Media Software Project Analysis Report

DeRisk IT recently completed a project for a media software company, which produces media software for direct response agencies and marketers, and has over 200 years of combined Direct Response experience in their headquarters, recently sought to make their testing more dynamic and reliable by automating aspects of their Direct Response software. The Media Software Company acquired licenses of TestComplete to assist with the automation of functional testing that was being performed manually. TestComplete, a dynamic automation testing tool offered by Automated QA, was obtained in the second quarter of 2009 by the company. Throughout the course of the project TestComplete offered a virtually seamless transition to automation and if maintained properly will cut testing efforts by one-half or more. In May 2009, DeRisk IT, Inc. offered an offsite testing solution to assist with the implementation of TestComplete and the Automation Conversion. The media software company procured DeRisk IT as their automated testing solution and opted to use 5 weeks to automate several key areas of their software.

DeRisk IT Inc. provided a two week ramp up period free of charge, during which time they gained access to the client environment via VPN, manual test cases, and performed small automated scripts to ensure both parties would be pleased with the finalized results. The tester assigned to the project spent several hours navigating through the application and becoming familiar with the workings of the software.
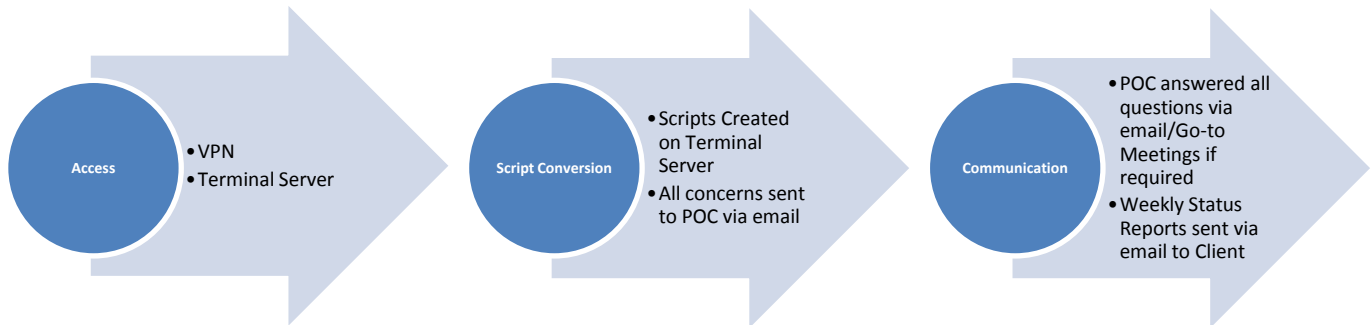
During the course of the project there were very few obstacles and hurdles to overcome, which made the creation of a total of 518 automated scripts possible.

Setup/Testing Stats:

DeRisk IT and the media software company worked together to come up with the most beneficial testing approach/access approach possible.

- ✓ Test Complete v.7 originally slated for Automated Testing tool, updated to TestComplete v. 7.10 when update was released on July 1, 2009.
- ✓ Testing occurred through VPN Access/Terminal Server.
- ✓ Copies of all manual test cases were sent to DeRisk IT to evaluate prior to testing start date.
- ✓ Client provided walk-through of the application under test. DeRisk IT used the 2 week ramp up period to create sample conversion scripts, and execute manual test cases to gain better understanding of the application.

DeRisk IT/Client Work Flow:

Access
- VPN
- Terminal Server

Script Conversion
- Scripts Created on Terminal Server
- All concerns sent to POC via email

Communication
- POC answered all questions via email/Go-to Meetings if required
- Weekly Status Reports sent via email to Client

Project Successes

- *Communication*

Communication was fulfilled primarily through email. Any issues that arose daily were communicated to the direct point of contact at the client site. A weekly status report was sent out every Friday detailing scripts that conversion was completed on, and detailed all those marked as in-progress. Nearing the end of the project an "In-Progress" spreadsheet was sent to the client so that all items still unresolved and in need of attention by the POC could have sufficient time to be fixed on the client end so scripts could be finished. Any items the Point of Contact felt needed additional attention were shown to the tester via Go-To-Meetings. Throughout the project, small meetings were also held to show conversion progress by running scripts for the client via Go-To Meeting.

- *Best Practices*

DeRisk IT provided a best practices walk-through on the last day of the project. This allowed representatives for the client to see scripts ran, and ask any questions related to the automation and the progress. DeRisk IT showed the client how they approached the automation conversion and provided tips for maintaining the scripts. DeRisk IT also offered a "courtesy" best practices meeting on maintenance for the client personnel that were not able to attend this meeting. This Follow-Up meeting will take place within two weeks to allow the client to formulate any remaining questions after an initial running of the scripts.

Project Failures

- ***Testing Tool Scope of Support***

TestComplete v. 7 supported the backbone and initial scripts converted by DeRiskIT. However, when more in-depth test scripts were converted, 33 scripts were left "In-Progress" at the end of the project due to TestComplete. During the creation of these scripts, TestComplete was only seeing a broad portion of the screen. This object was a grid within the client application, and therefore only recording could be relied upon to enter information within fields. TestComplete recordings were occuring against the wrong "tabs" within this grid on many of the scripts. *(This affected 8 of out the 33 scripts left as in-progress.)* On other scripts it would record against the same combo box, selecting an item, when the test should have been entering information into cells within the grid. Additionally, 2 selections from the submenu had to be recorded. These items recorded as transposed, meaning the recordings for both selections showed the selection of item "A", regardless of whether item "A" or "B" were selected. When the same script was played back item "B" was always selected. *(This affected 8 out of the 33 scripts left as in-progress)* The TestComplete version was updated to v. 7.10 with the same issues occurring. Additionally, another section of the application suffered similar problems. When using the object browser to find and map items, the "finder tool" would not attach to the screen and lock up TestComplete and the application under test. The application would have to be closed. Recording was then the only suitable work-around, however when played back or input into scripts "objects" could not be found. The same objects could be highlighted on the application using the name mapping project item. This occurred on an entire section which affected a combined total of 16 scripts. Checkpoints needed for one automated section had difficulty due to TestComplete's inability to attach to the screen and/or find the object when the script was played back and the report displayed on the screen. Automated QA was contacted on these issues.

- ***Timely Follow-Up of In-Progress Items on Client End***

DeRisk IT provided a weekly status report, noting all test scripts where conversion was complete and those marked as In-Progress. All In-Progress items were commented within the status report. Also, any issues found that left a script in-progress were immediately sent to the Client Point of Contact along with screenshots. With no resolution on several items on the client side, DeRisk IT sent out a 2nd spreadsheet marking the items the Client was supposed to provide feedback or a resolution on. These items were only given the full attention they deserved during the last few days of the project. On the very last day of the project, full answers were given. When DeRisk IT attempted to resolve several of the issues with the resolution provided by the client, the issues were still unanswered, leaving the items in-progress at the end of the project. The Client representative responsible for maintaining the scripts will have to complete the conversions on the unsolved test scripts.

DeRisk IT's Solution to Overcoming Failures:

Overall, the conversion Project should be marked as a success. With a 5 week timeline, the largest majority of the manual test cases were converted, leaving only 33 in-progress items out of the 518 attempted. DeRisk IT work diligently to create reliable, working automated scripts. The project obstacles preventing full completion could have been avoided in the following ways:

- ✓ *Follow-Through*
  DeRisk IT proposes that any in-progress items should be taken care of as soon as possible. This includes items on the client-end that development has to prioritize and research. If these items were given the appropriate consideration and follow-through then many in-progress scripts would be fully functional. Additionally, any items in-progress due to a testing tool submitted to the support team should have been given a resolution in a timely manner.

In conclusion, the project can ultimately be considered a success by both DeRisk IT and the client. Both parties worked closely to ensure that the majority of test cases were converted successfully, and that a maintenance plan was in place for the future. The Client attended a training seminar offered by Automated QA in-addition to DeRisk IT's sharing of best practices. These items combined should ensure that the automated tests remain functional and usable.