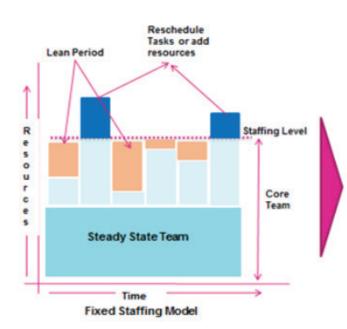


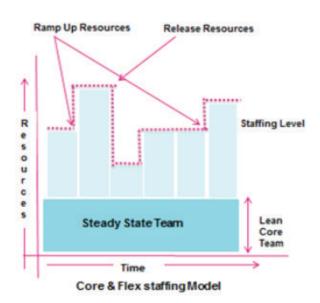
TRANSACTION BASED MODEL for OUTSOURCING (TMO)

Bring more value to both client & service provider

A "pay-per-use" model based on actual executed transactions which help you stop worrying about resource utilization and release management bandwith

Operation Model





Lean Core team (1 PM + Test Leads): paid as fixed price, focus on management jobs and test planning

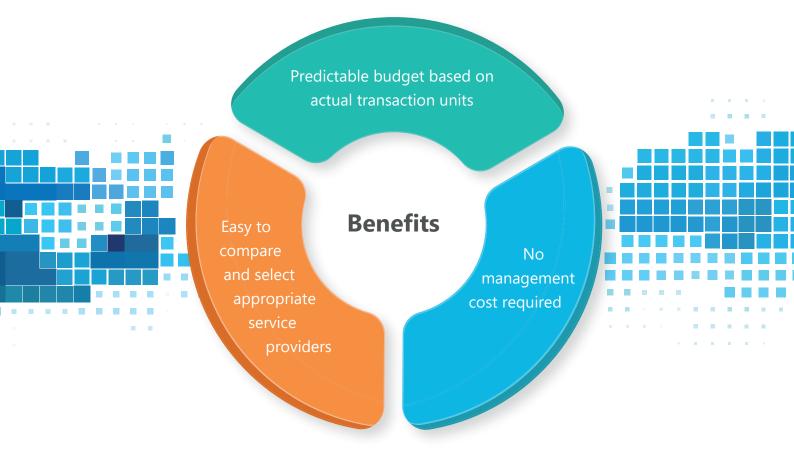
Flex/Extended team: flexibly ramped up and paid based on actual executed transactions

When to apply

Projects can be broken down into a set of measurable transaction units

When in your projects, volume of transactions vary substantially over short spans of time

Service provider has multi projects or big project in required domain



Transaction Unit Types

Test Case Design

- Feature/Coverage Investigation
- Test Plan Design
- Test Case Detail Design
- Test Case/Test Plan Review

Test Case Automation

- Automation Environment setup
- Test Case Scripting
- Script Review
- Script Maintenance

Test Case Execution

- Test Case Execution
- Defect Report
- Defect Retest
- Test Summary Report



Pricing Rule (as an example in Telecom VoIP project)

Flex team

Transaction Base Volume (in #hrs/mon) is defined prior to project start

Total Actual Transaction Volume (in #hrs/mon) must be higher than or equal to 70% of Base Volume

Pricing Rule for different Test Levels:

| Transaction Units (TU) | Unit Test | | | | Product/Feature Test | | | | Solution/Integration Test | | | |
|--|---|--------|---------|--|----------------------|--------|---------|---|---------------------------|--------|---------|---------|
| | hrs/TU | #\$/TU | #TU/mon | hrs/mon | hrs/TU | #\$/TU | #TU/mon | hrs/mon | hrs/TU | #\$/TU | #TU/mon | hrs/mon |
| TC Design | 0.33 | 6.5 | Α | A*0.33 | 0.5 | 10 | Α | A*0.5 | 0.75 | 15 | Α | A*0.75 |
| Auto Test Script Develop | 1 | 20 | В | B*1 | 1.5 | 30 | В | B*1.5 | 2 | 40 | В | B*2 |
| Auto Test Script Maintenance | 0.5 | 10 | С | C*0.5 | 0.5 | 10 | С | C*0.5 | 0.75 | 15 | С | C*0.75 |
| Manual TC Execution | 0.5 | 10 | D | D*0.5 | 1 | 20 | D | D*1 | 1.5 | 30 | D | D*1.5 |
| Auto Test Script Execution/Analysis | 0.25 | 5 | E | E*0.25 | 0.25 | 5 | Е | E*0.25 | 0.4 | 8 | Е | E*0.4 |
| Defect Retest | 0.5 | 10 | F | F*0.5 | 1 | 20 | F | F*1 | 1 | 20 | F | F*1 |
| Total volume (hrs/mon) | X =(A*0.33+B*1+C*0.5+D*0.5+ E*0.25+F*0.5) | | | X =(A*0.5+B*1.5+C*0.5+D*1+ E*0.25+F*1) | | | | X =(A*0.75+B*2+C*0.75+D*1.5 +E*0.4+F*1) | | | | |

Our Capability

Experience: 22+ years in software testing with ODC/Fixed price model, 10+ years in Transaction Based model

Domain coverage: Telecom, Network, Automotive, Healthcare, Finance, E-commerce, Education, IoT/Embedded Software

1000+ Software testers across different software domains

Experienced all Test Types: Manual Test, Automation Test, Load/Performance Test, Traffic Test, Security Test, NFV/Cloud Test, **API Test**

Case Study



Project: VoIP Application Server Automation Testing



Testing service: Automate Call processing and Call services Test Cases



Test Level: Solution Regression Test



Technology: VoIP, SIP, SIPp, RTP, IMS, SOAP/REST API, TLS, NFV/Cloud



Automation tool: in-house tool developed by customer, Perl scripting



Team structure: > 1 Team Lead (FTE based) - 3200\$/mon

> Flex team: 3-5 members



Transaction Units under coverage:

| Transaction Units (TU) | Solution Regression Test | | | | | | | | |
|-------------------------------------|--------------------------|--------|---------|---------|--|--|--|--|--|
| | hrs/TU | #\$/TU | #TU/mon | hrs/mon | | | | | |
| Auto Test Script Develop | 2 | 40 | 200 | 400 | | | | | |
| Auto Test Script Execution/Analysis | 0.4 | 8 | 800 | 320 | | | | | |
| Auto Test Script Maintenance | 0.75 | 15 | 100 | 75 | | | | | |
| Total volume (hrs/mon) | | | | 795 | | | | | |
| Baseline Volume (hrs/mon) | | | | 800 | | | | | |

- ② TMA Tower, Street 10, Quang Trung Software Park, District 12, Ho Chi Minh City, Vietnam
- http://tma-innovation.center/
- © 028.3997.8000 (ext: 5945)