

# QA Leadership Offsite Oct '17 - Agenda

Thursday, September 21, 2017 9:19 PM

- 1) QA vision - general overall vision of what QA is at FactSet
- 2) QA Goals and Objectives for 2018
- 3) QA Operating Principles
  - a. Examples....
    - i. We are relentless in our pursuit of defects in our FactSet Products
    - ii. We are 'performance without compromise' (quick and efficient, thorough and consistent)
    - iii. We validate each Product's quality characteristics (functionality, security, and performance)
    - iv. We collaborate deeply with Product Development and Engineering – to know our products and projects
    - v. We provide transparent feedback – so FactSet can make informed decisions
- 4) Metrics
  - a. QA Dashboard
    - i. Metric themes....(consider both product and process)
      - 1) Automation
      - 2) Organization demographics ideal state
      - 3) Attrition
        - a) Attrition early warning mechanism
      - 4) Hiring
      - 5) Training and career development
      - 6) Bug counts: stage of release cycle where bug was found (i.e. prebuild/edge/post-release)
      - 7) Release time
- 5) Ideal HYD Org Structure
  - a. Title framework
  - b. Team setup: # of people a TL should manage at a max or min
    - i. Criteria
    - ii. Responsibility
- 6) Organizational Development
  - a. Key Talent
  - b. Nine box
- 7) CPP
  - a. Re-write
- 8) Professional Development
  - a. Yours
  - b. Your teams
- 9) Book Club - An event where we as a team read chapters of a book and debate on same
- 10) Promotions process - should it be with 1 - 2 managers or continue the way we are?
- 11) Certifications on Testing, Automation and fundamentals for everyone
- 12) Automation Strategy
  - a. Training an

Metrics Dashboard for SBU and All QA  
Goals  
Vision  
Operating Principles  
CPP  
Automation Strategy

- 13) From Kranthi
  - a. QA Training Synopsis

Updated ppt



QA Training  
Synopsis v1

Leftover items from 10/13 meeting:

=====

**Training courses that need to be realigned.**



RE Eligible  
criteria fo...

**Best Practices and Action items:**



Best  
Practices ...

**Hired from industry and their experience:**



industry  
hires\_Exp...

- 14) CTS QA
  - a. Eric to talk how he is creating CTS QA - Eric
- 15) Portware QA
  - a. Overview of Portware QA from Sushree - Sushree

Area of focus			
Metrics	<p>Automation</p> <p>Percent automated</p> <p>Percent automatable</p> <p>Test coverage</p> <p>Requirements</p> <p><b>Code coverage</b></p> <p>People</p> <p>Attrition</p> <p>LC/HC</p> <p>Avg. Tenure</p> <p>Experience</p> <p>Test suite</p> <p>Increase coverage</p> <p>Decrease or revamp</p> <p>What do we need to keep consistent and where can we be flexible? i.e. SBU</p> <p><a href="https://is.factset.com/BI/ExecDB/#/product/qainventory">https://is.factset.com/BI/ExecDB/#/product/qainventory</a></p> <p>Prebuild testing metrics (signoff)</p> <p>Automation bugs (Terrence CLP)</p>	<ul style="list-style-type: none"> <li>• <b>Rework Effort Ratio</b> = (Actual rework efforts spent in that phase/ total actual efforts spent in that phase) X 100</li> <li>• <b>Requirement Creep</b>= ( Total number of requirements added/No of initial requirements)X100</li> <li>• <b>Schedule Variance</b>= ( Actual efforts – estimated efforts ) / Estimated Efforts) X 100</li> <li>• <b>Cost of finding defect in testing</b>= ( Total effort spent on testing/ defects found in testing)</li> <li>• <b>Schedule slippage</b>: (Actual end date – Estimated end date) / (Planned End Date – Planned Start Date) X 100</li> </ul> <p>From &lt;<a href="https://www.guru99.com/software-testing-metrics-complete-tutorial.html">https://www.guru99.com/software-testing-metrics-complete-tutorial.html</a>&gt;</p> <p><a href="https://www.gasymphony.com/blog/64-test-metrics/">https://www.gasymphony.com/blog/64-test-metrics/</a></p>	
Tellus	<p>Stable framework</p> <p>Process for handling Tellus issues</p> <p>Review with ARB (Engineering)</p>	<p>Need hardware/software to handle the load that we will be putting on the framework</p>	
QAI	<p>Need something similar to this:</p> <p><a href="http://applicationpd.factset.com/">http://applicationpd.factset.com/</a></p> <p>Should be the landing page that you get when you select Quality from the dropdown</p>	<p>We should not do anymore integration of Tells/BDD/JEP etc. until we finalize Tellus 2.0 and hardware and it is stable. (should be priority #1) We should instead focus on a landing page for the horizontal team and SBU's</p> <p>Org structure, best practices, mission statement, etc.</p>	
Hyderabad	<p>Hiring</p> <p>ADP/SDP</p> <p>Campus hiring</p> <p>HR</p> <p>Recruiting</p> <p>Training</p> <p>Comp FY18</p>		
CPP	<p>Stateside</p> <p>Hyderabad</p>		
Vision and Mission Statement	<p>Need mission statement</p> <p>Also need to document QA workflows across the board.</p>	<p>We should include Content QA in this since there are often content critical RPDs and having documented testing practices will help during those situations</p>	
Critical's	<p>Do we know if QA is going to handle this yet?</p>		
Communication	<p>How do we want to represent QA to the company?</p>	<p>Meetings? (what did Don do? I missed that meeting) Web page? e-mails?</p>	

# Offsite\_Onsite Meeting Notes (2017)

Wednesday, November 08, 2017 4:02 PM

## QA Vision (as provided by Bruce)

1. Quality Assurance is a collaborative partner who provides efficient and rigorous QA testing ensuring that FactSet delivers the highest quality products and services to our clients with optimal speed to market.
  - a. "QA accomplishes this mission everyday through a highly talented work force utilizing standardized processes."
2. Quality Assurance is a collaborative partner who strives to continuously deliver the highest quality products and services to market with optimal speed, ensuring the best client experience possible.

## Original Vision by Team

1. Quality Assurance, the collaborative partner with a highly talented workforce utilizes standard processes to continuously deliver highest quality products and services through efficient and rigorous testing with optimal speed to market ensuring the best client experience possible.

## Our Greatest Asset is we are "One QA Team" we....

- o cover for each other in a pinch
- o operate as a unified QA community
- o have each other's backs
- o finish each other's sentences
- o share ideas, share successes, share lessons learned
- o learn from each other's mistakes
- o are a QA and testing team covering 5 SBU's and 2 horizontals
- o have a global workforce of over 250 associates with presence in US, UK, France, India
- o deliver test automation in many forms to drive efficiencies across all teams

## We are "One QA"

## DESIRED OUTCOMES

1. QA Vision
  - o Build QA Vision
  - o Define QA Principles
  - o Common Achievable goals
  - o Work together by knowing each other
  - o Well defined Mission statement
  - o QA Department strategy for next 1-2 years
  - o Biggest Hindrance to FactSet's growth of QA
  - o Ideas on direction of QA holistically over 1-2 years
2. Communication Across QA and Stakeholders
  - o How to improve communication and coordination across QA teams of Different SBUs
  - o In FactSet, how we represent QA as a team
  - o Participate and Have fun
3. Best Practices
  - o Consistent bug tracking tools and Methods
  - o Testing Workflow
  - o More than testing QA is Insight, Collaborator, Motivator
  - o Dedicated team to develop tools and APIs to allow testing
  - o With the different SBUs, Roles and Responsibilities of QA as a team in next fiscal year
4. Metrics and KPI
  - o KPI for Testing Outcomes (Common KPIs)
  - o Build QA Metrics Dashboard
  - o Define practices around Hiring and training across SBUs
  - o Ability to track
    - o Resource Allocation
    - o Metrics for Roles/Functions
5. CPP
  - o Consistent CPP across SBU and Horizontal
  - o New CPP with Functional and Technical Career tracks
  - o Team Structure and way forward
  - o Redefine CPP
  - o QA Engineers titles adoption of Hay's group study
6. Automation
  - o Owner of automation Training and R&D
  - o A solid automation Strategy for having resilient test automation inventory

## DASHBOARD

**Theme: Client Bugs** < Currently it is possible to generate it >

- o Client Bugs by app /product/SBU
- o Client Critical by SBU
- o Client bug categorization
  - o Reduction in number of client bugs every 6 months
- o Overall Client defect count

**Theme: Deferred Defects** < Currently it is possible to generate it >

- o Outstanding Bug count in RPD by product

**Theme: App Usage** < Currently it is possible to generate it >

- o Client app usage by product



- Outstanding Bug count in RPD by product

**Theme:** App Usage < Currently it is possible to generate it >

- Client app usage by product

**Theme:** Test Coverage < Currently it is possible to generate it > < High Priority votes >

- Code Coverage < Not possible at this time >
- % Of coverage of Test cases vs code change per release
- Test coverage by apps/product
- Product coverage (similar to Sushree's report)
- Test coverage effectiveness
- Requirement coverage
- App coverage – By requirement by test cases

**Theme:** QA Bug Detection < Currently it is possible to generate it >

- # of QA bugs found by App/SBU
- Jira Bugs < Not possible at this time >

**Theme:** Prebuild Changes – tracker Items < Currently it is possible to generate it >

- Needed by Prebuild
  - QA Signed off
  - # of changes
  - Time Production
  - Frequency of prebuild/per product
- Jira Prebuild < Not possible at this time >

**Theme:** Test Pyramid – 1 R

- % of Automated cases per tool
- % of automated cases per level of testing (Unit, Service, End to end, etc)

**Theme:** Total Manual Test Inventory and Optimization

- Number of test cases added per application
- Number of manual tests by application
- Retirement of test Cases vs Application's planned retirement
- New Test cases created
- Test cases updated

**Theme:** Automation Inventory/Pipeline

- Number of tests automated by application
- Automation progression stats with Goals and Pipeline
- Pace of Script Creation/Automation
- Test Cases Automatable
- Test Cases Automated
- % of test cases that are automated per product
- Automation Leverage by Product
- Number of new automated cases
- Number of automated cases updated
- Number of Script Errors

**Theme:** Test Execution Metrics

- Execution time per test plan
  - Automated
  - Manual
- Test Execution time by release/Product

**Theme:** Tellus Framework

- Test/Jobs run through framework
- Framework downtime
- Jobs by Infrastructure
- Test Not run
- Test/Jobs by area

**Theme:** Test Automation Effectiveness

- Number of bugs found by automation
- Bugs found by automation every 6 months
- Test Effectiveness Month on Month -  $[\text{Bug}/(\text{Bug} + \text{Client Bugs})] * 100\%$
- Bugs found per test plan
- Defect by App
  - Bugs detected – Closed vs Deferred vs Rejected
- Jira Bugs

**Theme:** Environmental Issue

- Inconsistent failures in Automated cases
- Number of Intermittent bugs
- What is causing them, is there a pattern

**Theme:** Team Operations

- RC Health and Risk
  - Bugs found:
    - Bugs found per RC
    - Bugs found in Atlas Iteration
    - Bugs found in Prebuild
    - Bugs found in exploratory testing
  - Phase/Stage where bug was found (Early/Late)
  - Number of Sneaks
  - Number of Emergencies
  - Number of Prebuilds associated with an RC
  - Number of Changes

**Theme:** Team Dynamics

- Diversity and Inclusion
- Hiring Turnaround time
- Time spent on training
- Industry Hire %
- Attrition Rate
- Historical R&R List
- Consolidated /Historical Promotion List

**Theme:** Invalid Bugs/Rejection %

- Number of Misfiled RPDs by Clients
- % of invalid defects missed by test
- Invalid bugs filed by QA
- Number of QA invalid bugs by application
- Test Cases not updated



- Number of QA invalid bugs by application
- Test Cases not updated

## PARKING LOT

1. Application Traceability (to show interdependencies between apps)
2. Intelligent Testing Suite – Rajul
3. BVT testing and Dashboard

## ACTION ITEMS

1. Identify dependencies of Infrastructure – all
2. Identify dependencies of applications – all
3. Build smaller component level test cases – Rajul
  - Develop a training plan to teach associates how to create smaller test cases
  - Develop plan how we get to smaller
  - Develop measures to demonstrate how well the teams are getting to “smaller”
4. Ensure QA in engaged on Infrastructure changes – All
  - Requires interaction with PD and Engineering
  - Requires understanding of infrastructure changes plan
5. Include accomplishments on metrics dashboard – Jim
6. Help change mindset to change from building code that is silo'ed to adoption of a distributed solution – Alisa
  - This requires testing to align to the distributed “way of working”
7. Develop plan to test micro services approach
  - Automation strategy should envelop micro services
8. Schedule QA summit (all QA leads) – Jim
9. Review BISAM with Rajul – Kate
  - Send pac to Sushree
10. Identify QA Champion for Test Environments and Test Environment Tools – Rajul / Alisa
11. Create metrics that measure best practice adoption – Alisa
12. Developer services collaboration – Alisa
13. Standardize ways to measure PA goals within a role – Eyme
14. Create mindset shift to “automate first” – All
  - Interdependencies on PD ; Eng
  - Requires QA proactiveness
15. Automation Innovation – Rajul
  - Where are we today (baseline) against all topics in Rajul's strategy
  - Define metrics to measure how innovation is being implemented
16. Learn and leverage CI pipeline from Portware and BISAM – Rajul and All
17. Develop a plan for PC side automation using Continuous Integration and Delivery – Nkem
18. How do we get the Jira defect data into metrics – Kate
19. Define QA dashboard requirements to CIA – Jim and Rajul
20. QA Individual Contributor identify crisis (stateside vs. HYD) – Kate and Jim
21. Build a roadmap (big blocks) for “blurring the lines”
22. Develop criteria for functional failure vs. test o re-run – Rajul
23. Ensure all projects (infra and app dev) have QA presence at inception phase – all
  - (e.g. open Fin)
24. Establish interaction model and process for infrastructure changes and how QA is engaged (e.g. FCD)

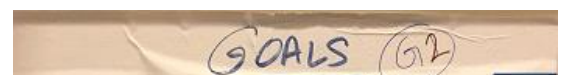
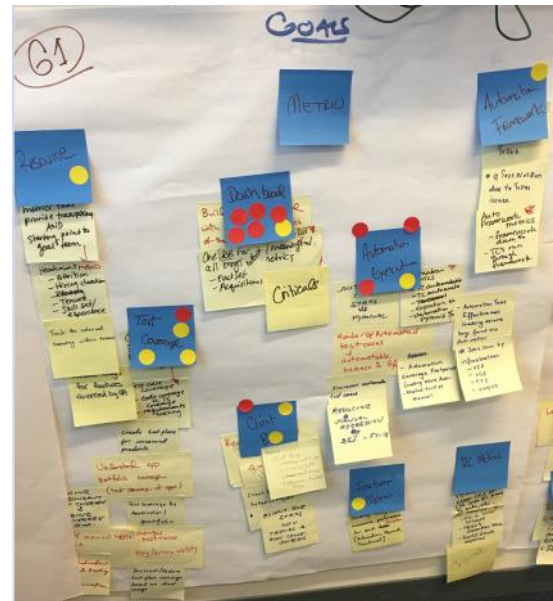




## GOALS (Page 1)

### Metrics:

1. Dashboard - 5 Red votes, 1 Yellow vote
  - Criticals
  - One dashboard for all metrics FactSet and Acquisitions
  - Build a QA dashboard with Performance metrics of the team
2. Automation Execution - 3 Red votes, 1 Yellow vote
  - Automation Inventory Stats vs Manual
  - Number of Automated test cases
  - Number of automatable test cases
  - Increase automation test cases
  - Reducing Manual Regression
  - Automation Metrics
  - ~~Test Case Automatable~~
  - ~~Test Case Automated~~
  - Execution Time
  - Automation Pyramid %
  - Automation Coverage Footprint leading to more automated test cases vs Manual
  - Automation Test Effectiveness leading to more bugs found via Automation
  - Number of jobs run by Infrastructure
    - CID
    - SGE
    - FPE
    - SoapUI
3. Test Coverage – 1 Red vote, 3 Yellow votes
  - Clear line of sight into Product Coverage
  - Prevent bugs for features covered by QA
  - Test Case Coverage
  - Code coverage vs TC Coverage
  - Requirements Tracking
  - Create test plans for uncovered products
  - Understand app portfolio coverage (test coverage of apps)
  - Reducing redundant test coverage and Lowering coverage gap
  - ~~Reduce number of manual tests~~
  - Less redundant manual testing, more automation
  - Test Coverage by Application/Portfolio
  - Code changes vs Test cases; Identify Traceability
  - Increase/Reduce test plan coverage based on client usage
1. Client Bugs: 1 Yellow vote
  - Client bugs detection by App/Portfolio
  - Client bugs by SBU
  - Trends and Root Cause Analysis
4. Resource – 1 Yellow vote
  - Create Automation Metrics that provide transparency and Starting point to Goal team
  - Headcount Metrics
  - Attrition
  - Hiring duration
  - Tenure
  - Skillset/Experience
  - Track the Internal training within Teams
5. Functional Metrics – 1 Yellow vote
  - Identify ways to measure metrics for each role/function
    - Automation
    - Functional/Analyst
    - Manual/Regression
6. Automation Framework – 1 Yellow vote
  - Reduce number of bugs on Tellus
  - Number of Test Not Run due to Tellus issues
  - Framework down %
  - Test Cases run through Framework
7. RC Metrics
  - Communicate RC Metrics such that Engg, PD, etc has clear line of sight into RC times, % Automated, etc
  - Fix in Late Release
  - No Go's duration time
  - Build down Metrics
  - Criticals



- QA Community
- o Criticals

## GOALS (page 2)

### Strategic Initiatives:

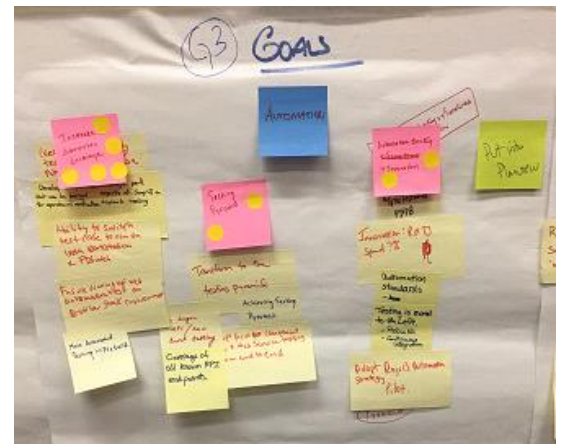
1. Blurring the Lines (2 votes)
  - o One QA Team
2. QAI
  - o FY18 QAI strategy with milestones
3. Test Coverage
  - o Metrics driven automation – leverage machine learning (Sarah Hoffman)
  - o Expand data driven testing across products
  - o Utilize machine learning to drive test coverage
  - o Understand client workflows and incorporate them into test plans
4. Collaboration
  - o QA is involved in all projects (PPM, ARB)
  - o Work with Developer services to ensure all production releases are handled consistently
5. Time to Market
  - o Plan to handle unrealistic deliverables based on demand
6. Release
  - o Formalize release process across all projects
  - o Develop fully isolated test environment to enable execution of test at any time
7. Aligned Goals
  - o Ensure alignment with respective product stakeholder goals
8. Best Practices
  - o Advance implementation and adoption of best practices with metrics
  - o Ensure team adhering to QA best practices by implementing adoption metrics
9. Interdependencies
  - o Define and document application interdependencies
10. Test Infrastructure (5 votes)
  - o Increase the testing coverage of our infrastructure
  - o Understand the current testing infrastructure and document dependencies
11. QA Home Page (4 votes)
  - o Landing page with QA content
  - o Vision, best practices, SBU info
12. QA Community
  - o Build a collaborative QA community that meets once per month
  - o Communicate on QA topics across horizontals and SBU's
  - o Collaborate – share pain points, bring together parties, develop / leverage solutions
  - o Collaborate between different teams within the product to minimize bugs and maximize test coverage



## GOALS (page 3)

### Automation:

1. Increase Automation Coverage (4 votes)
  - o Create BVT and sanity tests and ensure running post release
  - o Develop test cases that are automated which can be leveraged for operational verification
    - Leverage performance aspects of SoapUI to expand scope of testing
    - Ability to switch test case to run on both workstation and FDSWeb
    - Ensure running of Web automation tests on browser stack environment
    - More automated testing in prebuild
2. Test Pyramid (2 votes)
  - o Transform to the testing pyramid instead of inverted
  - o Achieving testing pyramid
  - o Begin API. Low level testing
  - o Coverage of all known API end points
  - o Shift focus to component level and web services testing from end to end
3. Automation Strategy and Innovation
  - o FY18 Automation strategy with milestones
  - o Innovation....R&D spend ? %
  - o Automation standards – testing is moved to left (Prebuilds and Continuous Integration)
  - o Adopt Rajul's automation strategy
4. Put Automation Strategy and plans into PlanView



## GOALS (page 4)

### Human Resources:

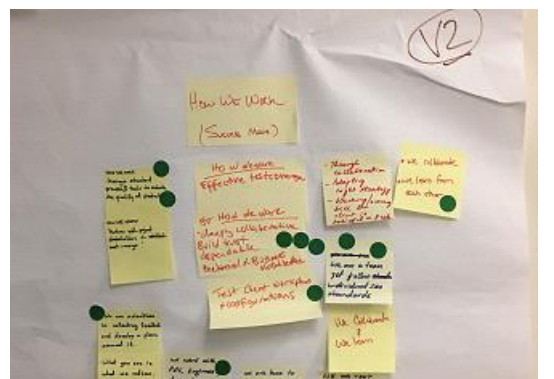
1. CPP overhaul (1 vote)
  - o Rewrite CPP to be simple and all inclusive
  - o Update CPP such that we challenge teams in HYD and bring QA team into the next century
  - o Update CPP such that we give opportunity to resources stateside
  - o Next career path for career growth
2. Hire QA resources to balance the testing of products
3. Resource rotations
4. Reduce attrition in HYD (3 votes)
  - o Reduce attrition by coming up with career options



## 11. QA Town Halls

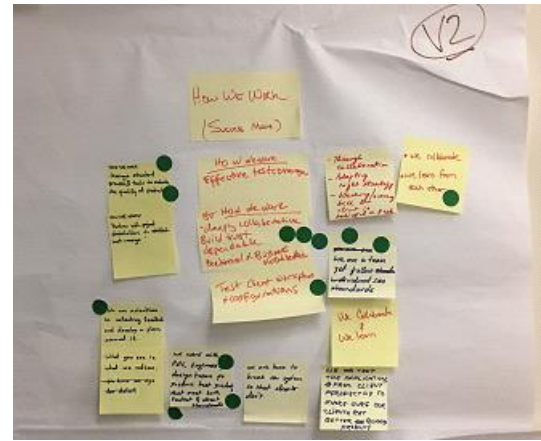
- Complete understanding of workflow
- Cross training
  - Provide technical and business training for team
  - Automation scripts acquire product knowledge and analysts learn more scripts
  - Expand QA roles to be more product / tech based, less function based
  - Cross training on automation tools
  - Encourage individuals to perform hybrid roles, instead of defined roles
  - Automation training for analysts and associates

- Leverage standard process and tools to evaluate the quality of products – OP
- Partner with project stakeholders to establish test coverage
- We test the applications from clients perspective to make sure our clients get better quality product
- We collaborate and we learn
- We are here to break the system so that clients don't
- We are relentless in collecting feedback and develop a plan around it





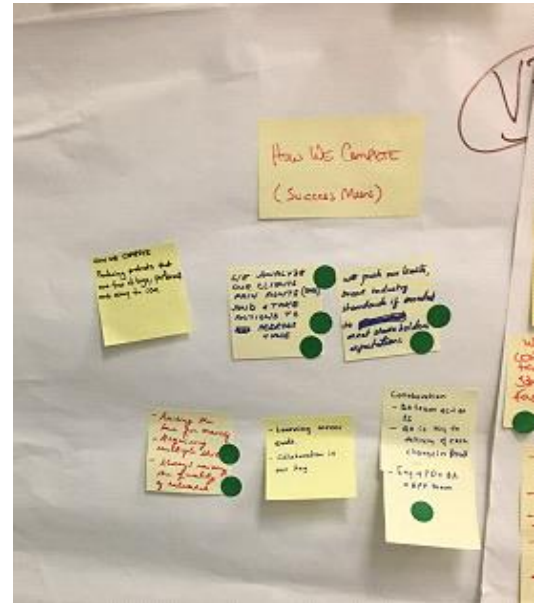
- o highly knowledgeable and hardworking people working towards company goals or a quality product
- o Our people mirror various skillsets, backgrounds and experiences – OP
  - We are thoughtful about our people's aspirations and create opportunities – OP
- o We have an eye for detail - OP



## Values (page 2)

### How We Work (Success Means)

- o Leverage standard process and tools to evaluate the quality of products – OP
- o Partner with project stakeholders to establish test coverage
- o We test the applications from clients perspective to make sure our clients get better quality product
- o We collaborate and we learn
- o We are here to break the system so that clients don't
- o We are relentless in collecting feedback and develop a plan around it
- o What we test is what we refine
- o We work with PD's, Engineers, design teams to produce best products that are meet both FactSet and client standards – OP
- o Test client workflows and configurations - OP
- o Deeply collaborate; building trust with dependable technical and business knowledge – OP
- o Effective test coverage
- o Through collaboration
- o Adapting the right strategy
- o Working and owning till the client is satisfied
- o We are a team yet we follow individual SBU standards – OP
- o We collaborate and we learn from each other - OP



## Values (page 3)

### How We Compete (Success Means)

- o Producing products that are free of bugs and easy to use
- o Raising the bar for oneself - OP
- o Acquiring multiple skills - OP
- o Always raising the quality of releases – OP
- o Learning never ends
- o Collaboration is our key
- o We analyze our clients pain points (bugs) and take actions to address these – OP
- o We push our limits by utilizing industry standards to meet stakeholder expectations – OP
- o QA team act as shared services – OP
- o QA is key to delivery of each change in production – OP
- o Eng + PD +QA = App Team - OP

## Values (page 4)

### What we Aspire to (Success Measures)

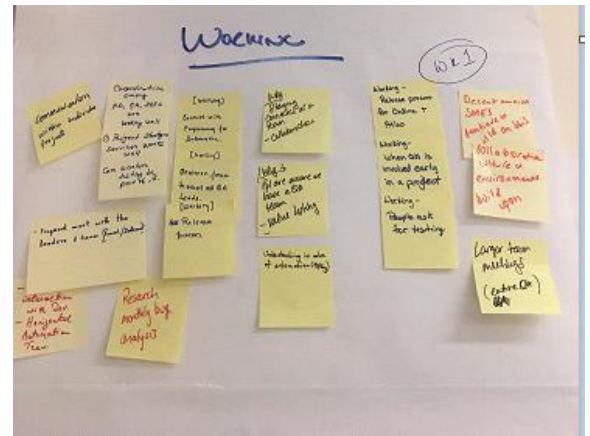
- o Be the experts in Automation - OP
- o People seek our guidance and look for our insight
- o All teams ask for QA
  - o Testing
  - o Insight
  - o Automation
  - o Knowledge of SDLC
- o Continuous Integration Testing via Automation
- o Fast and Stable Products and Services - OP
- o Adapting latest industry standards
- o Bringing in better metrics
- o Growing more technically
- o Working on new development practices along with engineering
- o Fast test execution to enable early detection of Bugs - OP
- o Providing foundation to evaluate a product's production readiness
- o We learn from our mistakes and take pride in sharing our learning to prevent others from making same mistake
- o Going the extra mile to deliver the best - OP
- o Have metrics that demonstrate what we do and how well we do it - OP
- o Knowledge of the Test Infrastructure - OP
- o We stay true to our core values and standards of QA



### What we Promise (Success Measures)

- o Evolve our testing environment and processes to be efficient and effective - OP
- o Build trust and expertise in testing and Release Process
- o Build and automation infrastructure that is scalable and useable by all
- o Prevent bugs from going to our clients - OP
- o We invest in our people and the people commit to invest in themselves
- o Meeting client expectations
- o Good career opportunities
- o Rewards
- o We promise to deliver quality product in fastest time
- o Promote process that leads itself to a more stable/quality product
- o Provide feedback on the quality/usability of a release/product
- o We promise very best products from FactSet both in quality and Stability
- o Transparent and Objective feedback
- o Deliver highest quality product and services to Clients
- o Recognize the talent and engage them wisely
- o Delivery Excellence
  - o Highest Quality product delivery - OP

- o Automation scale, Effectiveness - OP
- o Intelligent test suite
- o Automation first
- o Right test coverage for important app
- o Operational Excellence
  - o Best Practices
  - o Balanced team onsite offsite ratio
  - o Pyramid
- o Predictive vs Reactive - OP
- o Well measured Execution and Defined Outcome - OP
- o Optimally leveraged team

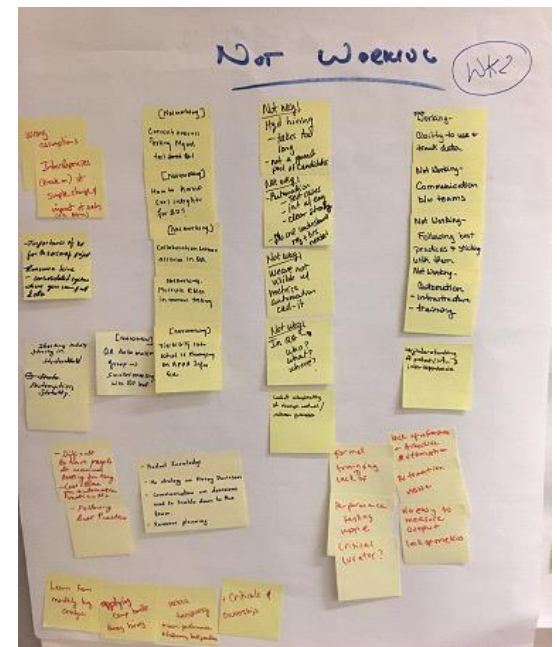


#### What's Working Today in QA?

- o Communication within individual projects
- o Close interaction with development
- o Horizontal automation team
- o Frequent meetings with the leaders and team (formal and informal)
- o Research monthly bug analysis
- o Connect with engineering for automation
- o Common forum to meet all QA leads
- o Release process
- o Staying connected as a QA team
- o Collaboration
- o People are aware we have a QA team
- o Value testing
- o Understanding in value of automation by our PD and Eng peers
- o Release process for online and atlas
- o When QA is involved early in projects
- o People ask for testing
- o Coordination amongst PD, Eng and QA
- o Project strategic services
- o Decent amount of SME's
- o Collaborative culture and environment to build upon
- o Larger team meetings (entire QA)

#### What's Not Working Today in QA?

- o Wrong assumptions
- o Knowing the app and infra interdependencies of a simple change and impact of such (e.g BAML)
- o Lack of product and infra interdependencies
- o An understanding of the importance of QA
- o No strategy on hiring decisions
- o HYD resource hiring (takes too long, candidate pool is limited)
- o Shorting the time to hire industry candidates in Hyderabad
- o Resource planning
- o Consolidated systems where one can pull data
- o Automation stability
- o Automation infrastructure
- o Automation training
- o Automation noise
- o Lack of infrastructure and architecture for automation
- o Less time for automation verticals
- o QA automation group (smaller meetings)
- o Difficult to have people do manual testing for long period of time
- o Following best practices and sticking with them
- o Product knowledge
- o Communication on decisions need to trickle down to the team
- o Communication between teams
- o Learning and acting from monthly bug analysis
- o Applying comp bands consistently during HYD hiring
- o Metrics transparency (team performance, adherence to best practices)
- o We are not transparent with automation metrics
- o Ownership by QA heads for all criticals and SWE
- o Critical curator
- o Lack of understanding of change control and release processes
- o Formal training
- o Performance testing
- o No easy way to measure output (lack of metrics)
- o Ability to use data to track and trend



#### What Others Should Contribute

- o Communicate
- o Open participation
- o Share experiences which we can benefit from



## What Others should Contribute

- o Communicate
- o Open participation
- o Share experiences which we can benefit from
- o Bring QA on agenda for all engineering projects
- o Best practices
- o Ability to enforce testing standards by a defined scope (others outside QA team)
- o All QA teams best practices brought together that benefit clients and how FactSet QA delivers testing
- o How each QA team functions and sharing of the same
- o Testing Infrastructure
- o Testing infrastructure support for evolving app architecture
- o Training and knowledge
- o Knowledge of product
- o Hybrid testing role skillset
- o Train our teams to be SME of product and technical architecture
- o Feedback
- o Ideas how to measure success
- o How to achieve our vision
- o Strategic initiatives teams are working on in their areas or SBU. What has worked, what has not worked
- o Automation
- o Rajul's vision on automation strategy

## Obstacles

- o Testing Infrastructure
- o Automation infrastructure is strong
- o Testing infrastructure that is supported
- o Automation is ingrained in all areas not just QA
- o Communication and Engagement
- o Lack of engagement
- o QA is part of discussions of company vision
- o QA as a function os united
- o Not providing honest and timely feedback
- o Not being open
- o Not being open or fear of bad or incomplete idea
- o Assumption others know about a topic you want to discuss (not providing context)

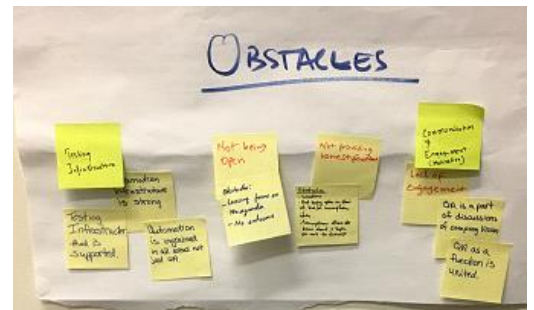
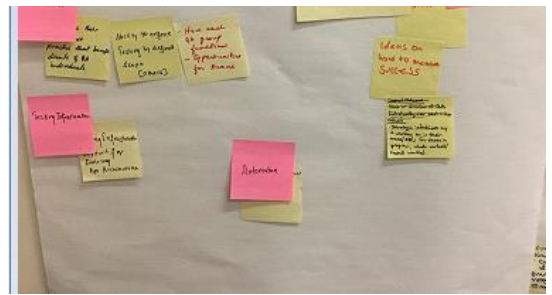
## The How - "Our QA Function"

How do we **grow the momentum the QA Function** has built up.....

We will **commit** to having and doing the following:

1. Have shared and common Performance Appraisal Goals
2. Attend QA Function Leadership Weekly Meetings
3. Create a monthly QA Community meeting
4. Develop and maintain a Global QA Function web page
5. Carry-out quarterly QA Town Halls
6. Participate in Team Building events
7. Revisit the offsite goals and desired outcomes
8. Innovate and share together
9. Implement Automation
10. Agree and adopt QA "Best Practices"

From <<https://outlook.pc.factset.com/owa/>>



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Friday, November 10, 2017 2:14 PM

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