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THE FUTURE OF SOFTWARE TESTING



# The End of Testing as We Know It

## James Whittaker

- Moving Test Forward
  - Vroeger testen, focus op preventie
- Test Culture
  - Testen is geaccepteerd, volwaardig partner
- Testing's Butterfly
  - van lelijke rups naar mooie vlinder
- Tests Shipped with Product
  - installatie inclusief regressietest (en tools)



# The End of Testing as We Know It

## James Whittaker

- Test Sourcing
  - Van “insourcing” (in huis, inhuur mensen)
  - Via “outsourcing” (offsite, inhuur resources)
  - Via “outservicing” (managed services)
  - Naar “Test Sourcing” (Testing as a Service)
- Visualization
  - Foto’s zeggen meer dan 1000 woorden, Film zegt meer dan 1000 foto’s
  - Test technieken en tools in de eerdere fasen van de SDLC



# The End of Testing as We Know It

## James Whittaker

- Huidige praktijk:
  - Een gebruiker of tester vindt een bug, ontwikkelaar kan het niet reproduceren
  - Een tester wil testcases hergebruiken, krijgt ze niet aan de praat
- Virtualisatie lost dit probleem op
  - Gebruiker maakt een “VM at the point of failure”
  - Testers maken VMs voor elke test

Companies no longer need QA departments



# The End of Testing as We Know It

## James Whittaker

- *Software* will continue to run our economy, our businesses and our lives
- Software will be a critical part of the solutions that will grow food, cure disease and produce sustainable energy
- Remove software from the equation and humankind's problems get a lot harder
- It is imperative that we get software right!



# Trends That May Shape the Future of Software Testing

## Randall Rice

- The Aging Baby Boomer Generation
- New Technologies
- New and Increased Security Concerns
- Energy Concerns
- Outsourcing
- Virtualization
- Advances in Test Automation

“Prediction is very difficult,  
especially if it's about the future.”

Niels Bohr



# Trends That May Shape the Future of Software Testing

## Randall Rice

- Elevate the awareness of software testing as a profession
- Improve the quality of testing
- Integrate testing in the software development life cycle
- Show the value of software testing as more than just finding defects

“Being right for the wrong reasons”



# Heuristics: Solving Problems Rapidly

## Michael Bolton

“guideline”

“rule of thumb”

**noun:**  
*A fallible method  
for solving a  
problem or making  
a decision*

**adjective:**  
Serving to discover



# Heuristics: Solving Problems Rapidly

## Michael Bolton

- Guid
- Trig
- Su
- He
- 
- He
- Ex
- Fo
- HI
- Ora
- T

LM-6      Basic Date October 27, 1969  
Changed \_\_\_\_\_

CDR      Describe Using Monocular: (15 Min)

• A model is an idea, activity, or object...

• ...that represents (literally re-presents) another idea, activity, or object...

• ...whereby understanding the model may help you understand or manipulate what it represents

...expression (color analogy) and  
Predominant Features.

SUR-15      [note size, angularity,  
and roundness], cinders,  
ash fall or flow, lava,  
pahoehoe, aa, ejecta



# Heuristics: Solving Problems Rapidly

## Michael Bolton

- When trying to explain something, prefer “a” to “the”
- When someone makes some pronouncement, silently add “to me”
- Try adding “unless ...”
- No matter how much it is looking otherwise, everyone is trying to help
- What did you see or hear (smell, taste, touch) that made you believe ...
- If you can't think of at least three explanations for something, you probably haven't thought about it enough



# Two Futures of Software Testing

## Michael Bolton

- The Dark Future
  - The Plan is Everything
  - Change is Controlled
  - Measurement
  - Putting the Testers in Charge
  - Promoting Orthodoxy
  - Automation is King
  - Pathologies
- The Bright Future
  - Skill is Central
  - Quality is value to **some person**
  - Testing is a Service
  - Information in Context
  - Test Activities
  - Change Happens
  - Machines do Mechanical Work
  - Testers Collaborate
  - Narratives vs. Numbers
  - Focus on the Mission
  - Testers Light the Way

*The worst thing about the dark future is, that it's so much like today.*

Testing is NOT methodology



# Testing, The Next Level

## Erik Boelen

... de huidige praktijk...

- In order to pick a weapon –E
- In order to fire a weapon –SPACE
- In order to holster –F
- In order to press a button –ENTER
- In order to activate a switch –A



...bootcamp...



# Testing, The Next Level

## Erik Boelen

- Back to the roots of the V-model
  - creërende actie versus controlerende actie
- Shared objectives
  - Testen is partner, facilitator, deel van het team
- Combine (test) methodologies
  - Pak uit de gereedschapskisten wat je nodig hebt
- Share knowledge
  - Testers en ontwikkelaars samen

Apply in stead of use



Natural selection is not the only process that changes organisms over time. Yet it is the only process that seemingly designs organisms over time.

To stop evolving is to perish

Agile is a journey not a destination



The quality is remembered long after the price is forgotten

It is not the strongest of the species that survived, nor the most intelligent. It are the ones most responsive to change.

