**Project**: Client Connectivity and Conversation

**Client**: Radian.

Currently in my project, we are using two automation frameworks.

1) **Excel bases data driven SOAP UI framework developed by EPAM (At Alliance time):**

2) **Non-Delegated automation suite developed using Cucumber, Java-Selenium:**

**Excel bases data driven SOAP UI framework developed by EPAM (At Alliance time):**

1) Framework set up = Cost of developing + Frame work setup= 300+2 hours=302 hours

2) Every day we execute nearly 580+ test cases using this framework

3) Each test case take 10 min to develop so 97 hours to develop suite

4) Using automation it will take 4 hours to execute and results analysis (Worst case).

5) Execute this manually it takes 29.35 hours(Considered one test case will take 3 min, all test data ready for each test case and all test cases are PASS).

6) Project duration - Executing suites since three years and adding one more years so total project duration is 4 Years.

Cost of manual testing= 146.75(29.35\*5 days) per week \* 4 years \* 52 weeks = 30524 (9651.2 man-)hours

Framework set up + existing test case development =302+97 =399 hours

Cost for new test case = approximately 1 test case for 1 week so 10 min \* 52 weeks (Next one year) = 9 hours

Automated test execution & result analysis = (4\*5) 20 man hours per week \* 4 years\* 52 Weeks =4160

Automated tests development cost=

30524-(399+4160) 30524- 4559

ROI = -------------------------------- = -------------------- = 569 %

399+4160 4559

**Non-Delegated automation suite developed using Cucumber, Java-Selenium:**

**Cost of Automation testing:** Total test cases developed are 12

Daily smoke: (6 cases \* 3 min) 18min \* 5 days \* 3 years \*52 weeks =(14040 min) 234 hours

Monthly regression: (12 cases \* 3 min) 36 min \* 12 months \* 3 years = (1296 min) 21.6 hours

Framework set up + scenario development = 100 hours

Total cost of automation Testing = 234+21.6+100 = 355.6

Cost of Manual Testing:

Daily smoke: (6 cases \* 7 min) 48 min \* 5days \* 3 years \* 52 weeks = (32760 min) 546 hours

Monthly Regression: (12 cases \* 7 min) 96 min \*12 months \* 3 years = (3024 min) 50.4 hours

Total cost of Manual testing = 546+50.4 = 596.4

596.4-355.6 240.8

ROI = ---------------------- = ---------------- = 67.7 %

355.6 355.6