

# Continuous Testing for ERP Implementation Accelerates Digital Transformation

**CLIENT**WATERCARE SERVICES

INDUSTRY
PUBLIC UTILITY

TTC SOLUTION
OPEN SOURCE TESTING PLATFORM
FOR INFOR ERP IMPLEMENTATION

# Watercare Needed to Become Fast, Flexible, and Responsive

In 2010, Watercare consolidated seven water utility companies in Auckland to create a more consistent, better managed system for the city's residents. Watercare quickly built a solid track record in infrastructure and service delivery, but Raveen Jaduram, Watercare's Chief Executive Officer, has over the last several years focused on putting customers at the heart of the business. According to Chief Digital Officer Rebecca Chenery, "becoming customer-centric today means more than being reliable and efficient — it means being fast, flexible and responsive to the changing needs of Aucklanders". This sentiment is the driving force behind the digital transformation and application of technology underway at Watercare.

Auckland's Watercare, New Zealand's largest water utility company, provides the city's 1.7 million people with clean water and reliable wastewater disposal. To Watercare, becoming customer-centric meant more than being reliable and efficient, it meant being fast, flexible and responsive to the changing needs of Aucklanders. This sentiment is the driving force behind the digital transformation and application of technology underway at Watercare. The multi-year transformation has been led by Raveen Jaduram and his Executive team, knowing that, for real change in mindsets and culture to occur, it needed to be led and modelled from the top.

Watercare placed key leaders through a tailored leadership program and provided staff with Agile Fundamentals and Design Thinking training and on-the-job learning. This has ensured that employees are poised for greater success moving forward by creating an agile mindset that encourages thinking openly, solving problems differently, and greater collaboration. The digital transformation that Watercare has experienced has enabled it to remain at the forefront of new technologies which provide the foundations for innovation.

Through the implementation of innovative technology, the organization is able to deliver an improved, more sustainable digital experience than before, and implement change more quickly and effectively. "Everything we have done, whatever outcome we needed to deliver, has been focused on our people and our customers. The culture change is the foundation of everything that we have been able to do." says Rebecca Chenery, Chief Digital Officer at Watercare.



#### Culture Shift Towards Digital

One statistic that stands out for Watercare is that the automated testing platform, which minimizes the spend on testing from 30% of the budget to under 10% while quadrupling the efficiency and speed of testing. Partnering with the right experts who can help augment its capability has been a critical aspect of the success of Watercare's technology quality drive.

Testing Spend w/o Automation

30%

Testing Spend with Automation

10%

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- Rebecca Chenery Chief Digital Officer Watercare

## Our Testing Approach

Though teams can improve software quality using techniques such as pair programming or code-reviews, bugs will always slip through. QA should always be as lightweight as is practical. QA strategy should strive for:

- Faster Results
- More Accurate Results
- Fewer False Positives
- More Actionable Results

Most organizations must deliver their IT programs via a variety of traditional or modern delivery methods. Recently, common themes include Agile, DevOps and cloud computing as key enablers of going digital.

A solid software quality assurance (QA) approach enables developers to move faster, while having a consistent set of checks for what they do. This holds them to a standard for quality but frees them up from having to dedicate the time-consuming practice of manual testing.

The goal is to enable cross-functional, highly coordinated teams to deliver a digital improvement in very short cycle times. An automated and continuous test platform is key in today's fast-moving, risk adverse world. Through TTC's expertise organizations can easily transition to QA and Testing as a Service (TaaS) to eliminate poorly completed tests and the overhead of costly overhead of employing an army of manual testers.

TTC enables our clients with pre-existing proprietary test cases to fast start your testing with a click of a button. Tests are read are ready for execution 24/7 with the ability to scale up and down based on demand.

A common goal and outcome is to reduce an organization's cost base by at least 10%. Manual Testing typically consumes 29% of an IT budget. TTC delivers an automated and continuous test platform that will bring significant and repeating return on investment. With specialized testing consultants in offices around the globe, TTC assists all organizations in delivering modern, universal testing programs resulting in higher quality software, faster time to market, reduced costs and lower risk.



#### **Our Approach**



Digital is very simple from the customer's perspective (let me transact whenever and from wherever I am), but often highly complex in practice — this is where automated and continuous testing becomes vital. Without it, executives do not have visibility or control of the quality of their IT program and suffer poor speed to market and increased risk.

Many industries use complex, cross-functional systems, which can slow down the launch of new products and services. TTC believes you can get a head start by investing in a continuous testing platform that is easily understood and implemented. This investment provides tangible value and lasting benefits including re-usable test assets for project and postproduction use, security of IP and less reliance on individuals.

#### Legacy Challenges





4,500+ Tests Migrated

The results of the previous test automations were very difficult to see as they were buried on the many distributed servers that ran them. The output was misleading due to each job being reported as a "success" even if every single test failed. This lack of visibility meant a lack of focus on these valuable assets and left product owners, development leaders, and management all out of the loop.

The first step towards progress was brining the test automation system and its results to the foreground. The second step was making the information widely available across teams. And lastly, the third step was to repair the relevant test suits with the goal that all tests should be passing 100%.

Alongside the test automation, TTC also developed a large collection of manual tests. These tests existed in a different system to the test automation. That system (JIRA) is not designed to manage tests or testing. The relationship between those tests and the features they cover was difficult to obtain.

We have migrated 4,500+ tests from JIRA to qTest, the new tool. These tests were been arranged by product so that we now have a complete view of our test assets. A suite of reports and dashboards have been developed to accurately determine coverage and replace a highly manual process which utilizes Microsoft Excel.



### Open-Source QA Platform

Digital transformation is certainly a hot topic and is driving conversations at the executive table around: digitizing customer experiences, increasing speed to market, moving to Agile working environments lowering costs and increasing quality. TTC is a NZ owned software assurance provider with a focus on enabling organizations across the globe to transform the way they deliver technology. TTC teams enable robust and rapid test program delivery that helps organizations increase the speed and quality of technology deployment while reducing risk and cost.

Deploying a continuous testing platform provides the fundamentals of automated testing,

test data management and continuous deployment across any technology landscape in any industry and for any company size.

QualityNow is an open-source QA platform developed by TTC with the goal of providing organizations the ability to deliver a high level of QA across their digital platforms on a continuous basis. Through the leveraging of this open-source automated QA platform and a team o intelligent automation QA testers,

organizations can eliminate the plan associated with building their own large QA and testing teams and make the transition towards on-demand testing that is scalable and flexible, providing both quality, speed, and cost effectiveness.

Organizations can get test results fast and in real-time with dashboards and reporting that integrate seamlessly with tools - JIRA and ServiceNow to speed the place of delivery.

#### **TEST AUTOMATION**

0%



80%

"Having the right partners on the journey was critical. TTC has helped move our test automation from zero to over 80%, seriously raising our Quality game"

# Our Testing Approach

After an extensive ERP selection process, Watercare chose Infor - an industry specialized end-to-end ERP software brought together by AI technology. This complex implementation was quality assured with the help of TTC, which was accelerated by their IP of over 3,000 automated tests to save countless hours and budget while reducing the overall risk.

One essential innovation is Watercare's Data Hub. Established on the new, AWS-hosted platform, the Data Hub brings together data that was previously scattered across the business into one accessible visualization layer, making it available and digestible for every employee.

This enables our data science team to uncover insights that will allow the operational teams to save money,

save water, and increase customer satisfaction," he adds.

"Having the right partners on the journey was critical. The fresh talent from Harmonics has accelerated our shift towards a data-driven culture while TTC has helped move our test automation from 0 to 80%

"A solid software quality assurance (QA) approach enables developers to move faster, while having a consistent set of checks for what they do."



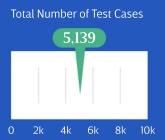
#### Benefits Achieved

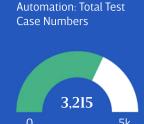
The most common outcomes include test cycle times reduced from 10 weeks to 3 days, business risk coverage increased from 30% to 90%. Improved data and environment management along with easier engagement and visibility with development suppliers.

In addition, decreased cost of testing ownership, increased and retained value of testing assets, ongoing operational monitoring, and integrated test and business process automation.

No two organizations are the same. Regardless of what a client needs, or level of maturity - TTC strives to help implement positive changes to achieve business goals.

TTC helped Watercare successfully deliver their digital strategy. This is just one example of many client success stories. The IP and Accelerator Packs that TTC has developed over our 15-year history can be tailored for any organization to help transform the way they deliver software assurance by combining powerful technologies with the best operational expertise.







Manual: Total Test

#### **About TTC**

TTC is the leading global software assurance provider focused on helping organizations transform the way they deliver technology. Our unique capabilities across a wide range of delivery areas enable our clients to increase the speed and quality of technology development while reducing risk and cost. TTC was founded in 2004 to be a testing partner that could take global learnings and best practices and deliver them in a locally appropriate way. Fast forward fifteen years with offices in New Zealand, Australia, Asia, Americas, and Europe and strong partnerships with some of the world's largest organizations, this is still TTC's purpose today. To learn more visit us at ttcglobal.com.

