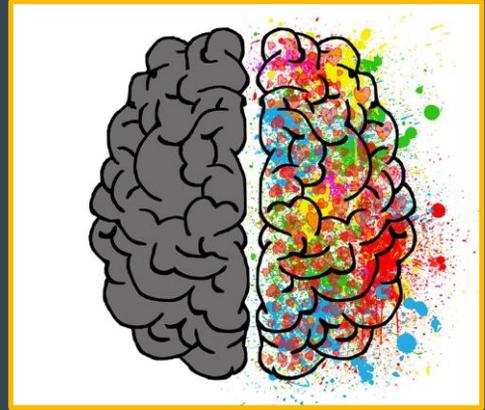


# The new Skill-Set for the new QA Specialist



Joel Montvelisky  
PractiTest - Chief Solution Architect

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## About Me!

### QA / Testing

(last 20+ years)

- Tester
- QA Manager
- Blogger
- Speaker
- Solution

Architect



Joel Montvelisky  
Follow: @joelmonte

### PractiTest

- Chief Solution Architect
- QA Manager

### Other Stuff

- Testing 1on1 Podcast
- State of Testing™
- Online Test Conference

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# About PractiTest

- ✓ SaaS QA Management Solution
- ✓ Simple & Intuitive – yet – Professional & Flexible
- ✓ Integrates with Jira, Selenium, Jenkins, Pivotal Tracker, QTP, Bugzilla, Ranorex, SoapUI, etc...
- ✓ Best Darn Support in the Business 😊



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 **OnlineTestConf**

Bringing the Testing World Closer. VIRTUALLY.

June 5-6th, 2019

[www.onlinetestconf.com](http://www.onlinetestconf.com)

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# A Skill Set...

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# Do we need a new Skill Set?



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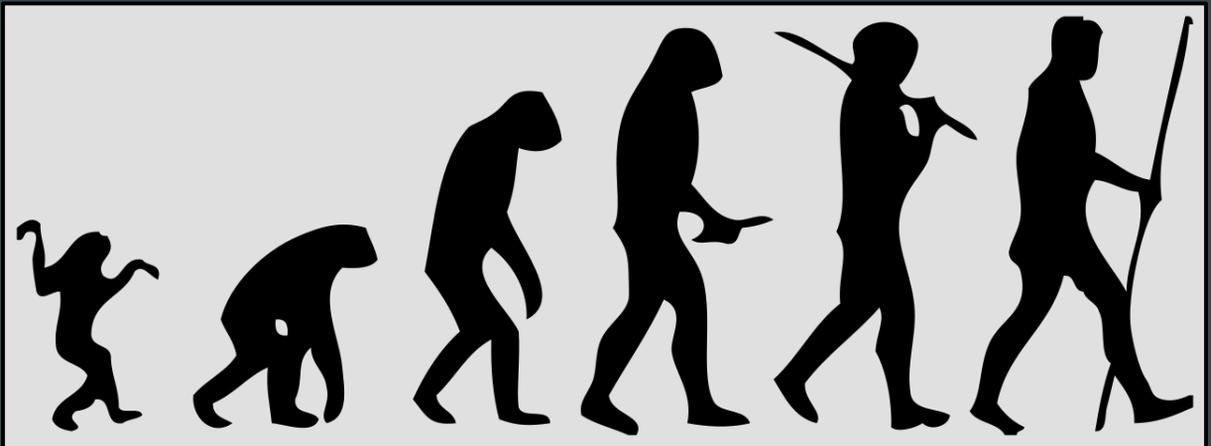
# The World is Changing.

(& thanks God for that!)



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*Change is usually an **Evolution** more than a **Revolution***

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# Testing as a profession is also constantly evolving...

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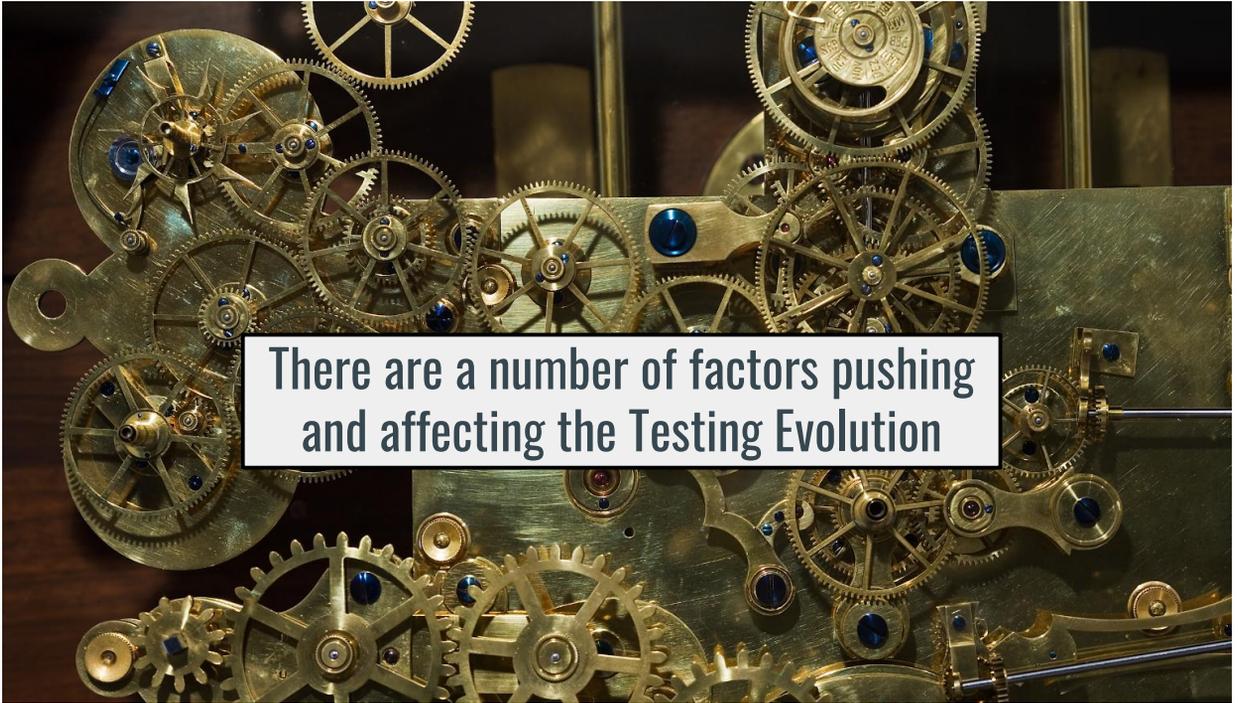
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## Where are we headed?

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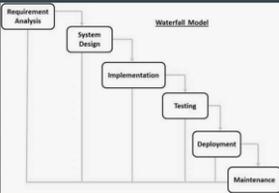
There are a number of factors pushing and affecting the Testing Evolution

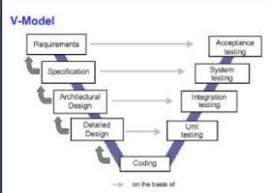
11

# Factor 1

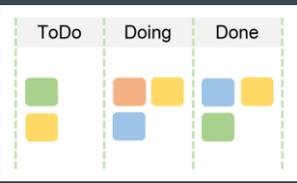
## Evolution of Development Practices

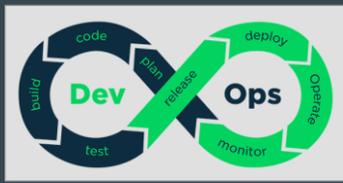








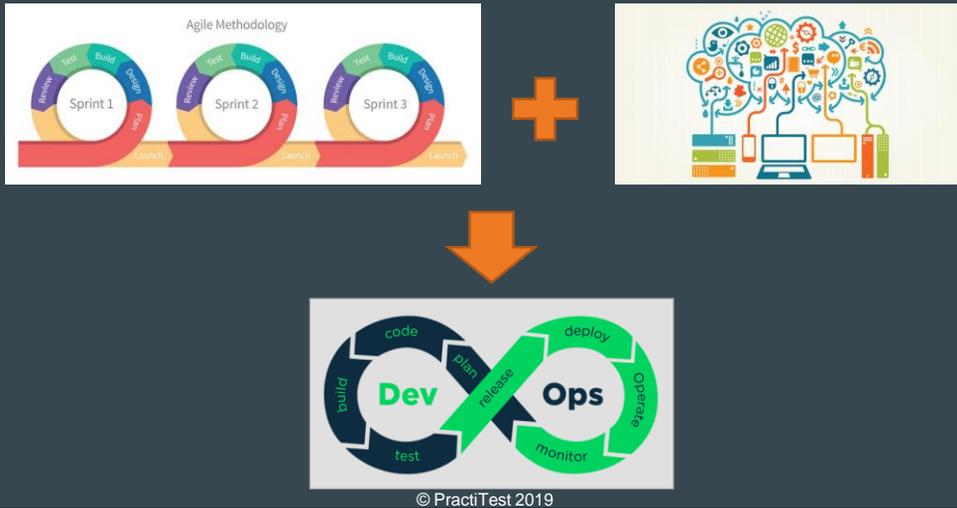




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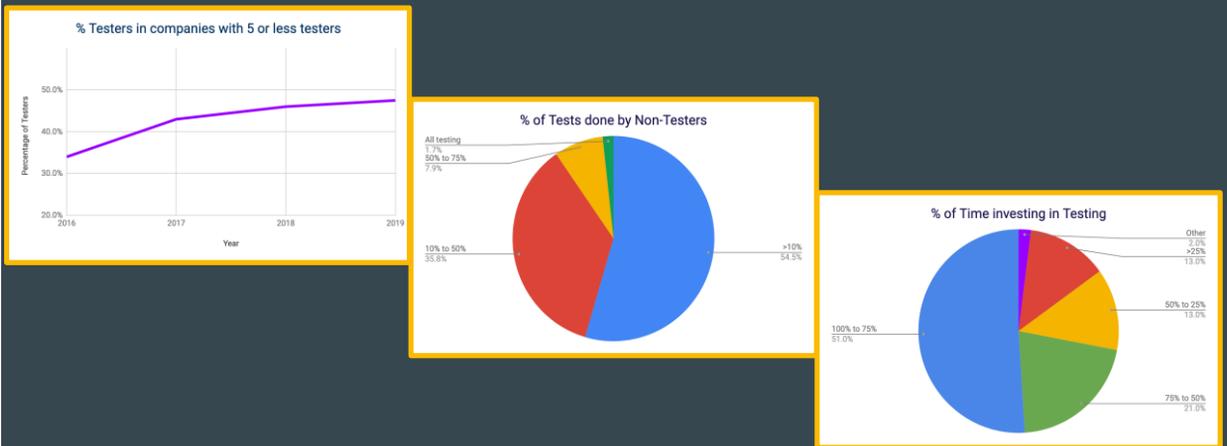
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# How we got to DevOps?



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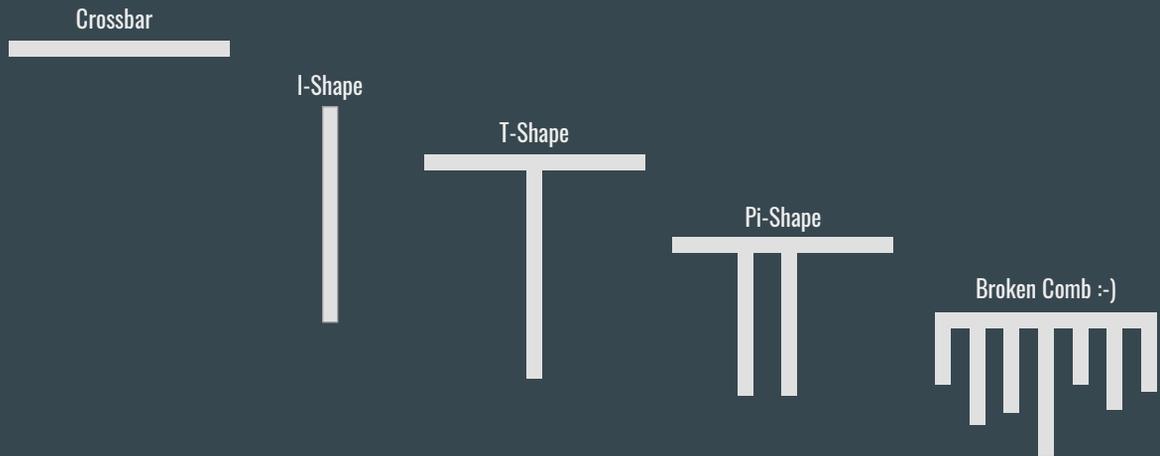
# Factor 2 Testing teams & testing work (SoT 2019)



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## Factor 3 Professional Evolution

(Generalization > Specialization > Generalization)



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## Testing Methodologies are also changing

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## What is Modern Testing? (this is not a presentation about MT!)

The Mission - To Accelerate the Achievement of Shippable Quality

### Seven Principles of MT

1. Our Priority is improving the business.
2. We accelerate the team, and use models like Lean Thinking and the Theory of Constraints to help identify, prioritize and mitigate bottlenecks from the system.
3. We are a force for continuous improvement, helping the team adapt and optimize in order to succeed, rather than providing a safety net to catch failures.
4. We care deeply about the quality culture of our team, and we coach, lead, and nurture the team towards a more mature quality culture.
5. We believe that the customer is the only one capable to judge and evaluate the quality of our product
6. We use data extensively to deeply understand customer usage and then close the gaps between product hypotheses and business impact.
7. We expand testing abilities and knowhow across the team; understanding that this may reduce (or eliminate) the need for a dedicated testing specialist.

<https://www.angryweasel.com/ABTesting/modern-testing-principles/>

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But, let's go back to our Skill Set...



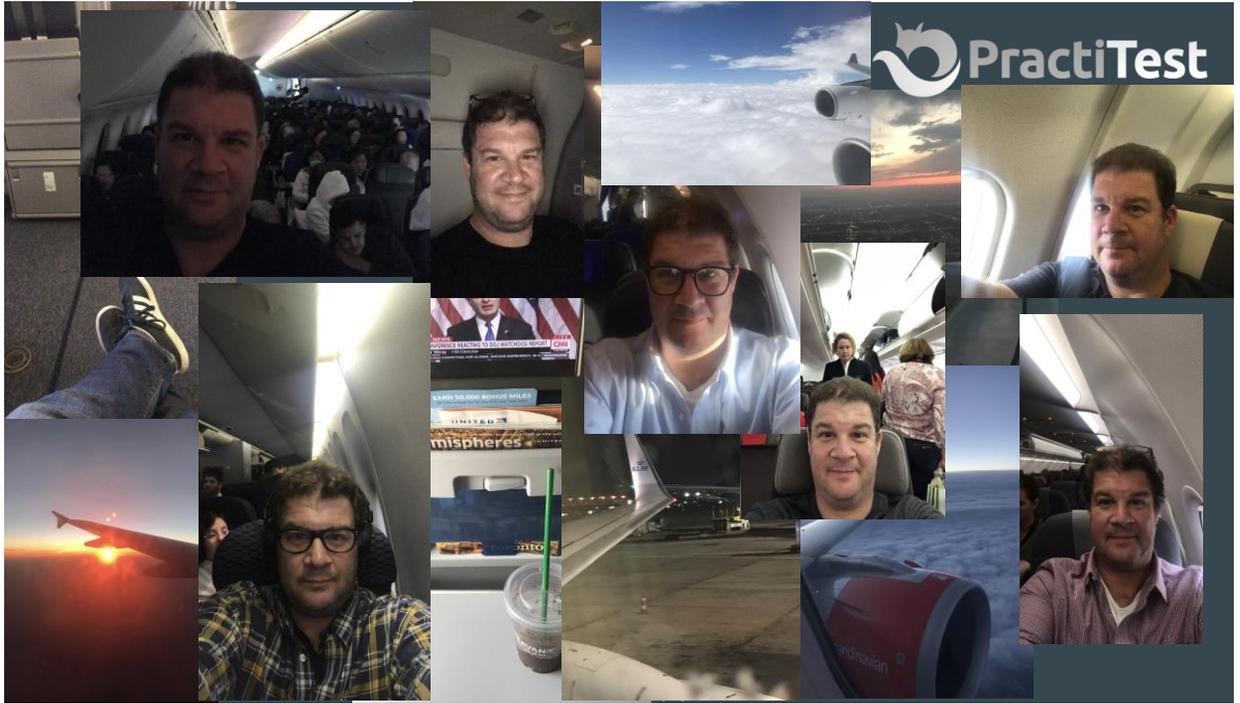
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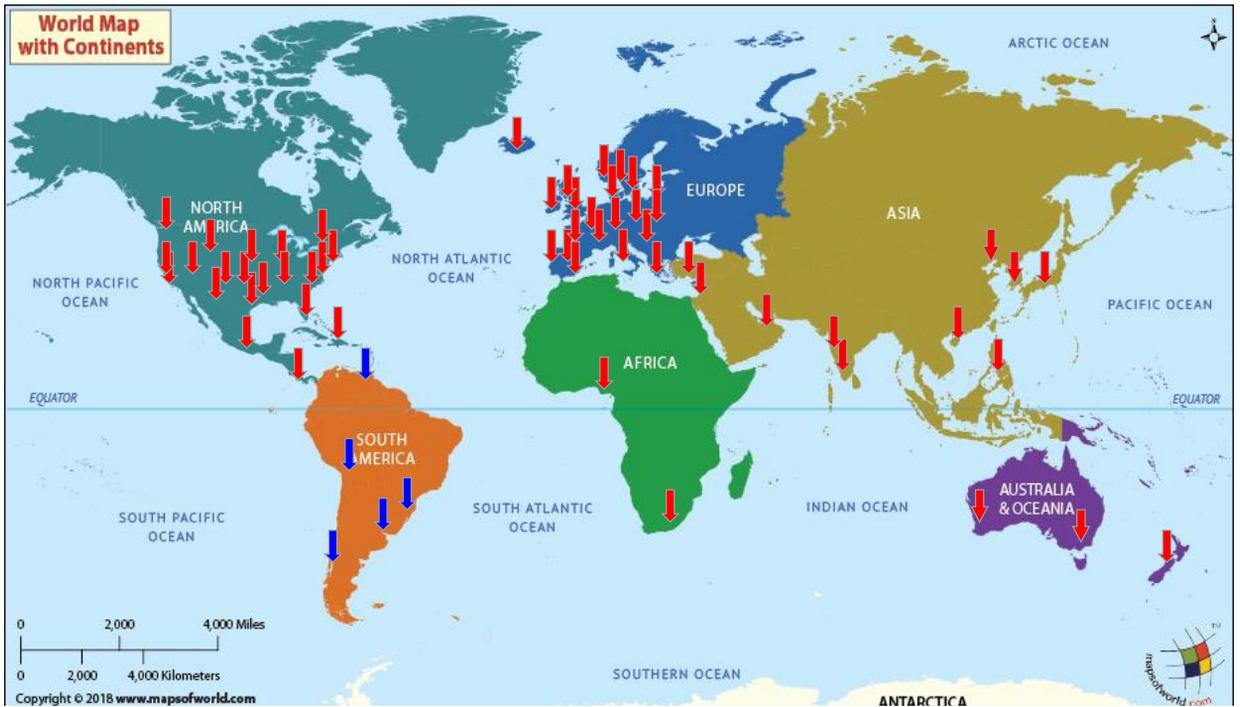
I get to travel a lot and talk to tons of testers worldwide...

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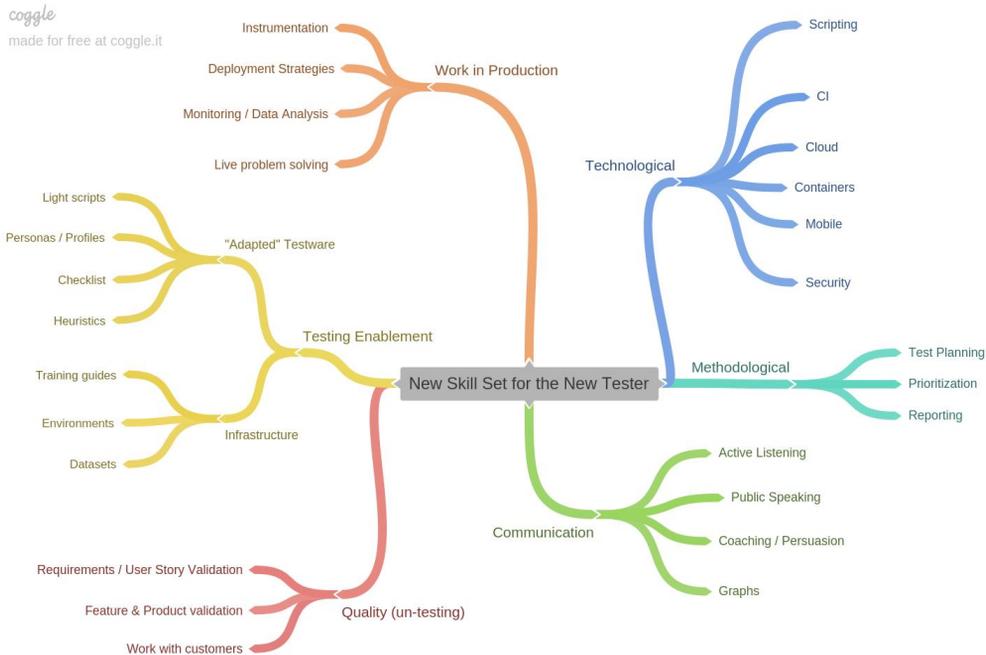


# We have also been running the State of Testing Survey for 6 years now...



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# Technological Skills



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## Technological Skills

### 1. Scripting (Not only automation!!!)

- Parsing logs
- Deployments
- Generating graphs
- Simple tests
- Data generation
- ...

This slide has some code

```

<script type="text/javascript">
  // Say hello world until the user starts questioning
  // the meaningfulness of their existence.
  function helloWorld(world) {
    for (var i = 42; --i >= 0;) {
      alert('Hello ' + String(world));
    }
  }
</script>
<style>
  p { color: pink }
  b { color: blue }
  u { color: 'umber' }
</style>

```



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## Technological Skills

### 2. CI platforms & process (Jenkins, TeamCity, CircleCI, Bamboo, etc)

- Quality measures
- Deployment process

### 3. Security Testing



### 4. Mobile

- Deployments
- Devices
- Tech

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## Technological Skills

### 5. Cloud (AWS, Azure, Google Cloud, etc)

- Dev vs. Testing vs. Staging vs. Prod environments
- Elastic computing
- Available resources

### 6. Containers (Docker, Kubernets, etc)

- Different "ready" environments
- Setups for dev-testing
- Speed...



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# Methodological Skills



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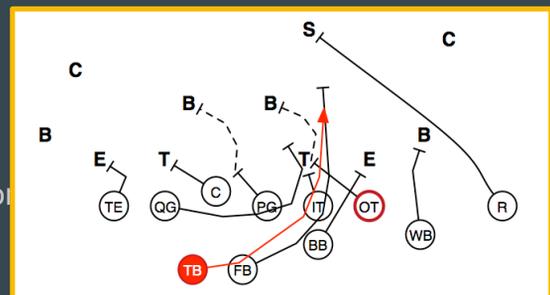
## Methodological Skills

### 1. Test Planning

- Preparations > Analysis > Definition > Execution > Analysis > Communication

### 2. Prioritization

- First vs. Second
- Pre-production vs Post-production



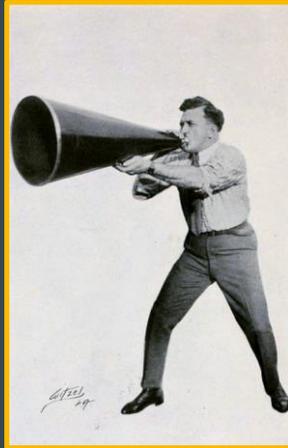
### 3. Reporting

- What & To Whom

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# Communication Skills



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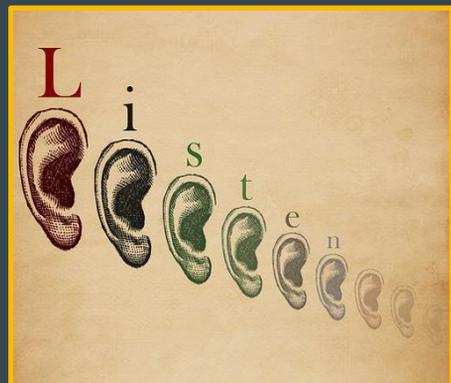
## Communication Skills

### 1. Active Listening

- Get the information you need

### 2. Coaching / Persuasion (???)

- Get others to test for you
- Teaching people to test based on their constraints



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## Communication Skills

### 3. Graphical presentations

- How it looks is as important as what you say
- Different people - different data - different times

### 4. Public speaking

- Internal communication with teams
- External communication with customers & audiences

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## Testing Enablement



Adapted Testware



Infrastructure

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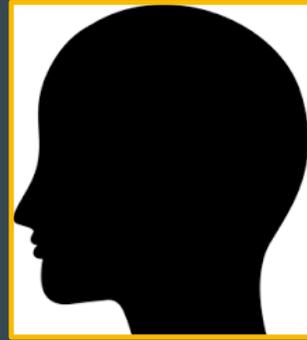
## Adapting your Testware

### 1. Personas / Profiles

- Help others visualize the people behind the tests
- Make it more concrete

### 2. Light scripts

- Focus people on very specific tasks
- Scale down the tasks to fit the person



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## Adapting your Testware

### 3. Checklist

- Some people simply do not like testing steps
- Build on their knowledge of the application

### 4. Testing Heuristics

- Help people test for themselves



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## Providing Testing Infrastructure

### 1. Training & Guides

- Specially for non-tech people

### 2. Testing Environments

- Remember "containers"...?

### 3. Testing Data

- Empty databases seldom bring interesting bugs



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## Working in Production



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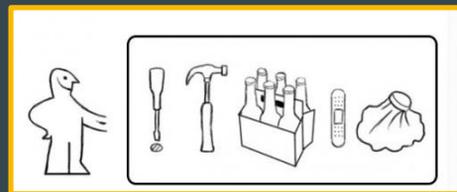
## Work in Production

### 1. Product instrumentation

- Prepare for what you will need to know later.
- Think about metrics.

### 2. Deployment strategies

- Minimize risk & damages
- Be ready to roll back as quick as possible



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## Work in Production

### 3. Monitoring

- Understand what is happening - as it's happening
- Alerts & displays

### 4. Data Analysis

- Making sense of information out of tons of data

### 5. Live problem solving

- More of an Art than a Science



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# Quality (un-Testing)



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## Quality (un-testing)

### 1. User Story Validation

- Making the right thing, and the thing right

### 2. Feature & Product Validation (post release)

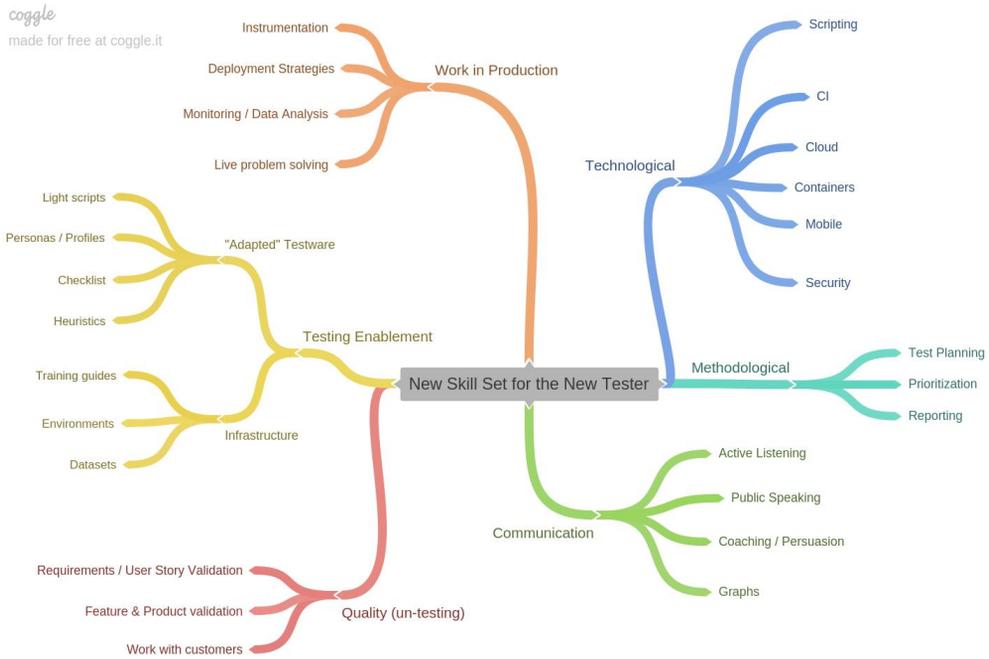
- Measure usage and adoption
- Provide real feedback into the development loop

### 3. Work with Customers

- CSM
- Support

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**You do not want to be left behind!**



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## Prepping for the Future

Keep your eyes Open

Knowing you will need

**FOCUS & ADAPT**



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## To summarize

- Testing is evolving, based on a number of simultaneous factors.
- New Skills are needed to cope with the changes and not make fools of ourselves.
- Skills will make us expand into new territories, and use our expertise on new areas.
- No One really knows where the future will take us but you can be ready by looking for it.



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# Thank you!

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[@joelmonte](https://twitter.com/joelmonte)

<http://qablog.practitest.com>

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