

Fleet Management System

JK Technosoft's Role

At present, JKT consultants are working at onsite location and are responsible for the complete testing activities of Fleet Management Application.

JKT faced many challenges while working on this and successfully implemented the well-thought off solutions

- The client maintained a large and complex system that schedules six to eight major releases a year. So, Test planning was typically done in-between the major releases.
- The client required reduction in the amount of defects found in production by improving test planning but without increasing the size of the team.
- As the nature of the schedule the time allotted for the test planning was limited so this lack of test planning lead to production defects.

About the Company

Client is the owner of one of the leading car loan and insurance companies in UK. They deal in Car Insurance, Car Loans, Car Buying & Selling and Car Servicing etc.

Fleet management System is an ERP system used by our client that is built on Oracle Forms/Reports 6i using Oracle database 9i.

Application Details

Effects of insufficient planning

- Delay in Releases: Due to total manual testing time required to complete the test cycle was unpredictable and often lead to delays in the release.
- Expensive in terms of human resources: Manual testing requires costly and highly skilled professional talent.
- High Maintenance required: As the application changed, maintenance of existing test cases required more work than earlier which results in less value returned.
- Difficulty to learn: Employee turnover always resulted in time-consuming relearning and retraining on the system. The complex design and lack of documentation contributed further to the unmanageability of the system.

JKT approached the problem from several different aspects.

Approach JKT took was to determine which test cases could be executed using a testing tool.

By the Investigation of the regression test bed it was found that a high percentage of these test cases were repeated for each release and it required entering the same data again & again for the functionality that rarely changed.

These test cases were indeed prime candidates to be automated. By automating these test cases, resources that were typically scheduled for regression testing at the end of a major release were now freed-up to begin planning for the upcoming major releases.

In addition to the major releases there are maintenance releases too. These are much smaller scale releases and contain solutions to trouble tickets or minor additions to the existing functionality. These maintenance releases would also require regression testing albeit on a much smaller scale than what is needed for major releases.

JKT discovered that this regression test bed could also be automated which would result in freeing up more time for the system testing. For automating the Test Cases QTP (Quick Test Pro from Mercury) was used.

Benefits to the Client

- Testing coverage increased over a comparatively shorter period of time.
- More efficient resource allocation: As the regression test cases got automated. Testing cycle could be executed even with a junior resource.
- Improved Testing quality
- Without increasing the size of the team the quantity of the amount of functionality able to be tested was also increased.
- Shorted development cycles: With automated testing and early detection of critical bugs the client could get through the development and testing more quickly.
- Ease of use: A good amount of reduction in the dependence on the testing team as the automation of the test cases facilitated the development team to run the regression test pack.