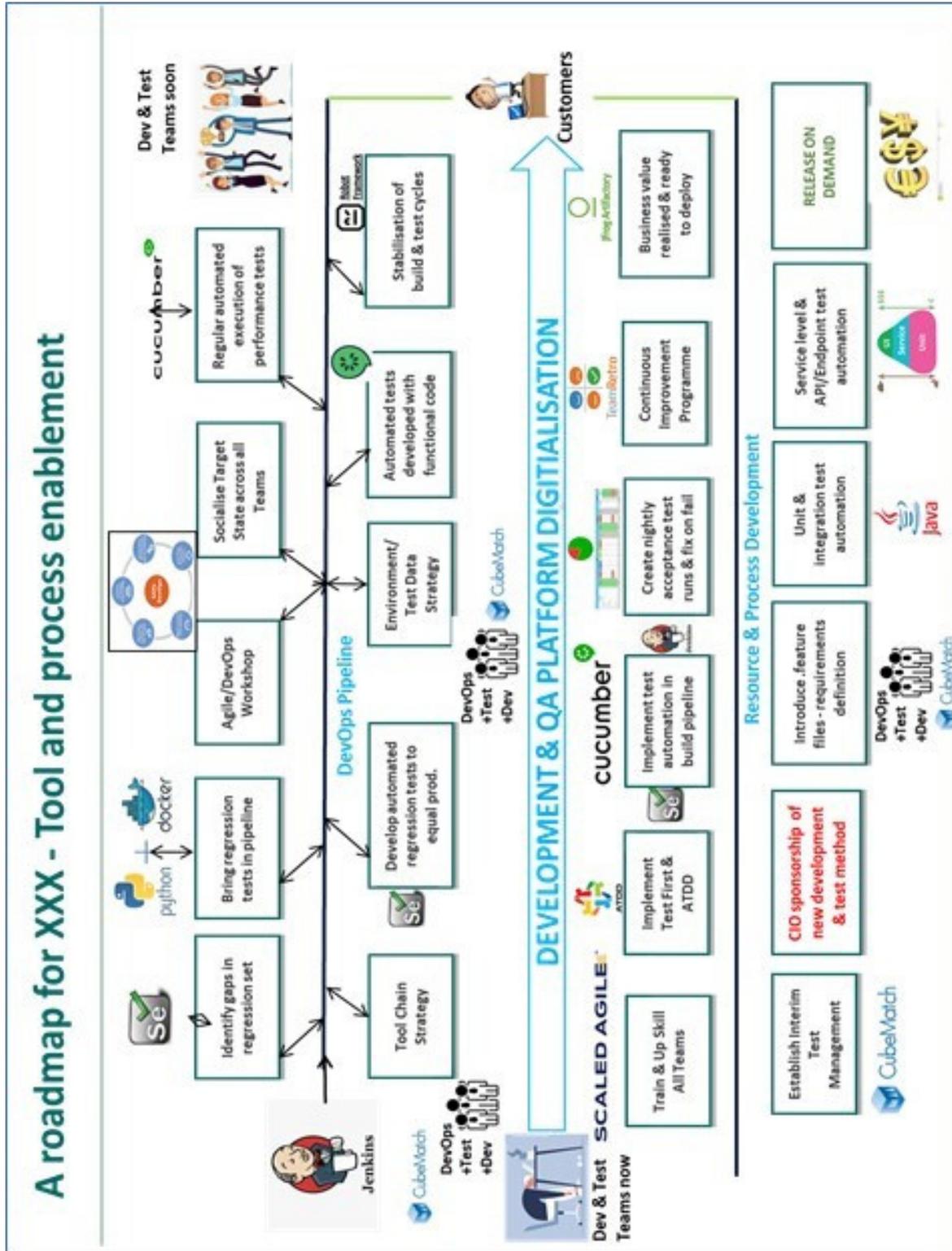
The GIT repository and overall coding and configuration management methods needed to be reviewed. Refinement of user stories required improvement to ensure that there is sufficient information contained within the user story to develop effective test cases. The team were concerned about the amount of change being introduced late in the development life cycle.

## PROPOSED SOLUTION

- Roadmap and Next Steps

CubeMatch proposed a roadmap to improve Current Applications X & Y and future steps to have Application Z (greenfield) successfully implemented.

Proposed Roadmap:



Implementation of a BDD approach accelerated by DevOps capability that needs expansion to reduce regression cost and go to market faster.

Expand pipeline tools to allow for Release on demand and Continuous Test - eliminating regression costs.

New approach and emphasis to automation with strong emphasis on continuous testing eliminating regression testing - quality is built in.

• **Further conclusions**

- Engage “Agile Coach” to lead new direction on Application X (and to influence both existing Applications - X & Y) with direct measurable objectives (12-month horizon) to implement Quality Driven Development through the implementation of a BDD development approach coupled with a focus and new energy on DevOps. This will unlock Speed, Tooling Approach, Pipeline optimisation and an agility that will secure success on Application Z.
- Establish a training programme for the team in Agile practice and advanced techniques leading to certification of staff in agile practice.
- Through proposed training and seeing change in action, raise up an internal candidate to be the process champion for new way of working.

• **Time to market improvements**

- Implement full process change to rapidly deliver future releases.
- Enhance frequently to meet customer expectations through taking an “App Approach”.

## CONCLUSION

---

CubeMatch was instrumental in taking an already “Agile” Fintech company to the next level which improved Quality, Time to Market and customer satisfaction. These changes invigorated the on the ground team, allowing them to pursue goals once beyond their grasp.

A measurable and quantifiable improvement was made to delivery time, first pass rate and team productivity. Cultural change was the game changer, and this brought the various facets of delivery together as “One Team” BDD as a “target model” gave clear direction of what good looks like and what direction was to be travelled.

If you would like to contact the author of this paper :

**Fergal O’Riordan**

[fergal.oriordan@cubematch.com](mailto:fergal.oriordan@cubematch.com)

086 070 11 00



Fergal O’Riordan is Director of Quality Assurance and has 25 years’ experience in Quality Assurance and Testing. He has led departments of 250+ resources down to small agile teams.

Believing that culture is the game-changer, Fergal’s favourite quote is: “Never doubt that a small committed group can change the world, in fact it’s the only thing that ever really has”.

# HOW CUBEMATCH CAN HELP

---

## • WHO WE ARE

Founded in 2002, CubeMatch is a **global change and transformation consultancy**, specialising in **Financial Services** and selected as the **chosen partner** for some of the largest and most demanding transformation projects within the Financial Services sector.

CubeMatch is an international brand continuously expanding with **six offices** worldwide : **Dublin, London, Amsterdam, Frankfurt, Singapore and Chennai**. Combining our world class expertise in Financial Services with our rich capabilities in all aspects of change and transformation, we apply a **Multiplier Effect**, helping clients to be more effective today while creating value for tomorrow.

We are **Banking Native**; it runs through our **DNA**. Unlike more general change consultancies, this banking intimacy means we deliver change and transformation programmes that stick, against a backdrop of complex regulations and continuous disruption.

Over the years, we have successfully built a global firm that is uniquely equipped to deliver pragmatic and business-focused results. We have over **150 staff and multi-million euro revenue**. And through our **strategic partnerships** we apply innovation to help organisations operate, compete and deliver at scale. Blending our powerful change capabilities with next generation technology, we deliver **innovation and business agility** to help businesses thrive.

## • OUR GLOBAL SERVICES



Strategic Change  
and Programme Delivery



Business and Digital  
Transformation



Regulatory, Risk  
and Compliance



Data and Technology



Quality Assurance



Managed Services

- GET IN TOUCH TODAY

Visit our website : [www.cubematch.com](http://www.cubematch.com)



CubeMatch (Ireland) Ltd  
+353 1 253 0020  
[Ireland@cubematch.com](mailto:Ireland@cubematch.com)

CubeMatch Ltd (UK)  
+44 20 3004 8098  
[UnitedKingdom@cubematch.com](mailto:UnitedKingdom@cubematch.com)

CubeMatch B.V. (Benelux)  
+31 20 890 3983  
[Benelux@cubematch.com](mailto:Benelux@cubematch.com)

Other Locations

CubeMatch GmbH (Germany): [Germany@cubematch.com](mailto:Germany@cubematch.com)

CubeMatch APAC Pte Ltd (Singapore): [Singapore@cubematch.com](mailto:Singapore@cubematch.com)

CubeMatch Claritaz (India): [India@cubematch.com](mailto:India@cubematch.com)



# CubeMatch

Powering Change