



a global vision for software testing

CASE STUDY

A MANAGED TESTING SERVICE SOLUTION TO REDUCE COSTS FOR A GLOBAL TELECOMS COMPANY

| | |
|---------------------------------------|-------------------------------------------------------------------|
| Client description: | World leader in mobile telecoms NYSE & Euronext - Paris listed |
| Locations: | Global |
| Customers: | 186 million |
| Testing projects managed (UK): | 33–45 per month |
| Testing team size (UK): | 30 |
| Testing delivered: | Enterprise, mobile and web |
| Testing structure: | Specialist teams |

Client situation

In October 2007 a global telecoms provider embarked upon an exercise to address a number of challenges being experienced with the management and supply of software testing services. For several years the provider had been engaging external suppliers for these services in the form of flexible resourcing agreements created and negotiated on a month-by-month basis.

The goals of the exercise were identified as:

- Reducing the overall cost of the services
- Utilising cheaper offshore resources where appropriate
- Maintaining focus and improving automation, quality and value added services
- Reducing the cost of managing the service
- Increasing the stability of the resource base
- Increasing the accountability and ownership of the external suppliers

The breadth of testing that the Client carries out encompasses software and systems changes across the enterprise including mobile, web and finance applications. 70% of the Client's software is developed in-house with the remaining 30% being outsourced to partner developers.

The end-to-end testing scope included the complete service proposition and infrastructure, spanning: web technology, back-office environment (including billing), supply chain, customer services interfaces, business processes and the mobile network integration.

It was important to the Client that they retained control of the testing function and key knowledge within the domain. Loss of these would have eroded the Client's competitive advantage which is based upon products, their performance and time to market.



"Having an in-depth understanding of our Client's goals has enabled us to put forward a combined solution that achieves a significant and material reduction in testing costs, whilst increasing their knowledge base for the future. It has been essential that we maintain a focus on both aspects throughout the process."

Andrew Coggins
Consultancy Partner
TCL EU



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Issues faced

The dynamic and fast-paced environment of the Client's market resulted in unpredictable peaks and troughs of testing demand. As new developments entered the testing phase this meant that they were regularly either over or understaffed.

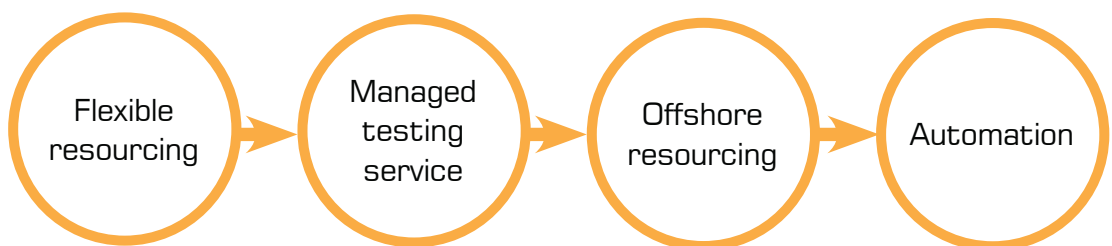
Ad hoc testing that had been utilised in reaction to the peaks and troughs of demand meant that the Client was dealing with a lack of accountability from vendors as testing needs were not being planned holistically. In addition, there was insufficient governance of the teams and their delivery.

The Client also needed to look at how to bring in innovative approaches without a significant investment in time, with the aim of bringing greater efficiencies to the testing process.

Solution proposed

The TCL managed testing service was proposed as follows:

1. A set number of TCL personnel working with the Client against an agreed project loading. This was based upon the amount of planned projects over a rolling period. Workflow requirements, tester infrastructure and costs were all factored in.
2. Fixed competitive pricing with a year-on-year cost reduction.
3. An additional pool of testers that could be deployed to the site as required by the Client. This could be based upon only 24 hours notice being provided.
4. From a flexible resourcing model TCL identified the customer's needs and proposed a managed testing service model which included the following roadmap:



The journey from flexible resourcing to managed testing service gave TCL the ownership and accountability for testing, it also gave the client a known test cost and a single point of contact. TCL expanded the managed testing service solution to offshore to allow greater testing time coverage and to enable further cost efficiencies for the client. Automation decreased the test time window and therefore facilitated an increased throughput of projects, as a direct result, cost efficiencies were realised by the client. In all three stages of the TCL managed service (managed service, off shore & automation), the client benefited from cost efficiencies.

5. A range of KPIs to ensure that both the Client and TCL had agreed measures for success.



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Success achieved

Roadmap for reduced resource cost

TCL have successfully transitioned from a time and materials provider to managed testing services for the client.

Reducing the overall cost of the services

The implementation of a managed testing service has resulted in a 25% decrease in cost during year one and a greater than 35% decrease in year two. The Client’s utilisation of a flexible pool has been greatly reduced due to the managed testing service which successfully combines the responsibility, quality, speed and cost effectiveness required by the Client. The workflow has been able to be planned more effectively which has had a positive effect on throughput of projects. The planned evolution from flexible resourcing to a blended managed service has become a reality.

Utilising cheaper offshore resources where appropriate

TCL have successfully deployed 50% of the entire managed testing service offshore to India by careful collaboration between the onshore and offshore teams. A pivotal role that remains today is the use of an onsite TCL coordinator who is the point of contact for onshore staff for the offshore workloads.

Maintaining focus and improving automation, quality and value-added services

Improving and maintaining focus on automation has been critical for the managed testing service roadmap. Generating an automated-testing library enabled the re-use of automation, the associated cost benefits, and the transfer of the knowledge base for the Client.

Weekly quality audits of projects against Client’s deliverables are undertaken. This continued cycle combined with the use of weekly quality circles focuses the TCL team on continuous improvement.

TCL present regularly at the Client test management meetings on innovation with a wide variety of innovations being taken up and implemented. TCL also run ‘Blue Sky’ innovation meetings with the Client’s senior test management staff to keep them up to date on new ideas and approaches in testing.

Reducing the cost of managing the service

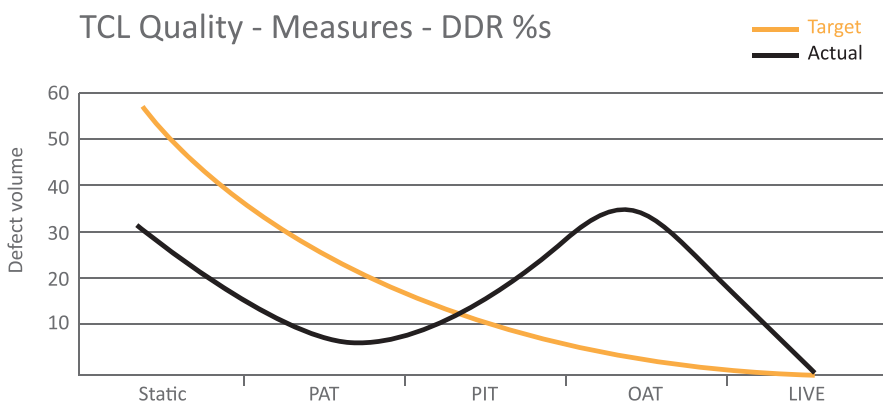
Account/resource management was an integral part of the service, delivered at no cost to the Client.

Increasing the stability of the resource base

Long term, localised staff commitment ensured continuity of the testing team.

Increasing the accountability and ownership of the external suppliers

TCL’s focus on accountability and quality led to the monitoring and recording of defect detection removal efficiency (DDR). At the start of the engagement we find most of the defects in integration testing and operational acceptance testing with little in static testing and pre-acceptance testing. The following graph depicts this:



See key on next page



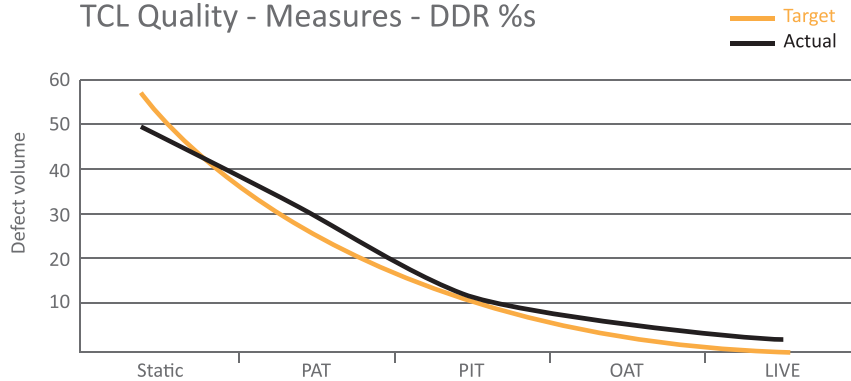
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Success achieved continued

For the first two years of the managed testing service, TCL focused on static testing and supplier governance. TCL then control this through exit gate meetings with each supplier. The increased focus on static testing has brought the testing and business analyst communities closer, thus better understanding each other's goals.

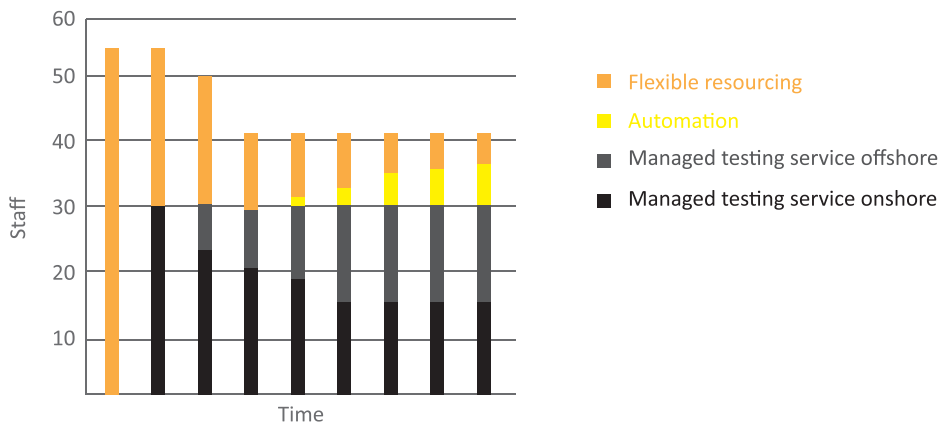
TCL Quality - Measures - DDR %s



KEY

- Static:** A detailed check of the business requirements ensuring that the requirement is fully understood and testable.
- PAT:** Pre-acceptance testing
- PIT:** Pre-integration testing
- INT:** Integration testing
- OAT:** Operational readiness testing

The projects are now working more efficiently with the appropriate mix of onshore, offshore and automation within the managed testing service. The evolution of the service is shown in the graph below:





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Why TCL?

TCL were selected for this project because of our:

- Ability to meet the Client budget over the short and long term of service provision
- A reputation for high-quality testing delivery
- Testing Telco domain knowledge
- Mature and pragmatic management style
- Resourcing solution management

“ We are cost focused as a business, TCL are aware of that and have in the past 18 months put together their managed testing service team for us. This gives us a good saving and we are able to demonstrate that saving. We go to TCL and say we need to be able to demonstrate we are saving X amount of cost and they come up with a model that says we can do exactly that ”