Quality Engineering

The Pitfalls and Possibilities

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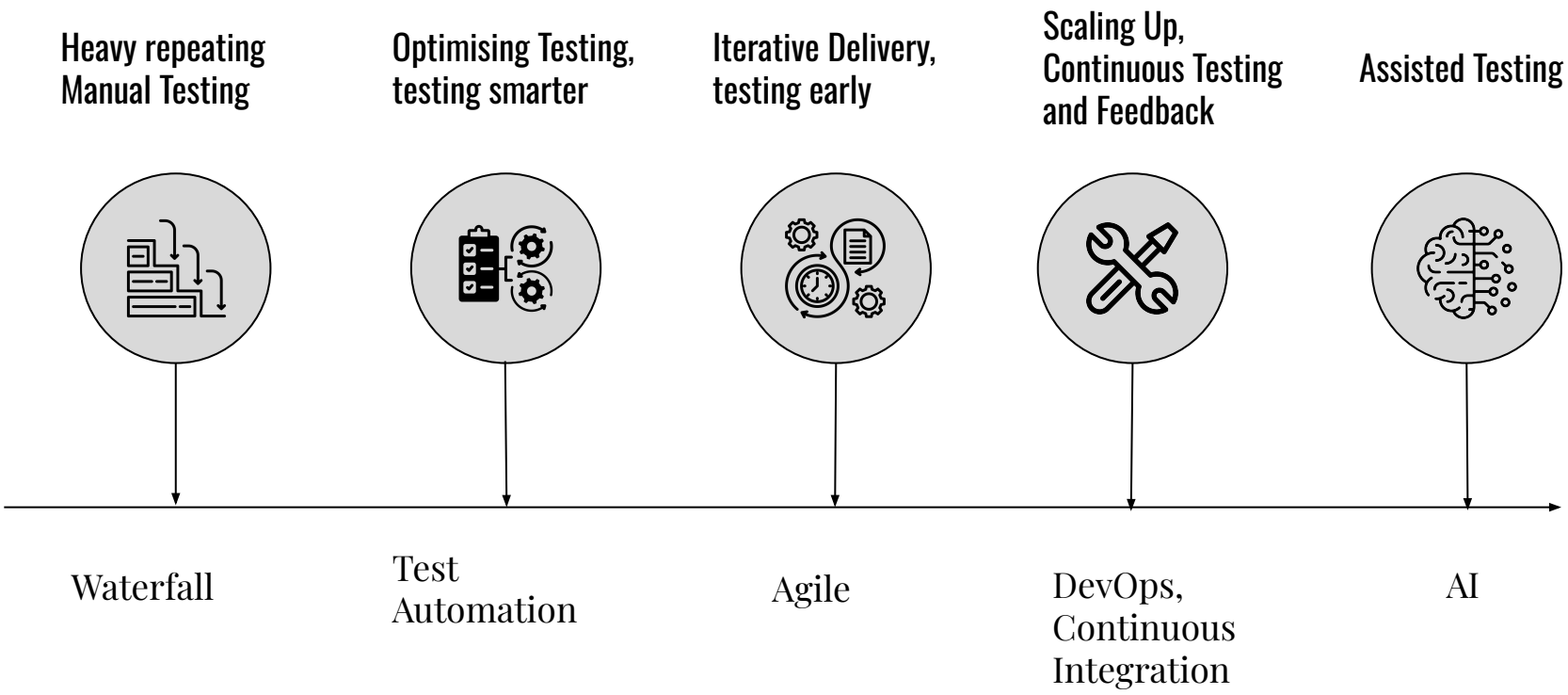
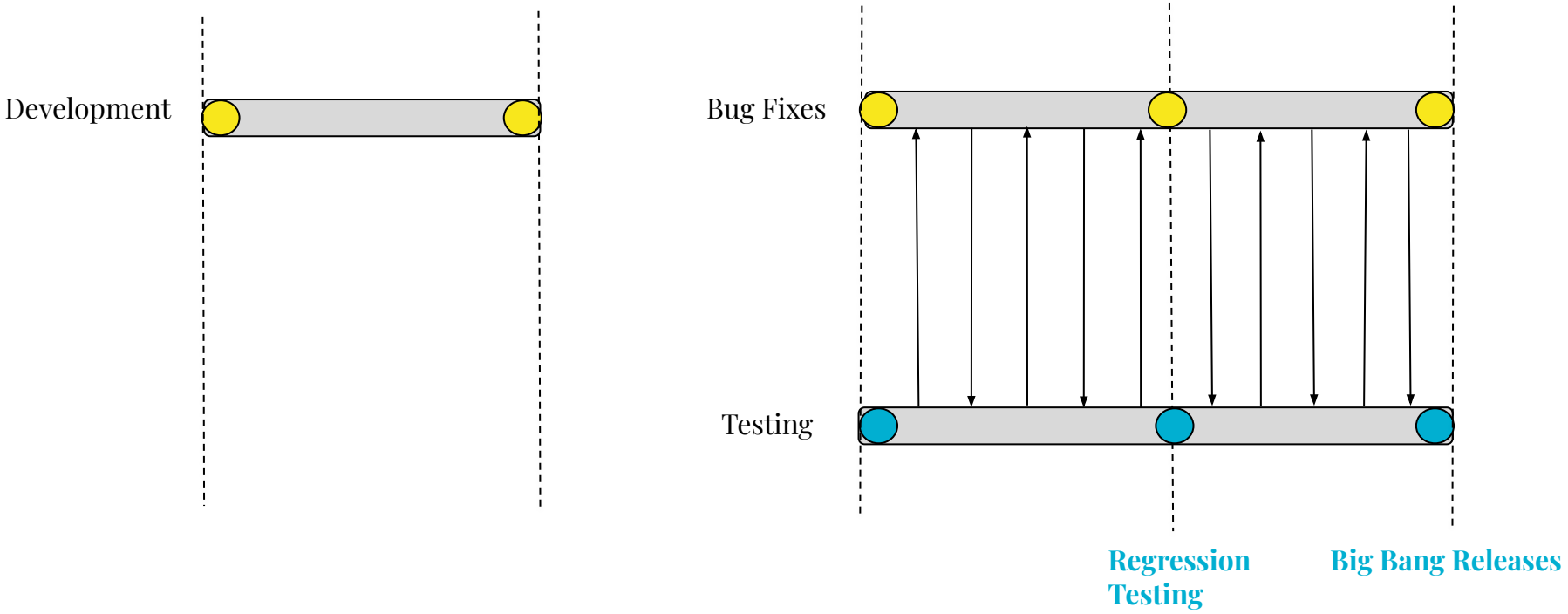
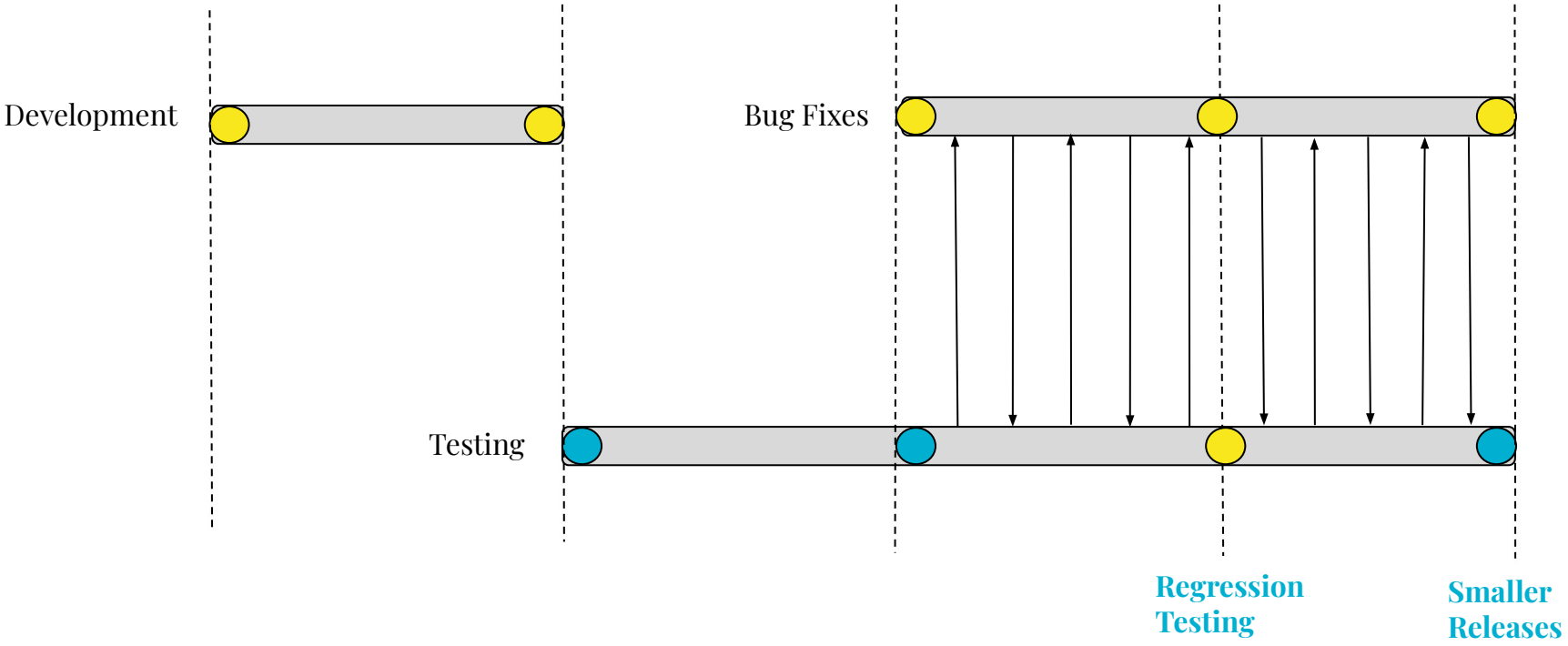
Technology is evolving. Testing is evolving



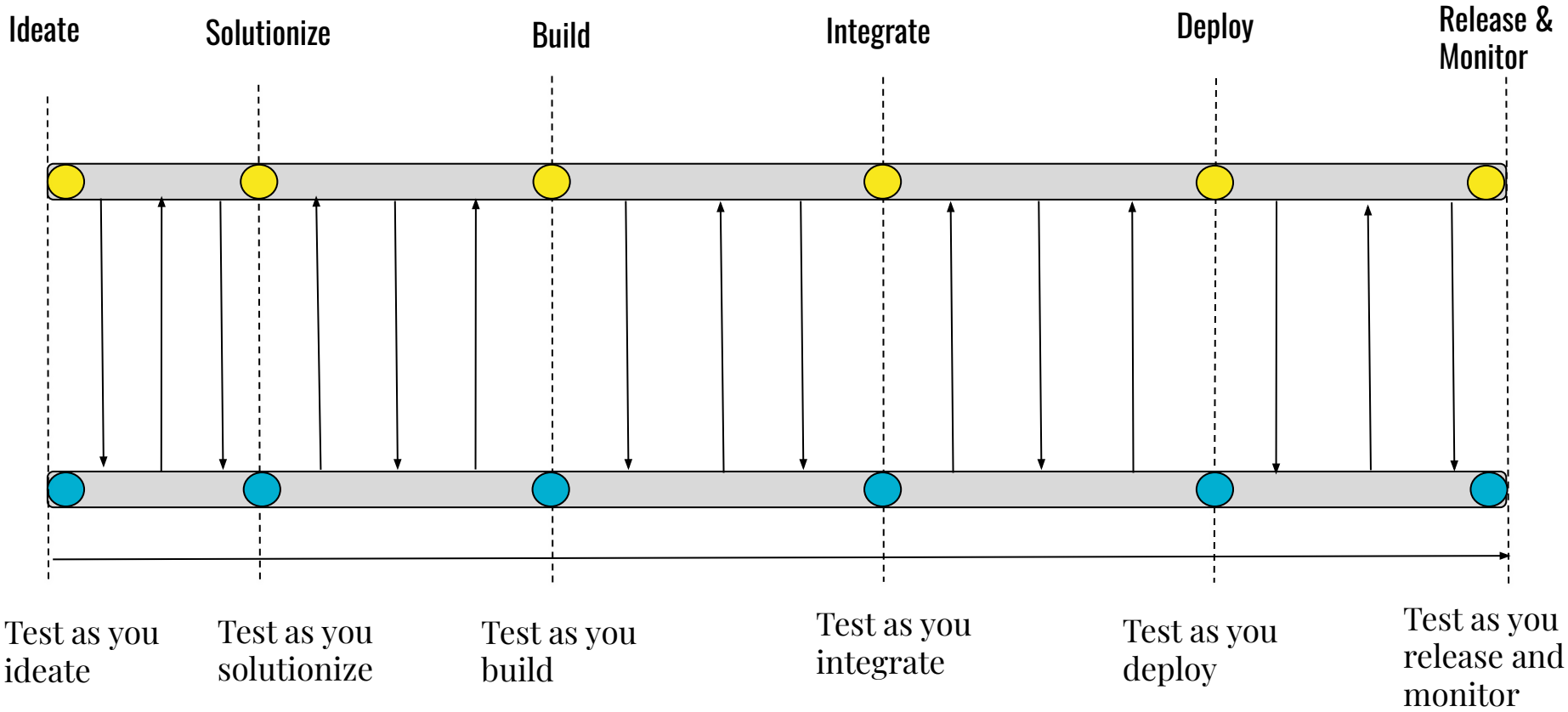
Throw-It-Over-the-Fence Testing aka Waterfall Testing



Test As You Develop aka Agile Testing



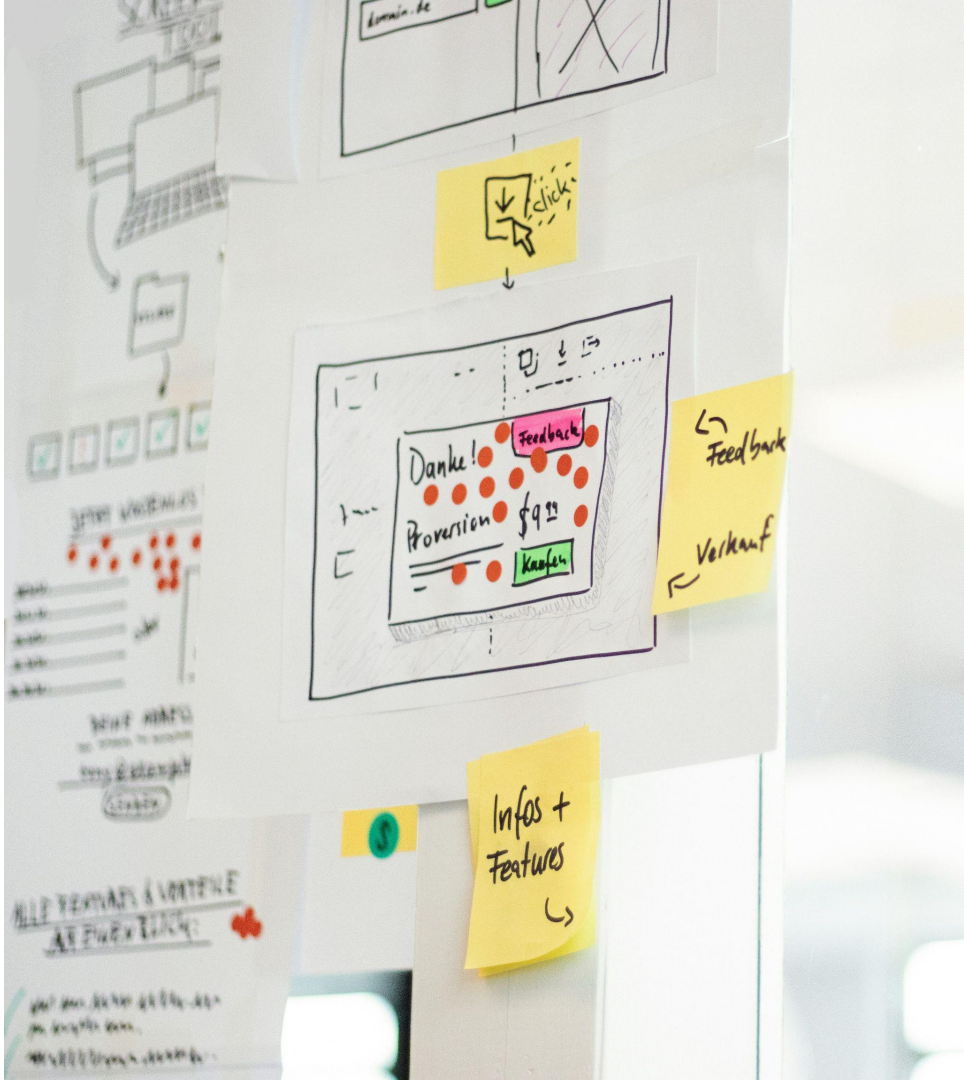
Test Ahead, Test Alongside, Test Beyond




Opportunities

Test as you ideate

Be part of the problem space.
Share your ideas, share your knowledge.
Explore unknowns.



Test as you solutionize

Play active role in solution.
Use data to do informed testing.
Explore testing ideas and approaches.
Think metrics and analytics.

Test as you build

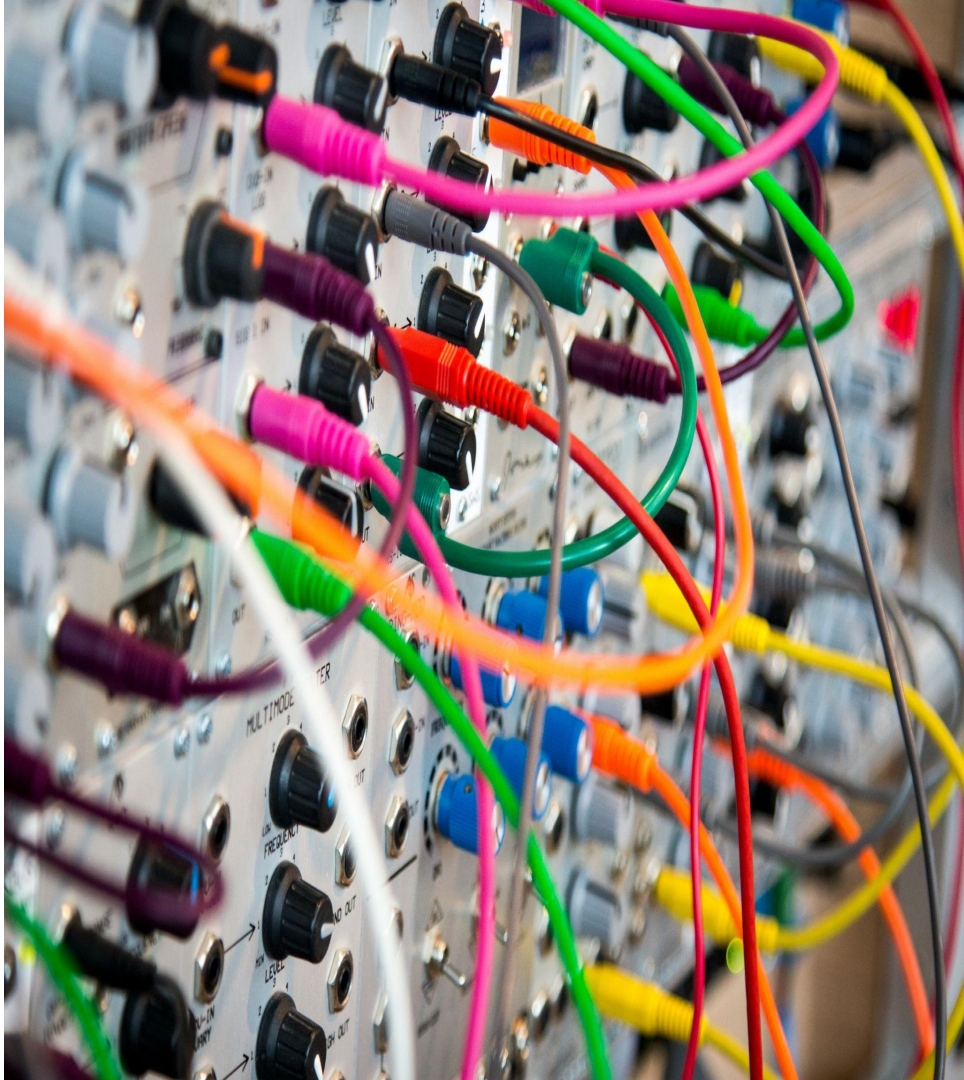
Align on testing approach with your team.
Pair up with developers.
Design and build tests.
Test your tests.

Test as you integrate

Integrate and scale automation.
Optimise testing feedback loop.
Reiterate and improve.
Write documentation.

Test as you deploy

Test.Test.Test.
Use early gathered metrics.
Advance your metrics.

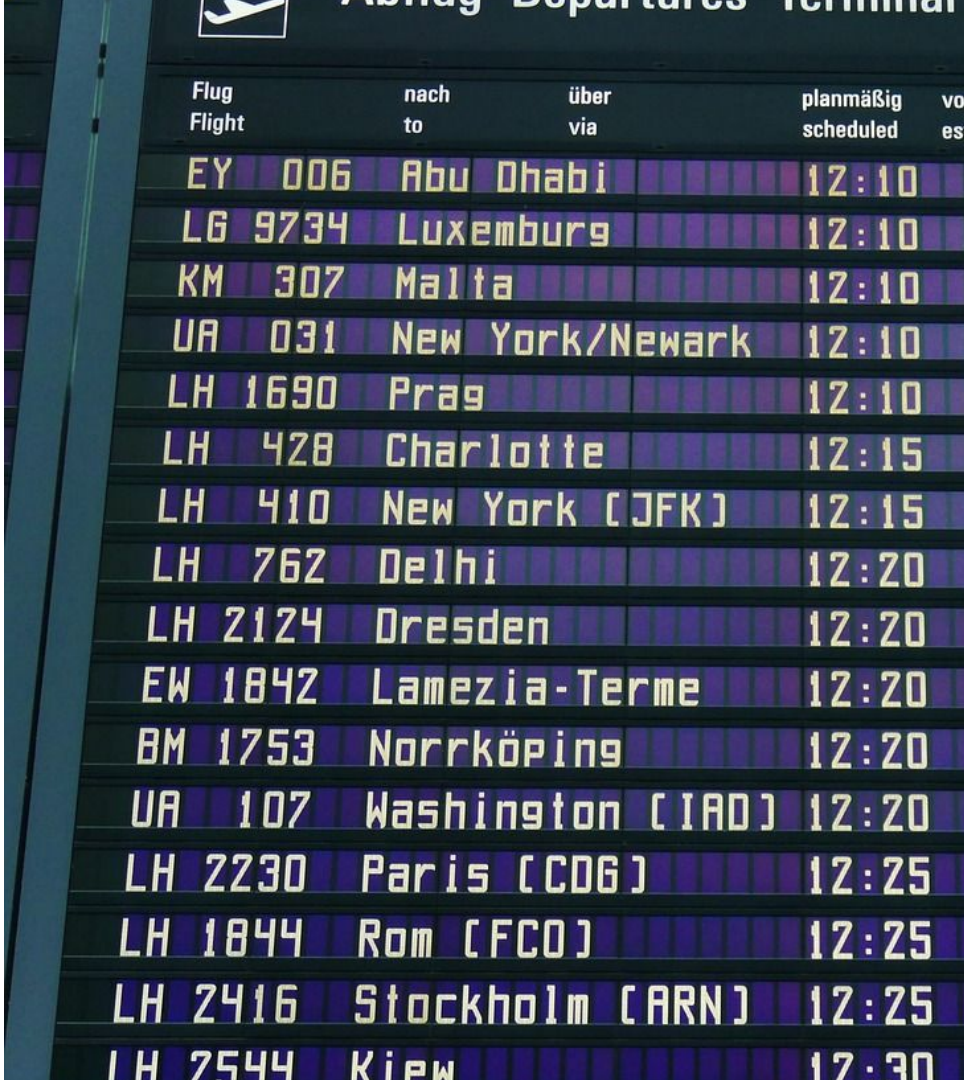


Test as you release

Use the systems, metrics to monitor release process.
Look out for unusual behaviour.

Test as you monitor

Use metrics and monitoring to replicate hidden scenarios. Test in production.



Challenges

Lack of Shared Goal

Symptoms:

- Lack of buy in
- Struggle to make the message land

How to Overcome:

- Work on your strategy addressing *your* company's problems
- Tweak your pitch differently to each audience

Resistance To Change

Symptoms:

- You experience push back
- It's hard to reach alignment

How to Overcome:

- Do not do it alone
- Find quality minded people
- Do not expect people change over the night (even if they agree with you)

Siloed Teams

Symptoms:

- Teams interdependencies hard to resolve
- Everyone works hard, desired outcomes not great

How to Overcome:

- Get to know people, ask about their job
- Offer your help
- Give feedback to your managers

Integration Gap In The Strategy

Symptoms:

- Too many misunderstandings
- Lack of proactivity, actions and progress

How to Overcome:

- Break down strategy into small attainable parts
- Put actionable steps for each part
- Measure to know how you are doing

Not Thinking Holistically

Symptoms:

- Imbalanced process, work load, test coverage
- Focusing on outputs, rather than outcomes

How to Overcome:

- Practice lateral thinking
- Explore where the real issues are
- Even out bumpy parts

Lack of tools that serve team well

Symptoms:

- Working seems like swimming in a jelly
- Unhappy and frustrated engineers

How to Overcome:

- Access team needs
- Explore open source
- Advocate for investment

Lack of continuous learning

Symptoms:

- Siloed knowledge and siloed communication
- Work assigned to specific people

How to Overcome:

- Communication in open channels
- Invite yourself to meetings
- Be curious and explore

How might it positively impact you

- Less “unnecessary busyness”, stress. More time and focus on innovation and doing cool things
- Increased confidence in teams and in product itself *(your personal confidence increases too)*
- Stronger collaboration and boost in team spirit
- Personal and professional growth

A few takeaways

- Quality Engineering is about creating environment, tools, techniques to help your team test and deliver software easier, faster and more joyfully.
- Quality Engineering is more about bridging gaps, not filling in holes in process, product or codebase.
- Quality Engineering involves lateral thinking, zooming out and zooming in when necessary.
- Quality Engineering is about deliberately practicing improvements, experimentation, measuring the impact and reiterating.

Thank you very much

MINISTRY OF TESTING

ADPList