Let’s focus more on Quality Engineering and less on Testing the Software

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PNSQC 2020
About Me!

**QA/Testing**
(last 22 years)
- Tester, Lead, Director
- Consultant, Speaker
- Blogger, Podcaster

**PractiTest**
- Head of Quality
- Chief Solution Architect

**Other Stuff**
- Sate of Testing ™
- Online Test Conference
- 1-on-1 Podcast (w/ Rob Lambert)

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Let’s get stated - with a Question...
What value do you provide to your company?
What **value** do you provide to your company?

- What decisions do you help make?
- How do you change the way your company delivers products?
- If you were not there, what would be different?

Hold on to these answers for the next 20 minutes...
Software development is undergoing a constant evolution
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#PNSQC2020

Focus on Quality - not on Testing!
Waterfall – V – W Models

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Waterfall – V – W Models

• Requirements are “ready” and “complete”

• Developers & Testing work separately

• Work based on Cycles converging into a Big Release

• Products are shipped to “someone” outside the team

• Feedback comes via 3rd or 4th level sources
Waterfall – V – W Models

Objective of the Testing Team:

Find all the bugs before releasing the product.

Ensuring the final product has reached the desired levels of quality and stability.
Iterative / “Agile” Models

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Iterative / “Agile” Models

• Developers & Testers work as Integrated group

• User stories are elaborated by the team

• Developers “should” take a more active part in testing

• Short sprints, faster delivery and feedback

• Products are shipped outside the team, feedback comes via 3rd or 4th sources
Iterative / “Agile” Models

Objective of the Testing Team:

Work together with Developers to test and deliver products quickly, receive feedback from the field, and continue the development process.
How we got to DevOps?

Focus on Quality - not on Testing!
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DevOps

Feels a lot like Agile but...

• We (Developers & Testers) are in charge of deploying and running the product in *our own production environments*

• We do not need to wait or ask other to get feedback on the product – we can measure it directly from usage

• Cost of releasing bugs to production is *radically reduced*
DevOps

Objective of the Testing Team:

Work with Developers to release quickly, enabling stability on the deployment process, engineering fast feedback from production.
Back to our constant evolution
Modern Testing

Focus on Quality - not on Testing!
Modern Testing (MT)

Originally defined by Alan Page & Brent Jensen in their AB Testing Podcast

http://moderntesting.org
MT – 7 Principles

1. Our Priority is Improving the Business.

2. We accelerate the team, and use models like Lean Thinking and Theory of Constraints to help identify, prioritize and mitigate bottlenecks from the system.

3. We are a force of 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.
MT – 7 Principles (cont.)

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 knowledge across the team; understanding that this may reduce (or eliminate) the need for a dedicated testing specialist.
MT – Missions Statement

Accelerate the Achievement of Shippable Quality

Testing → Quality Engineering

Focus on Quality - not on Testing!
What does all this mean to me and my team?
Focus on Quality not on Testing!
Focus on Quality - not on Testing!

- Bring "customers" into the Process
  - Bring real data / applications / configuration
  - Visit customers to get feedback
  - Create "Personas" for your team

- Deployment & Release Process
  - Ensure Usability and Accessibility
    - Define instrumentation
    - Generate MVPs
  - User Story Validation
    - Define Measurable Success Criteria (in production)
    - Detect conflicts and inconsistencies with existing product
    - Capture inputs from other departments

- Focus on Quality & Not on Testing
  - Develop Test Artifacts
  - Test Enablement for Devs
    - Test Environment generation
    - Gather inputs
    - Create information flows
    - Dashboards and alerts
    - Instrumentation planning and testing
    - Feature validation analytics

- Coordination with other teams
- Production Analytics
  - Pair testing sessions with Devs
  - New Dev Training programs
  - Test process definition
  - Testing Pre-Briefing & De-briefings

- Test Training & Coaching

User Story Validation

Focus on Quality - not on Testing!
User Story validation

- Generate MVPs – release small & get validation quickly
- Define measurable success criteria for production
- Define correct instrumentation for monitoring purposes
User Story validation

• Detect conflicts and inconsistencies within the product

• Ensure usability and accessibility

• Capture inputs from all other departments (support, sales, customer success, etc)
Bring “customers” into the Process
Bring customers into the process

• Take part of calls and visits with support, services, sales, etc.

• Create “Personas” for the Development process

• When possible, bring data for use in development and testing
Testing Training and Coaching
Testing training and coaching

- Test training for New Developers
- Test process definition
- Pair testing sessions with developers
- Test briefings and debriefings with developers
Test Enablement for Developers
Test enablement for Devs

• Testing cookbooks

• Test environment generation
  • Readily available dockers
  • Realistic data and setups

• Test artifacts development
  • Checklists
  • Heuristics
  • Sanity / Smoke scenarios
Development and Release Process
Deployment and Release process

- Release risk assessments
- Staged process and milestones
- Deployment and rollback design and testing
- Scheduling and notifications process
Production Analytics

- Instrumentation planning and testing
- Feature-validation analytics
- Dashboards and alerts generating
  - Product Health dashboards
  - Strategic Customer dashboards
Coordination with External Teams
Coordination with external teams

• Gather inputs and needs

• Generate information flows

• What teams?
  • Program / Project Management
  • Support
  •Docs
  • Services
  • Customer Success
Focus on Quality - not on Testing!
What value($$$) do you provide to your company?
What value do you provide to your company?

• What decisions do you help make?

• How do you change the way your company delivers products?

• If you were not there, what would be different?
Focus more on Quality and less on Testing
Thank you!

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