Introducing Automation

Into a Large Organisation

Chris Lawn
Test Consultant

About me

Tool Selection

Building an Automation Ecosystem, Clare McLennan 2014

http://www.anztb.org/userfiles/files/CLARE_BuildinganAutomationEcoSystem.pdf

The commitment to automation like a gym membership

You have the membership (tool) now what?

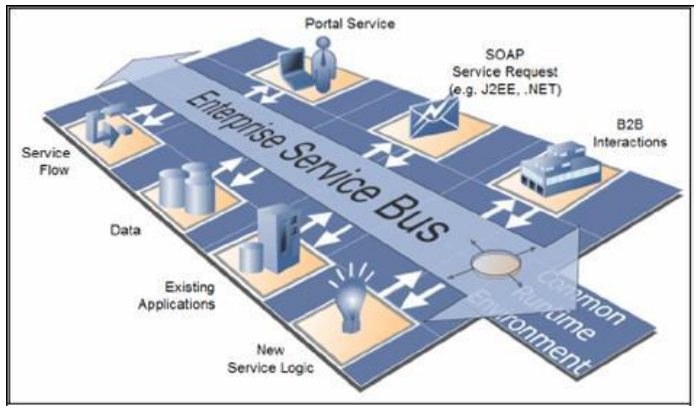
- Time commitment
- Extra nutrition
- Extra gym gear and cloths
- Fuel for the car to get there
- Schedule for when you attend
- Training Program
- Going after hours

Test Automation: A Story Lost in Translation

http://www.anztb.org/userfiles/files/ANZTBCanberraSIGiST24March2012TestAutomationColinCherry.pdf

The Landscape

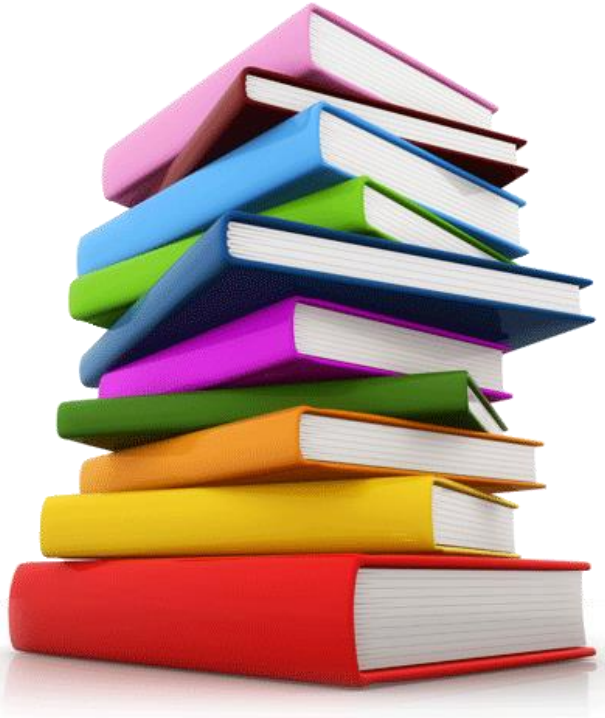
Tools for manual testing:



Oracle
SQL Developer

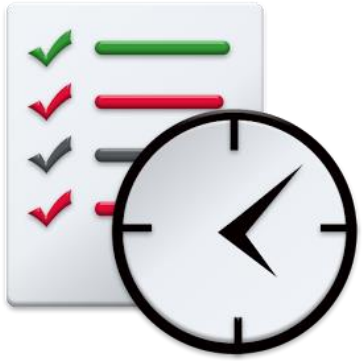
Start Automating ….

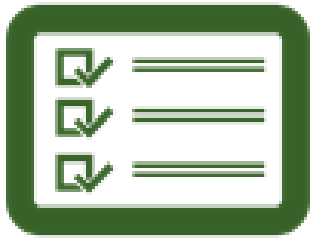
Seeking Help



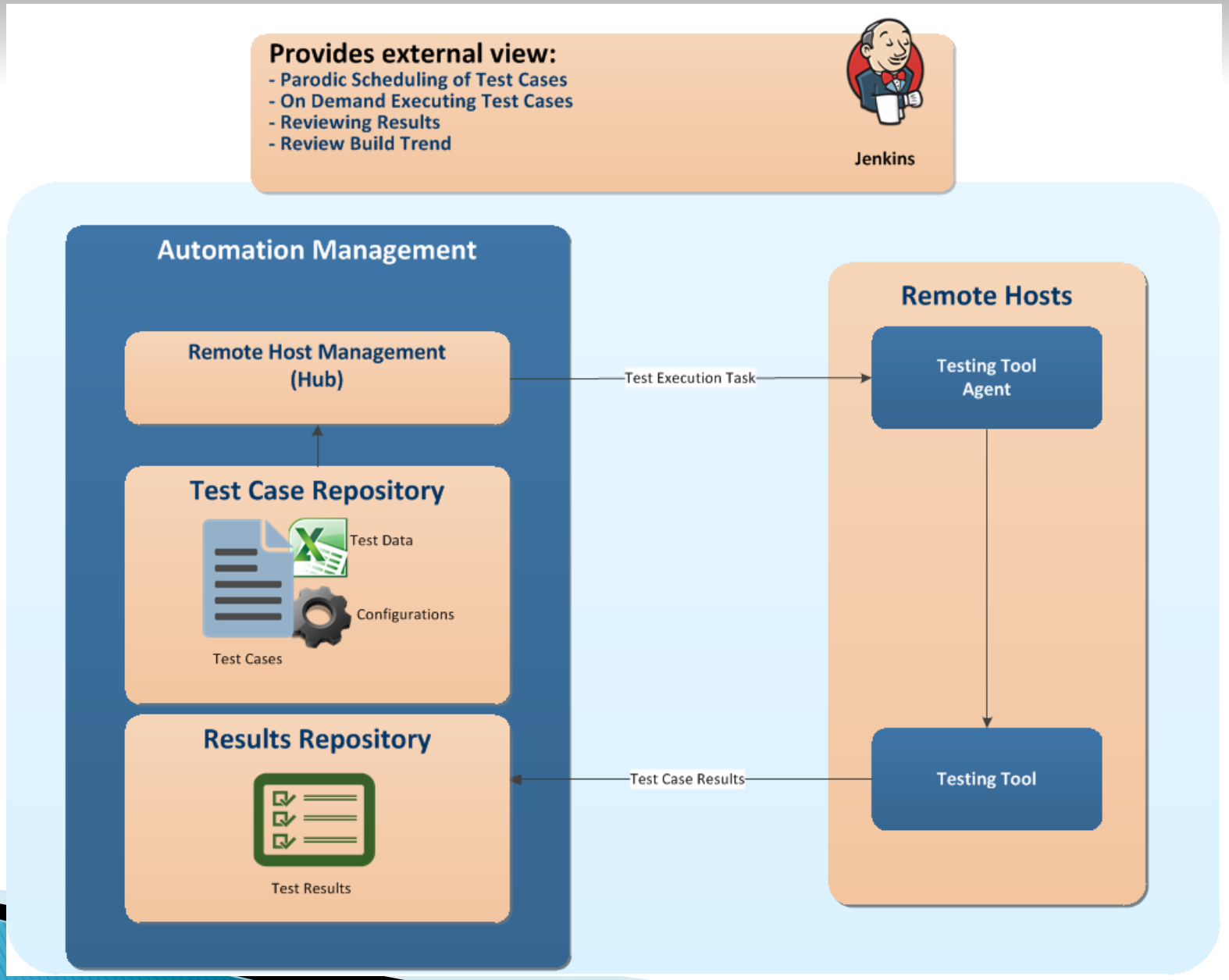
Google

Pieces of the automation puzzle

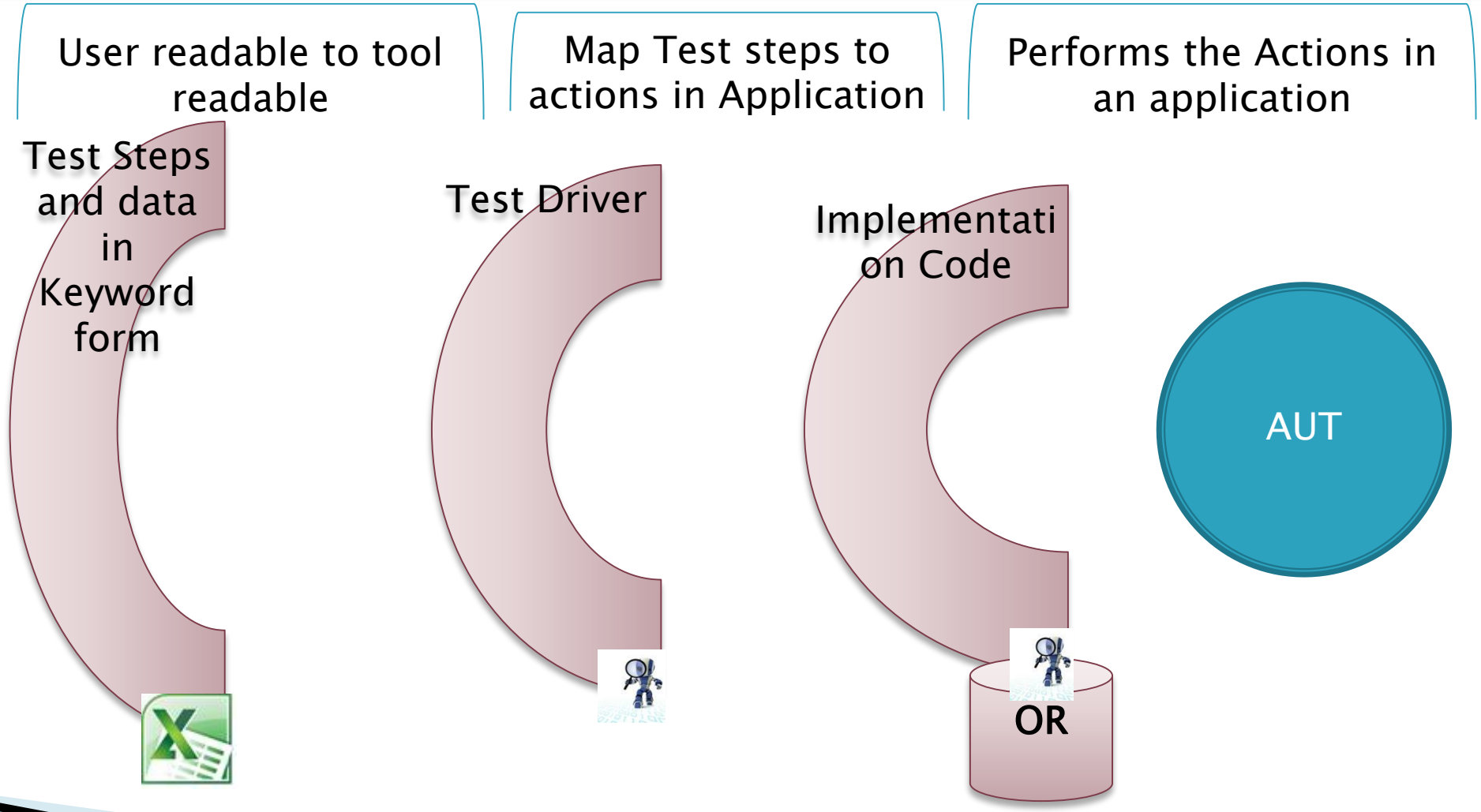




High Level Framework

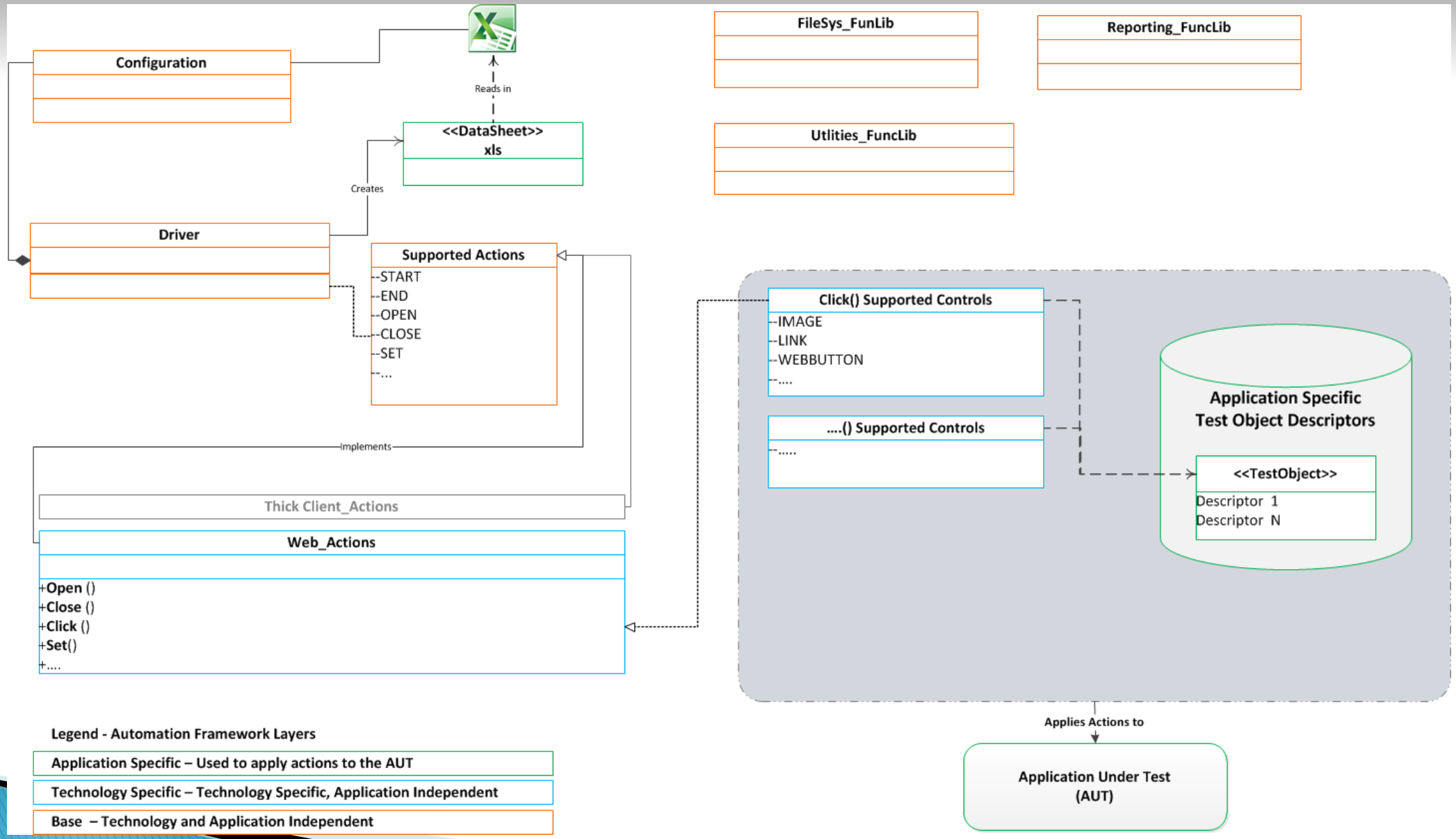


Layered Automation Abstraction



The onion concept - http://joecolantonio.com/testtalks/03-selenium-automation-framework

GUI Keyword Framework



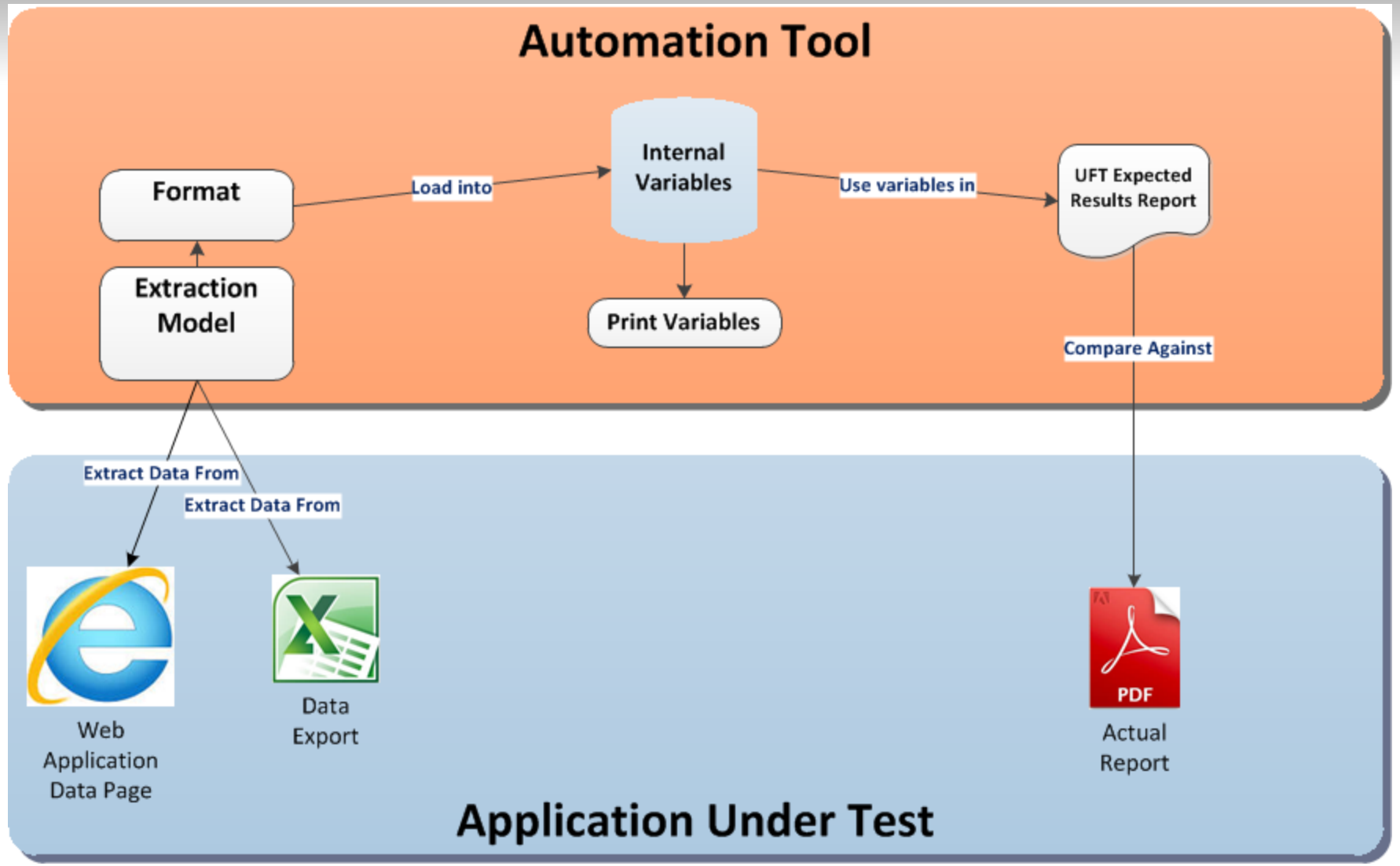
Bumps along the way

Things I have seen and heard
Automation tried before and failed
Its good in theory not in practice
Not enough time to automate
Too many Environment Issues
Too Busy to help with the solution
Wants automation but not willing to commit

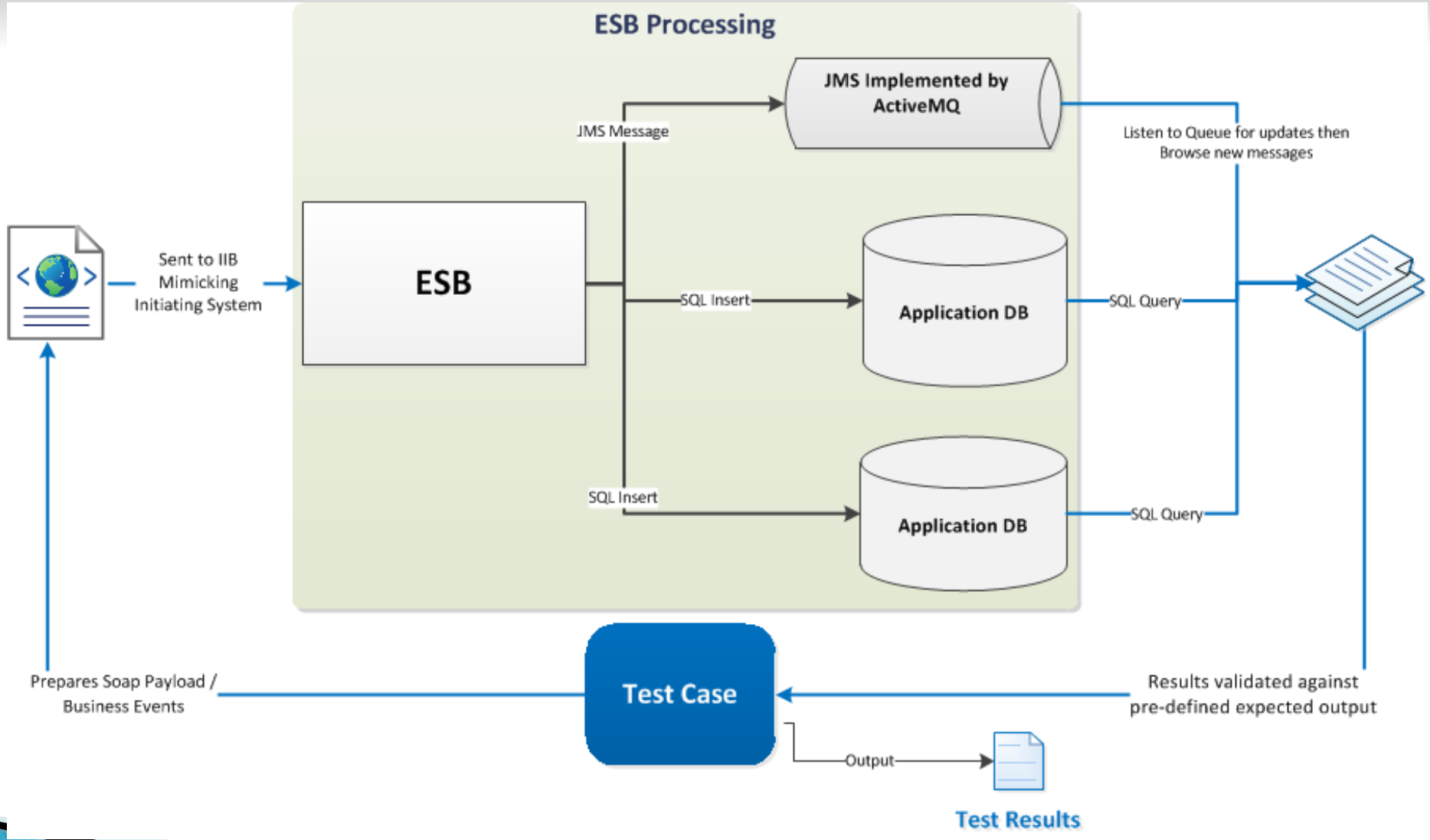
Automation Pinball

Promoting Automation

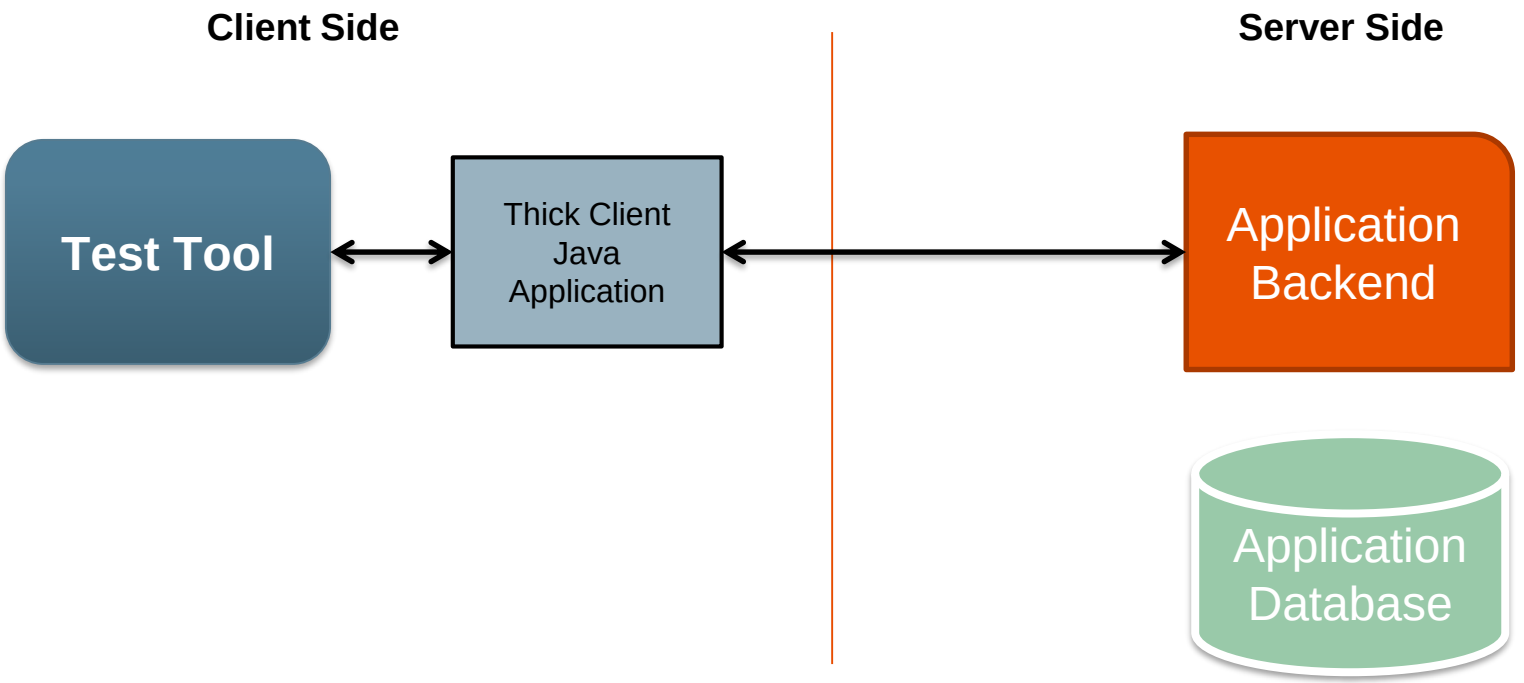
GUI: PDF Report Regression Testing



API: Data Flow Regression



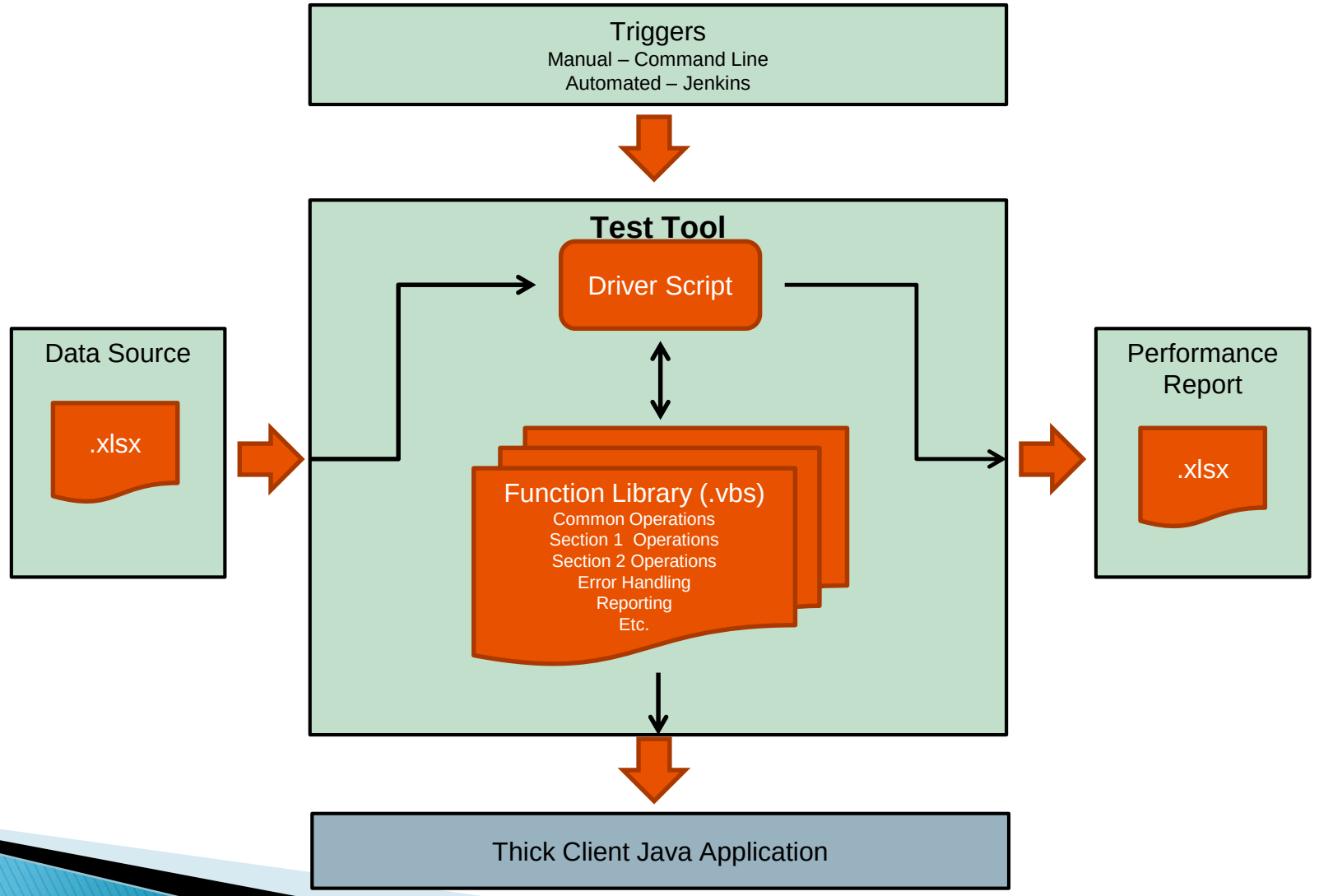
Synthetic Transaction Timings



Transaction Times Record in a Spreadsheet

Performance monitored by a separate Monitoring Tool

GUI: Synthetic Transaction Timings
Client Side Framework

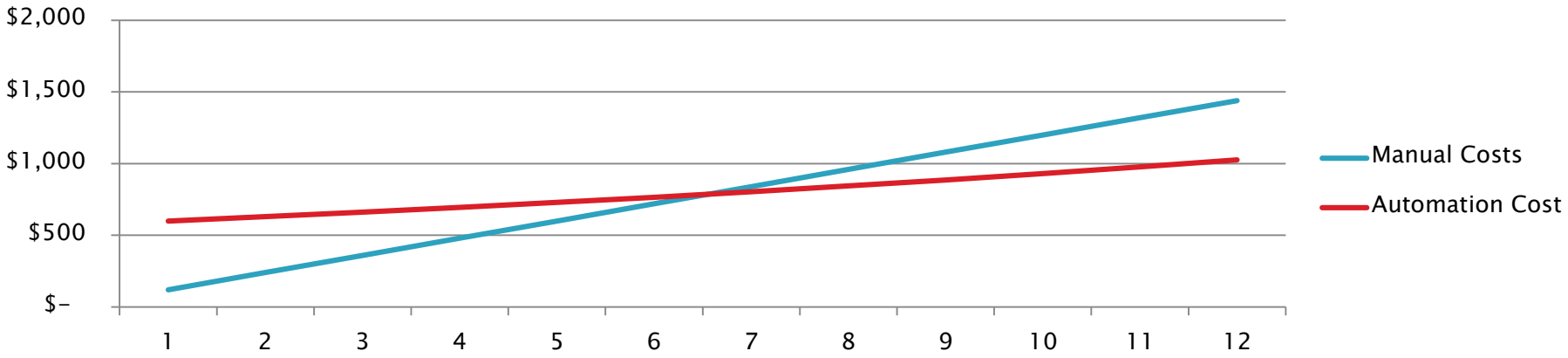


Automation Benefits

- Reduced out of hours work required and repetitive tasks from skilled people
- Reduced likelihood of production incidents by increasing pre-production test coverage
- Detection and notification of severe fundamental errors – e.g. Production Checks after maintenance tasks
- Reduce development costs by detecting defects earlier in the development process
- Reduced end user impact and non-productive time through early and proactive defect detection and notification
- Run Regression Testing in critical applications and business flows, earlier and more often

Automation Benefits

ROI using an example application to show commercial value



- Requires regression every month. Takes 4 staff days per month at $30per day (put your real daily rate in here).
- Automation build cost is 4 staff weeks at the same rate.
- Assume maintenance of 5% of build cost per month
- Saving of about 29% for that application per year
- Also able to same run regression suite weekly or nightly (increased ROI)

Lessons Learnt

- The Automation Tool is only one piece of the puzzle
- Lots of up front talking to people is required
- Everyone is busy – you have to follow up and be persistent
- Environment stability is a pre-request for automation success
- Need to quantify current state to show hard (commercial) value
- Benefits need to be translated into stakeholder language

Questions