XP CONFERENCE INDIA 2016

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Bangalore

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A journey with XP – Case study

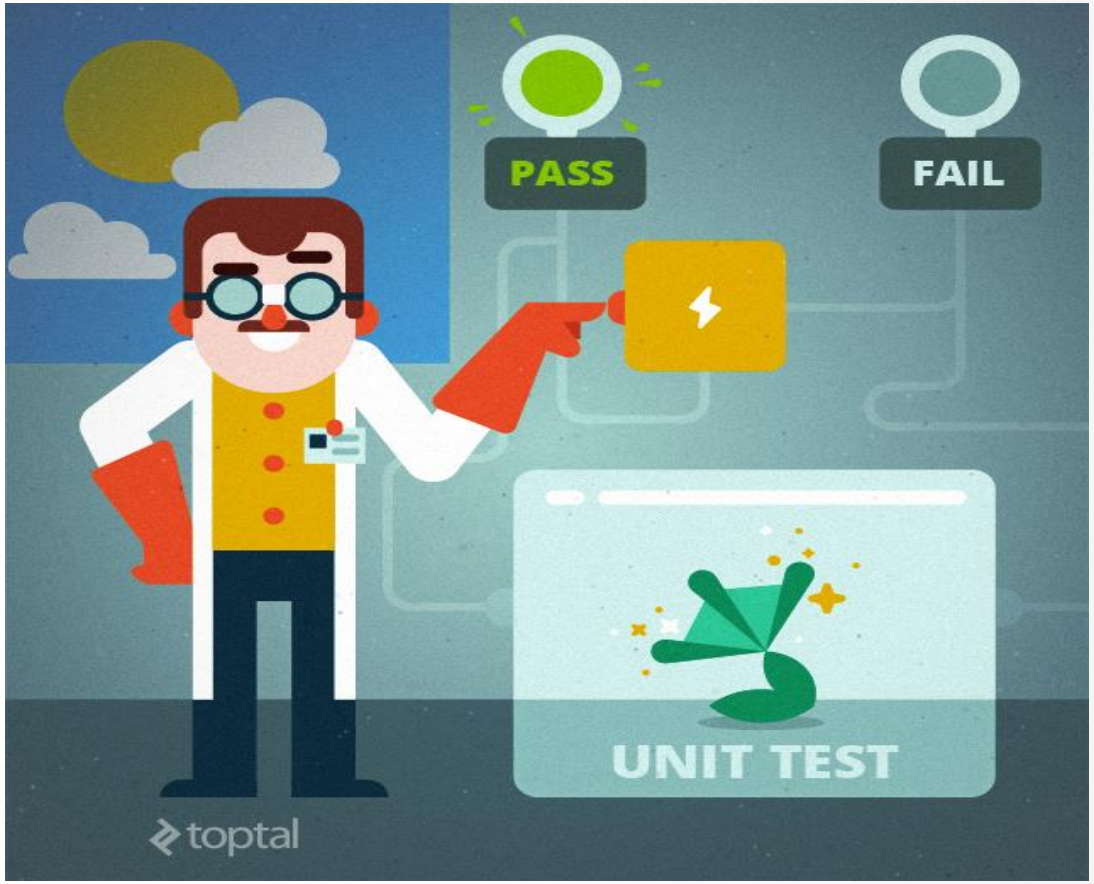
Why we needed XP practices

Lots of problems got exposed through agile practises

Problems

All unit tests passing-All the time

At the same time defects also got passed



Problems

Automate every test at the System Level

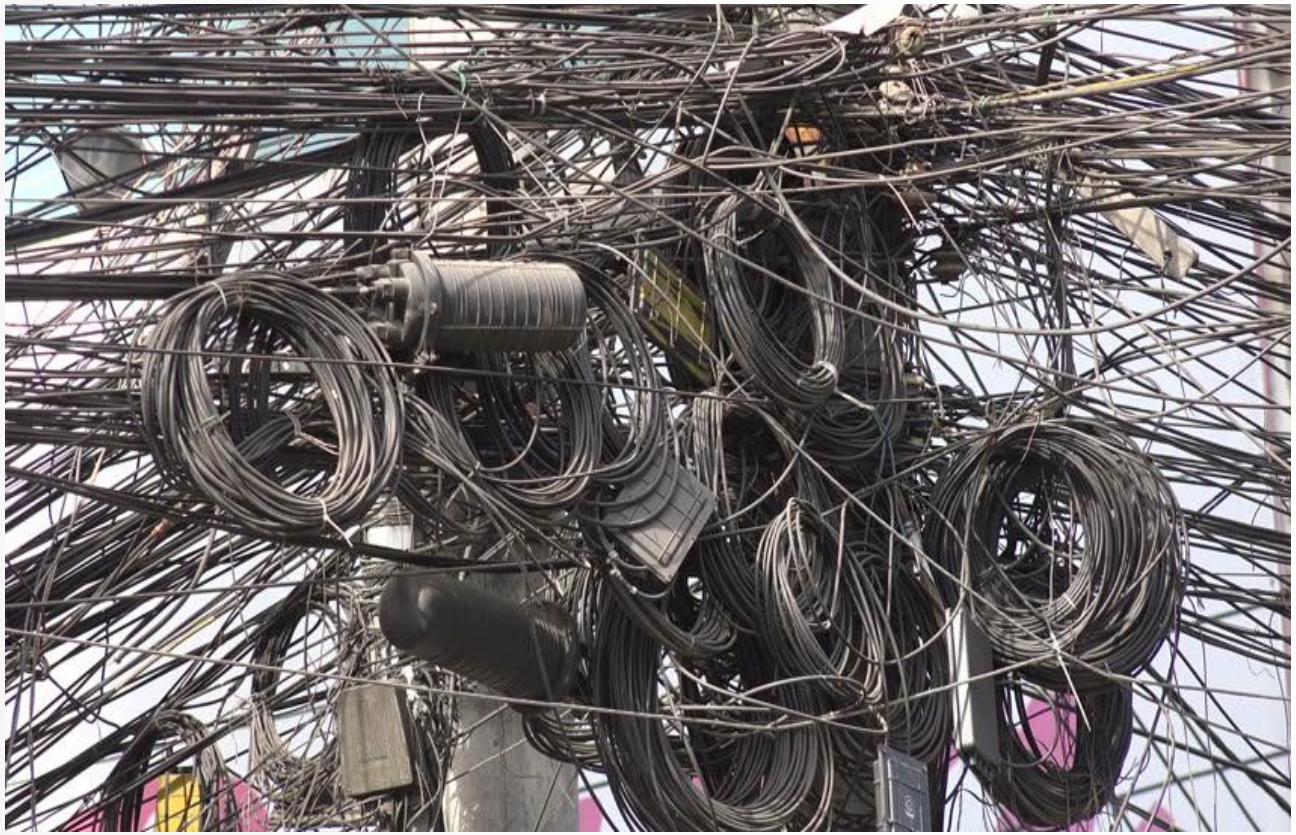
Automation was a big head ache

Problems

Big sized user stories

Teams situation

Problems



CI infrastructure

Other problems…..

- Long debugging cycles
- Multilayered architecture
- Legacy Code
- Always spill overs

What we had

1. Scrum teams
2. Leadership teams
3. An infra structure for CI
4. Unit tests and integration tests
5. Agile trainings

First trial of our journey

- Created a team of champions, from various projects
- Trainings on XP practices with live code
- Put them back to their projects

Result after 4 sprints

- Leadership focused on deliveries
- Not Interested in Engineering practices
- Objectives of project change
- No support to champions
- Escalations
- Champions searched other jobs
- Don’t know how to do bla bla bla

Second trial of our journey

- Identified a target project (Eligible for transformation)
- Leader ship team and customer was educated
- 3 targeted scrum teams
- Sprint based goals
- Inspect and adapt methods

Then came our way

- Not deviating much from the existing work flow, tools and technology
- A big heap of legacy code
- How to write Unit tests?
- Multilayered architecture- where to stop? Where to start?
- Different technologies in each layer
- No test frame works in few components
- Very few experts in all the areas
- People mind set

What's next?

- Organize teams based on features and experience
- Workshops
- Backlog with simpler user stories (Across the layers)
- Explore new technologies to fill up gap
- Brain storm on handling multi layered, multi component based architecture (Aligning tools, frame work, technologies etc)

On the court

- Vertical way of tasking
- Deriving BDD scenarios
- Identify the impacted layers
- Deriving test pyramid

- Using existing tools and technologies in a different way
- Unit tests and its importance
- Integration tests
- Controlled coding

After 4 sprints

- Less spill overs
- Sense of accomplishment
- Easy way of automating tests
- Easy debugging
- Easy integration tests
- No transferring defects

Results (10 sprints)

- Team is self driven
- New champions
- Targeted team were 3, infected team were 6
- Started TDD
- Pair programming
- New experiments
- One complete feature was delivered with Zero P1 defects

What did not go well

On the second engagement….

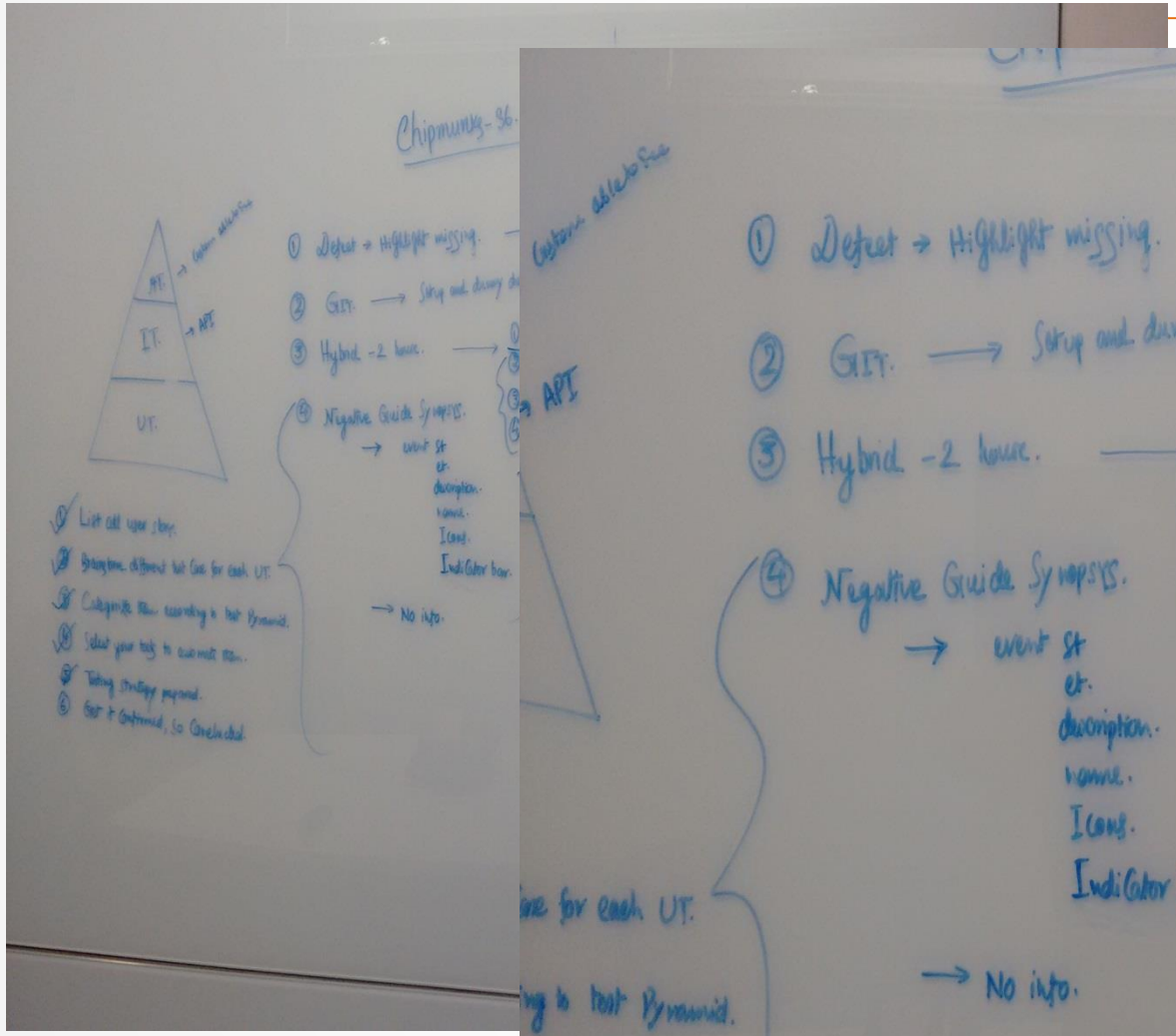
- Partnering customer
- Partnering higher management
- As an opportunity to the team
- Sustainability

We put a logical end after 6 sprints

Where are we now

- One account with 9 Scrum teams is on XP (70 people)
- One more account with 6 scrum teams is in the path of break through(40 people)
- Third account with 7 scrum teams is not fully transformed (56 people)
- 15 senior contributors infected by XP

Signatures


Chipmunks-36.
AT.
IT.
UT.
API
① Defect → Highlight missing.
② GIT.
③ Hybrid -2 hours.
④ Negative Guide Synopsys.
→ event st
et.
description.
name.
Icons.
Indicator bar.
→ No info.
List all user story.
Brainstorm different test Case for each UT.
Categorize them according to test Pyramid.
Select your tools to automate them.
Testing strategy prepared.
Get it Confirmed, so Concluded.

Customer able to see
API
① Defect → Highlight missing.
② GIT. → Setup and dummy check
③ Hybrid -2 hours.
④ Negative Guide Synopsys.
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for each UT.
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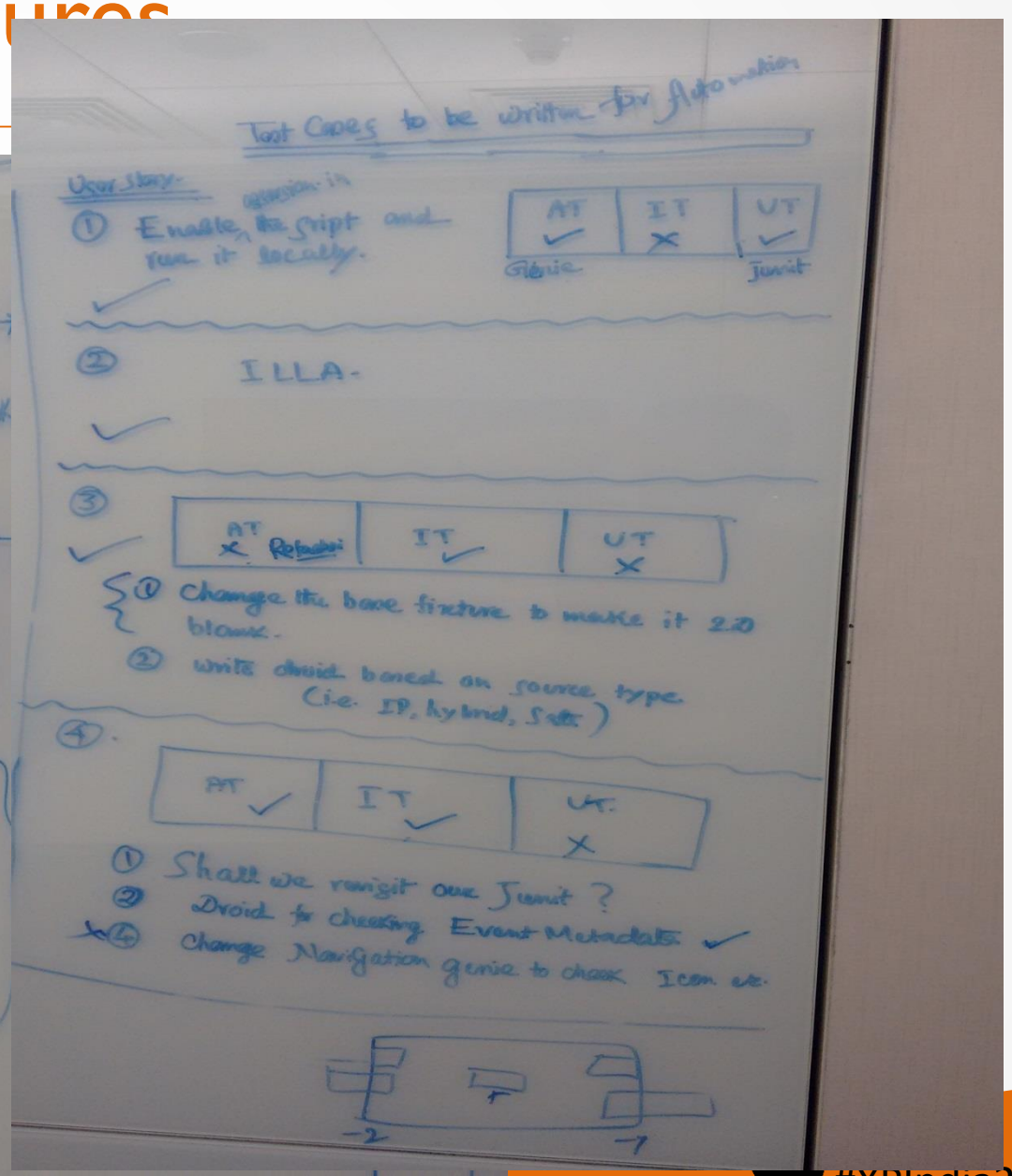
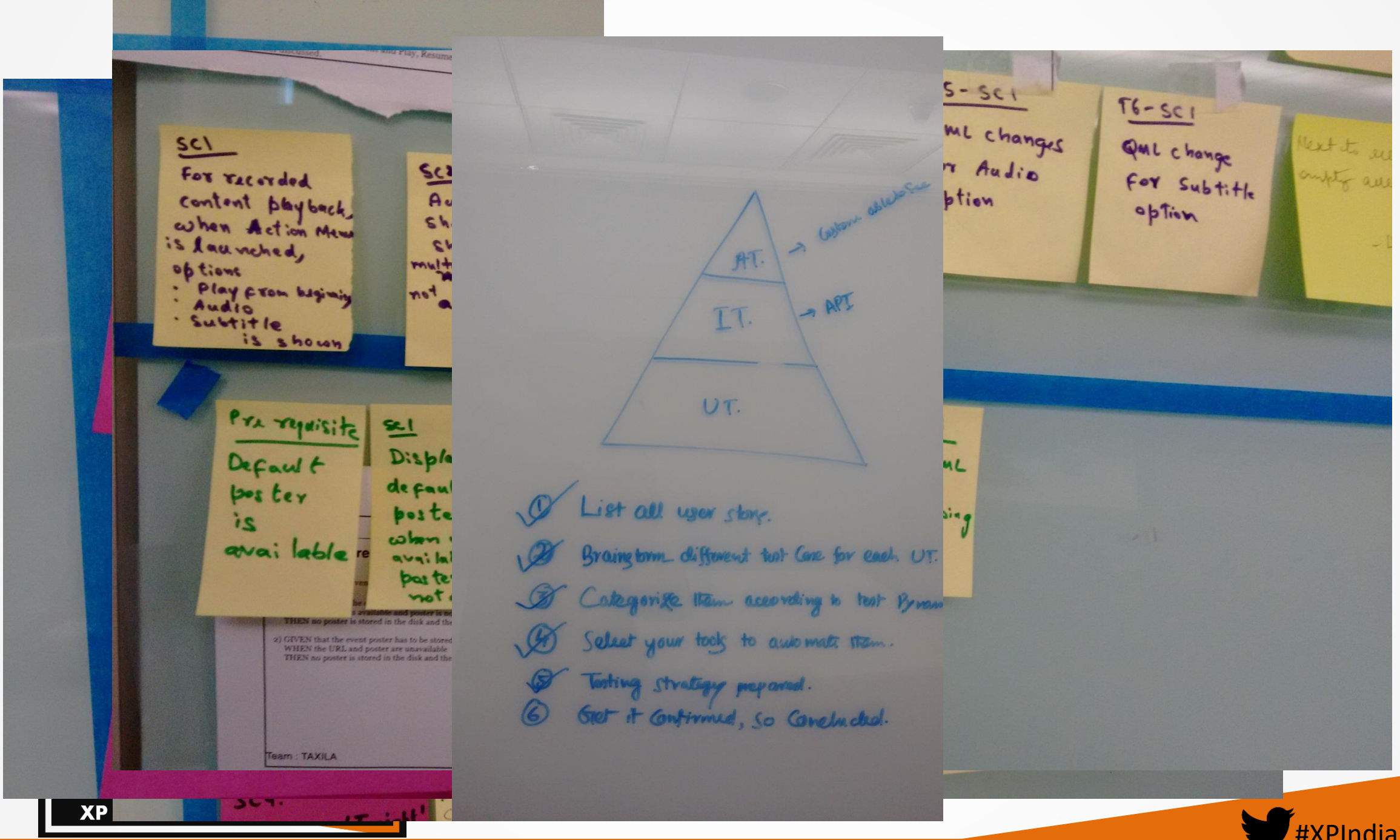

Test Cases to be written for Automation
User story.
① Enable assertion in the script and run it locally.
AT
IT
UT
Genie
Junit
② ILLA.
③
AT
Refactor
IT
UT
① Change the base fixture to make it 2D blank.
② write droid based on source type (i.e. IP, hybrid, Satt)
④
AT
IT
UT
① Shall we revisit our Junit ?
② Droid for checking Event Metadata
④ Change Navigation genie to check Icon etc.
-2
-1


Sc1
For recorded content playback, when Action Menu is launched, options
· Play from beginning
· Audio
· Subtitle
is shown
Pre requisite
Default poster is available
Sc1
Team : TAXILA
AT.
IT.
UT.
List all user story.
Brainstorm different test Case for each UT.
Categorize Item according to test Pyramid
Select your tools to automate Item.
Testing strategy prepared.
Get it Confirmed, so Concluded.
T6-Sc1
QML change for Subtitle option

- Questions

I will try to answer from my experience ☺