

Engg - AlphaOri

Shift Left Approach

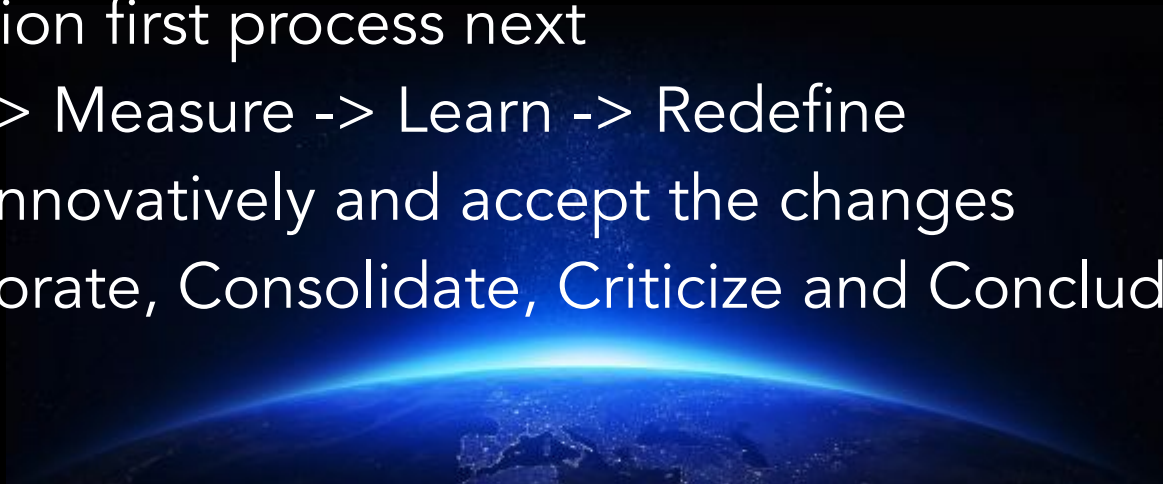
Govi Rajagopal - 11/13/2019

Startup Mindset

Let's Re-engineer our mindset!

Startup - Mindset

- Leverage existing resources
- Sell first, build next.
- Execution first process next
- Build -> Measure -> Learn -> Redefine
- Grow innovatively and accept the changes
- Collaborate, Consolidate, Criticize and Conclude



Startup Mindset - E P C S

E - Execution

P - Process

C - Communication

S - Simplicity

Execution first, Process Next!



Startup QE Mindset

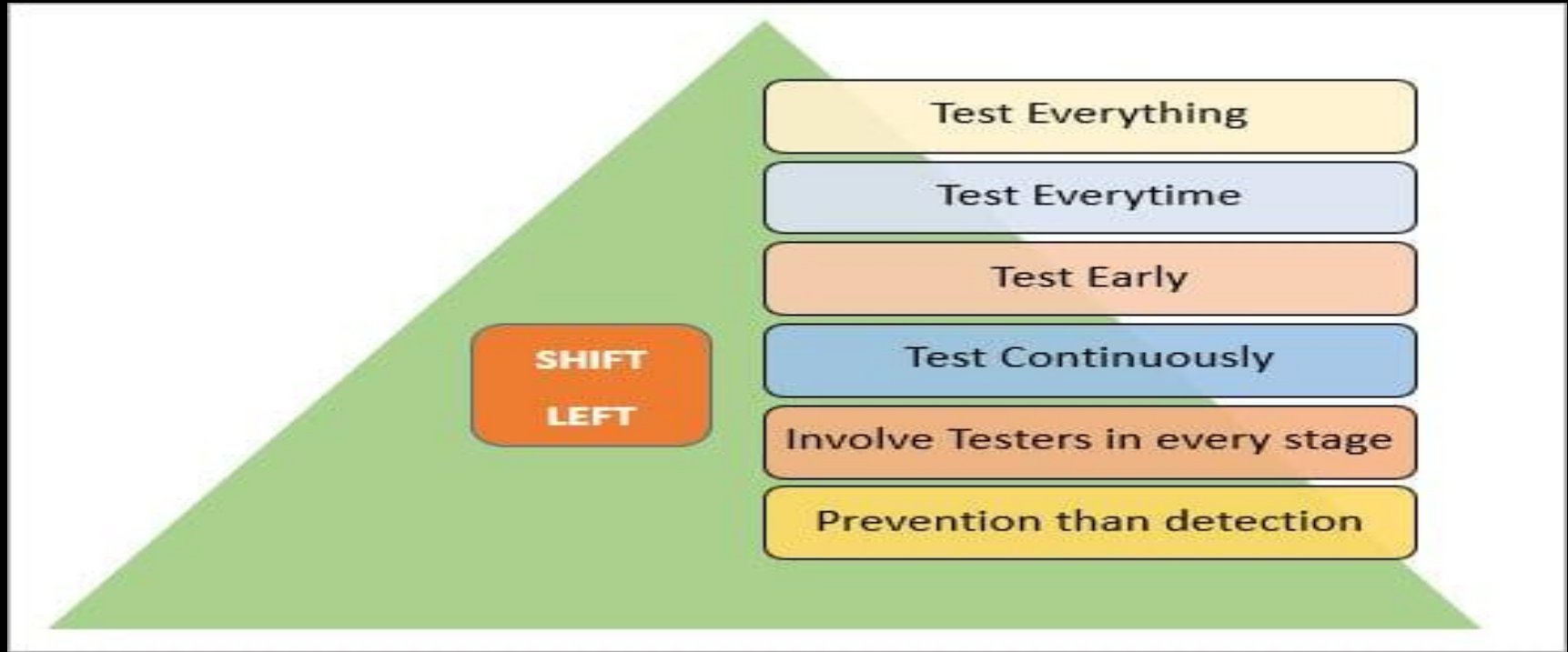


Execution

- Effective execution is required (C,S,S)
- Proper Planning - (Cost, Scope and Schedule - CSS)
- Effective turnaround through collaboration
- Effective turnaround through automation
- Effective turnaround through exit criteria
- Plan ahead for non-functional areas - API for eg.
- Maintain and monitor - CI/CD jobs

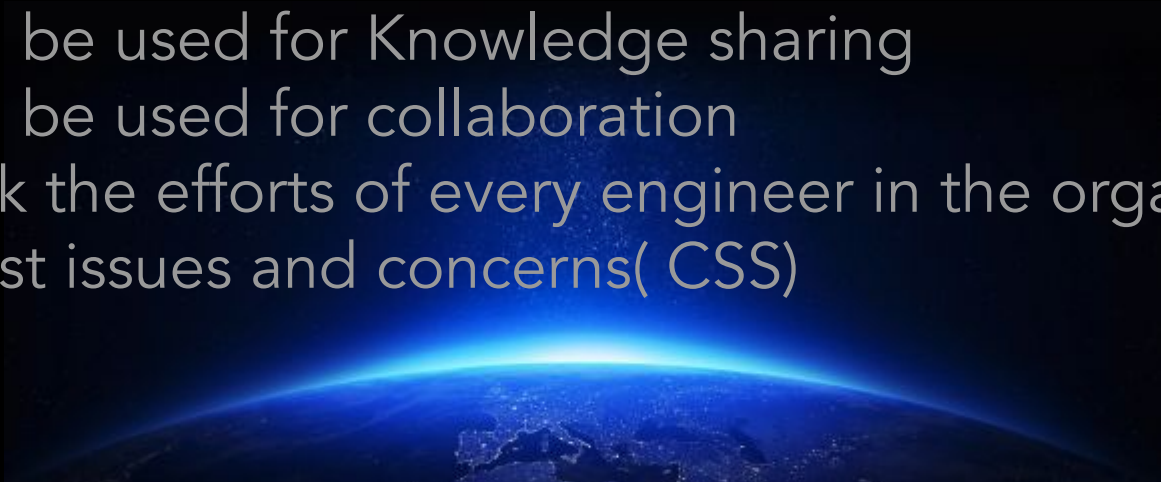


Shift Left -Execution



Process

- Process always comes after Execution
- Must help engg than hurting the velocity of Engineers
- Should be streamlined for all our tasks
- Should be used for Knowledge sharing
- Should be used for collaboration
- To track the efforts of every engineer in the organisation
- Forecast issues and concerns(CSS)



Shift Left - Process

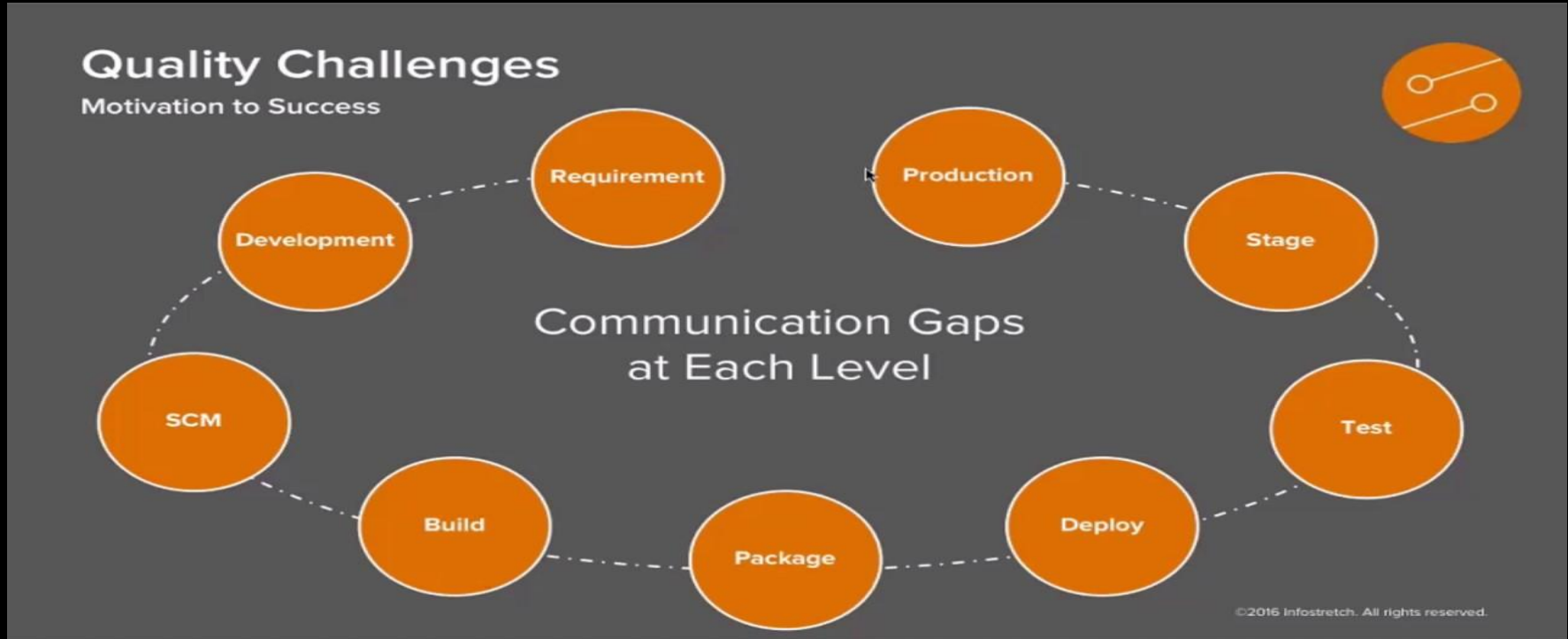


Communication

- Risks and Concerns (CSS)
- With in Engineering - Build, Execution, CSS
- Automation - CI/CD jobs and their statuses
- Sprint level issues and concerns
- Daily standup - issues and concerns
- Technical clarifications - Dev/QA/BA/PdM etc..

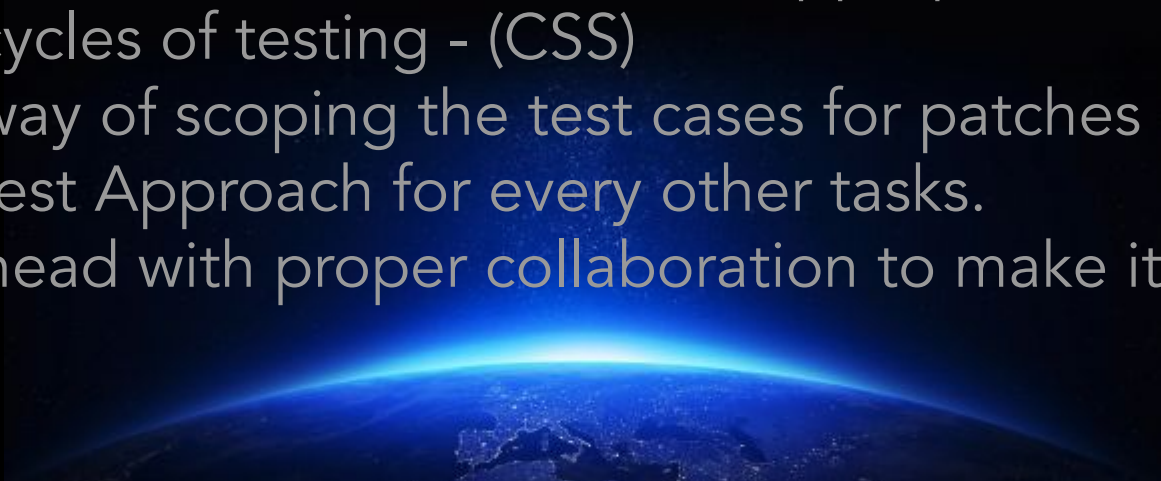


Shift Left - Communication

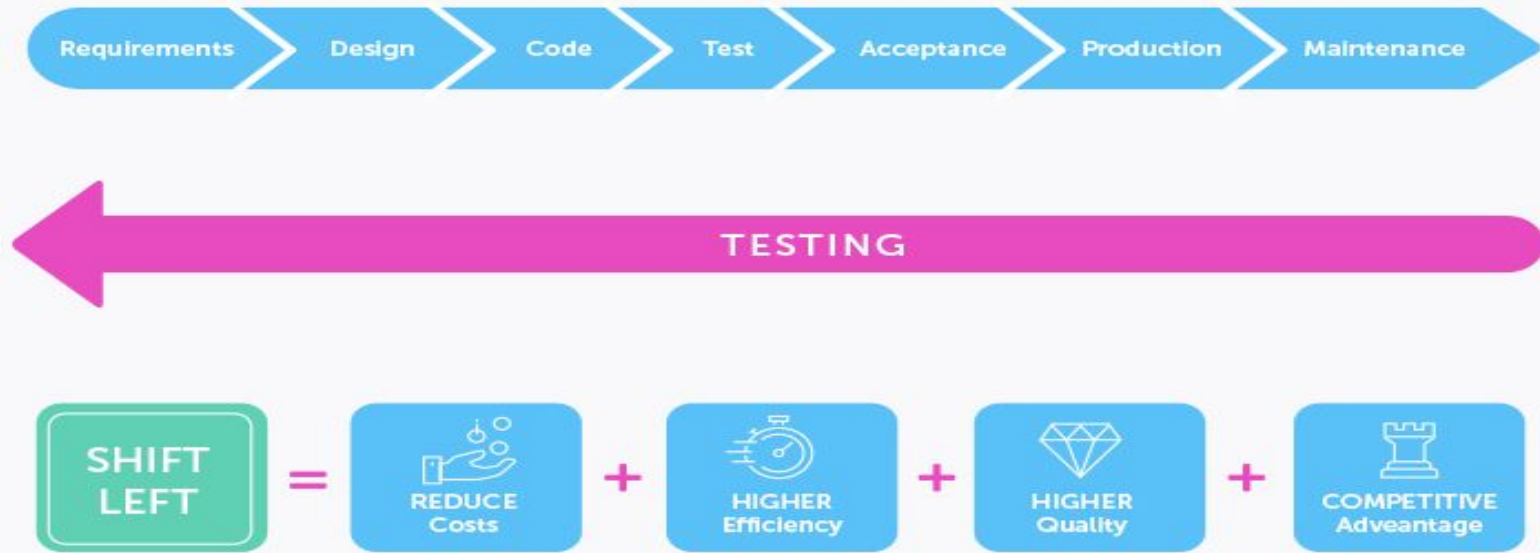


Simplicity

- Avoid noisy test cases/too many test cases - functional
- Avoid noisy test cases/too many test cases - Automation
- Understand the feature and have appropriate coverage.
- Right cycles of testing - (CSS)
- Right way of scoping the test cases for patches
- Right test Approach for every other tasks.
- Plan ahead with proper collaboration to make it simple

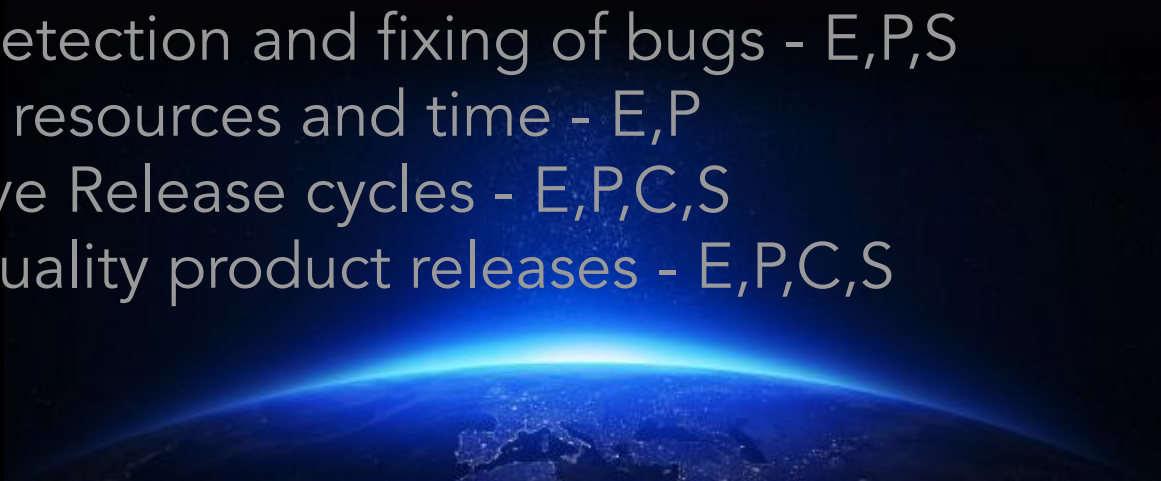


Shift Left - Testing Approach



Shift Left - Benefits

- Cost effectiveness - E,S
- Allows adequate test coverage - E,P,S
- Expedites delivery of the software - E,P,S
- Early detection and fixing of bugs - E,P,S
- Saving resources and time - E,P
- Effective Release cycles - E,P,C,S
- High quality product releases - E,P,C,S



Shift Left - How?

- Shift left means testing earlier in the SDLC - (E,P,C,S)
- Testers helping developers implement unit testing
- Planning, creating, and automating integration test cases
- Gathering, prioritizing, and processing feedback
- With Agile practices like TDD, BDD, CI and DevOps
- Invoking API, non-functional items early in the cycle
- Automating problematic areas in advance
- Participating and understanding the features early

Shift Left - QE Engineer

- Functional, non-functional testing - Effective execution
- Future Release Focus - Execution
- Sustenance Release Focus - Execution
- Defects Statistics - Process, Jira Focus
- Collaboration - Process, Confluence update(s)
- Tool and Technologies - H/W, Firmware, S/W, Services
- Know your infrastructure and Build process for CT



Shift Left - Devops Engineer

- Well aligned build process[CI/CD], Gating for builds
- Packaging readiness and incremental changes
- Early infra support, maintenance and forecasting cost
- Version control - Components[NodeJS], Services
- Separate instances for QE/Dev/Staging/Pre-Prod
- Auto Config for - H/W, Firmware, S/W, Services
- Forecasting cost and skills required for our engineers



Shift Left - BA, Scrum Leads

- Product - Early inclusion of Both PdM/Dev/QE
- Establish Process - Collaboration, Communication, Change control
- People/Engineers - User stories metrics, Monitor and control, Dashboards for releases/tasks
- Clarity on the release vehicle and updating risks
- Certify the features implementation
- Review the test plans and requirements early in the cycle

Shift Left - QE Leads

- Product - Deliver Releases - Multiple code paths
- Establish Process - Collaboration, Communication
- People/Engineers - QE Metrics, Monitor and Redefine
- Influence Shift Left practices
- Empower skills for the engineers



Thanks to Everyone

Thanks for all your
dedicated efforts

