Testing & Agile Myths Busted!

TESTERS JUST BURN MONEY!

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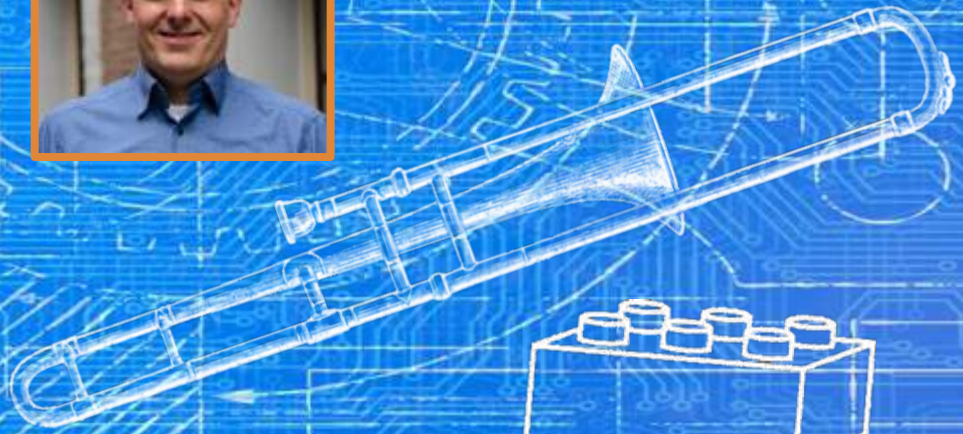
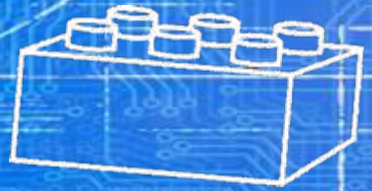
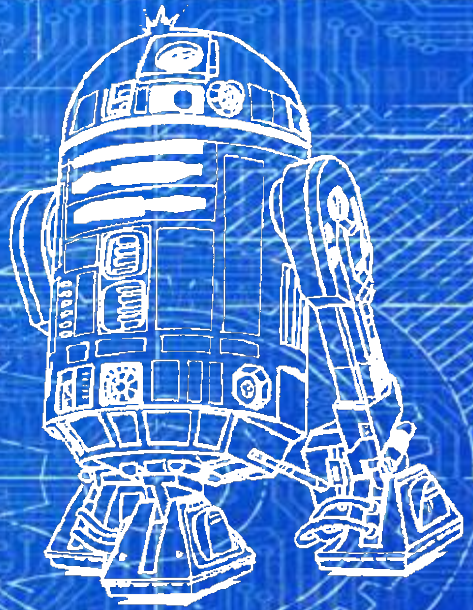






Goals for today

- Look at how experiments are done
- Inspire you all to be MythBusters in your own projects
- Bust some myths with you in this session
- Have fun!

What are Myths?

Definition One:

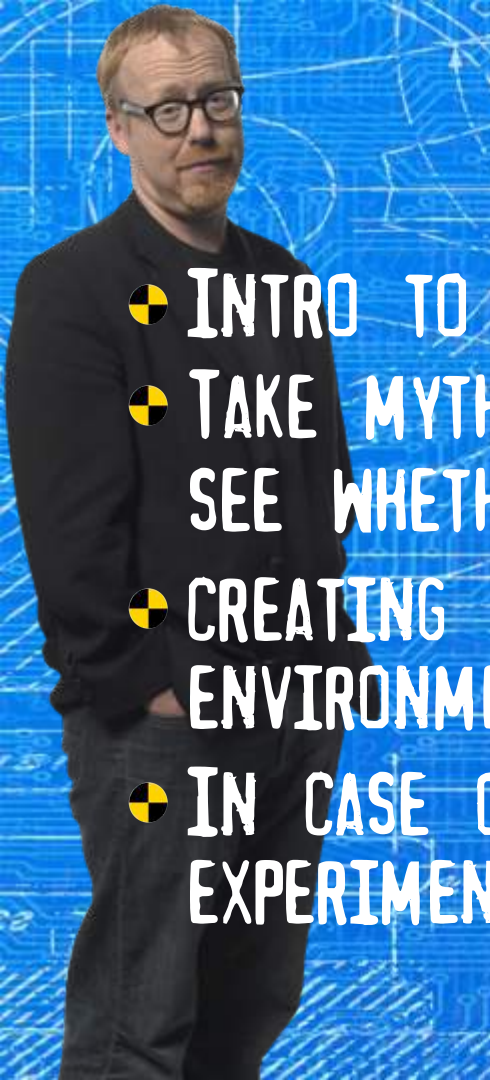
A traditional story, especially one concerning the early history of a people or explaining a natural or social phenomenon, and typically involving supernatural beings or events.

What are Myths?

Definition two:

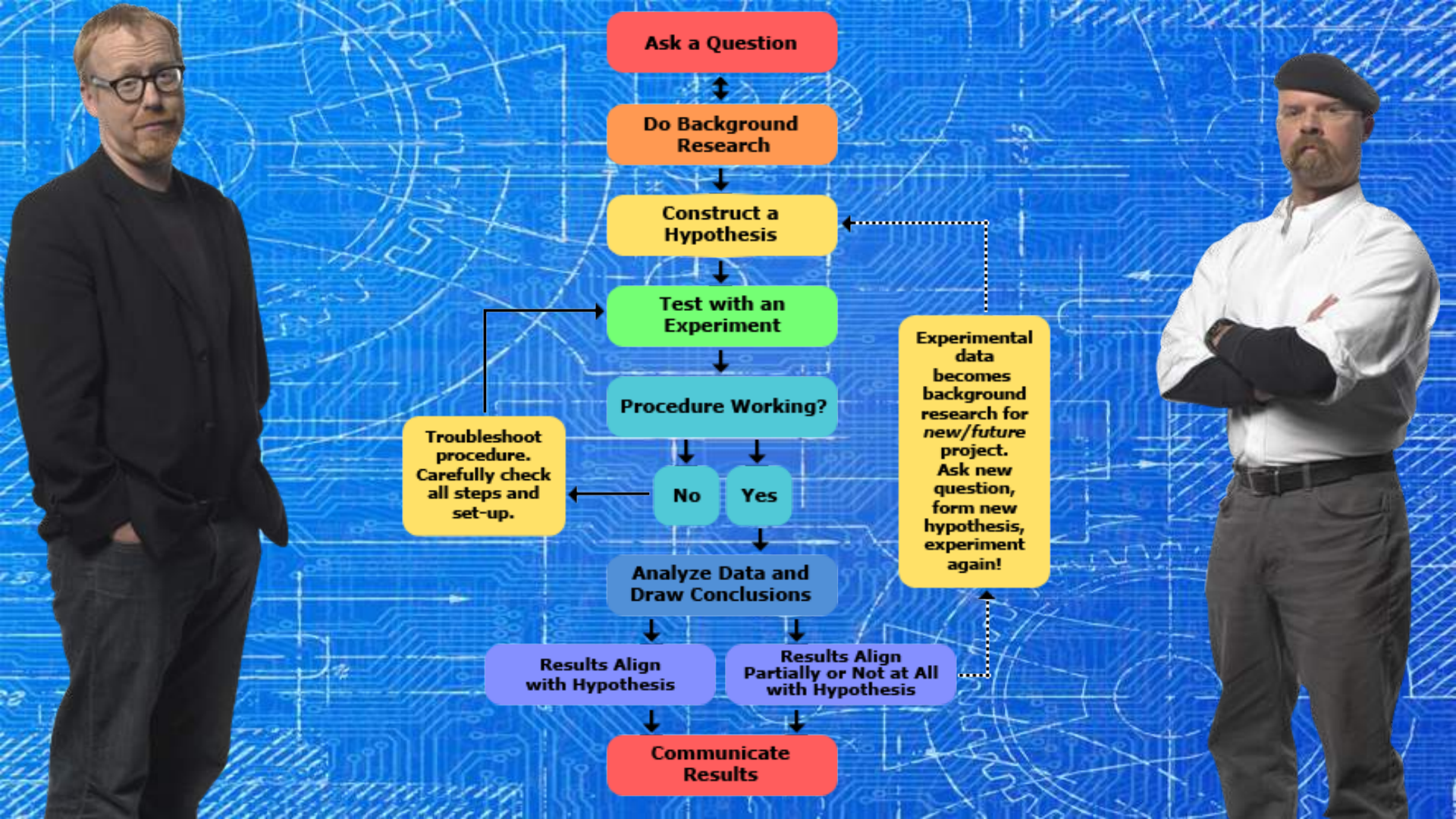
Things we believe, use to make decisions.
A widely held but false belief or idea.

"The belief that evening primrose oil helps to cure eczema is a myth, according to dermatologists"



MythBusters

- Intro to premise
- Take myths and design experiments to see whether they are Busted/Confirmed
- Creating testable hypotheses, reproducing environment and running experiment
- In case of doubt, adapt conditions until the experiment gives the predicted result (or not)

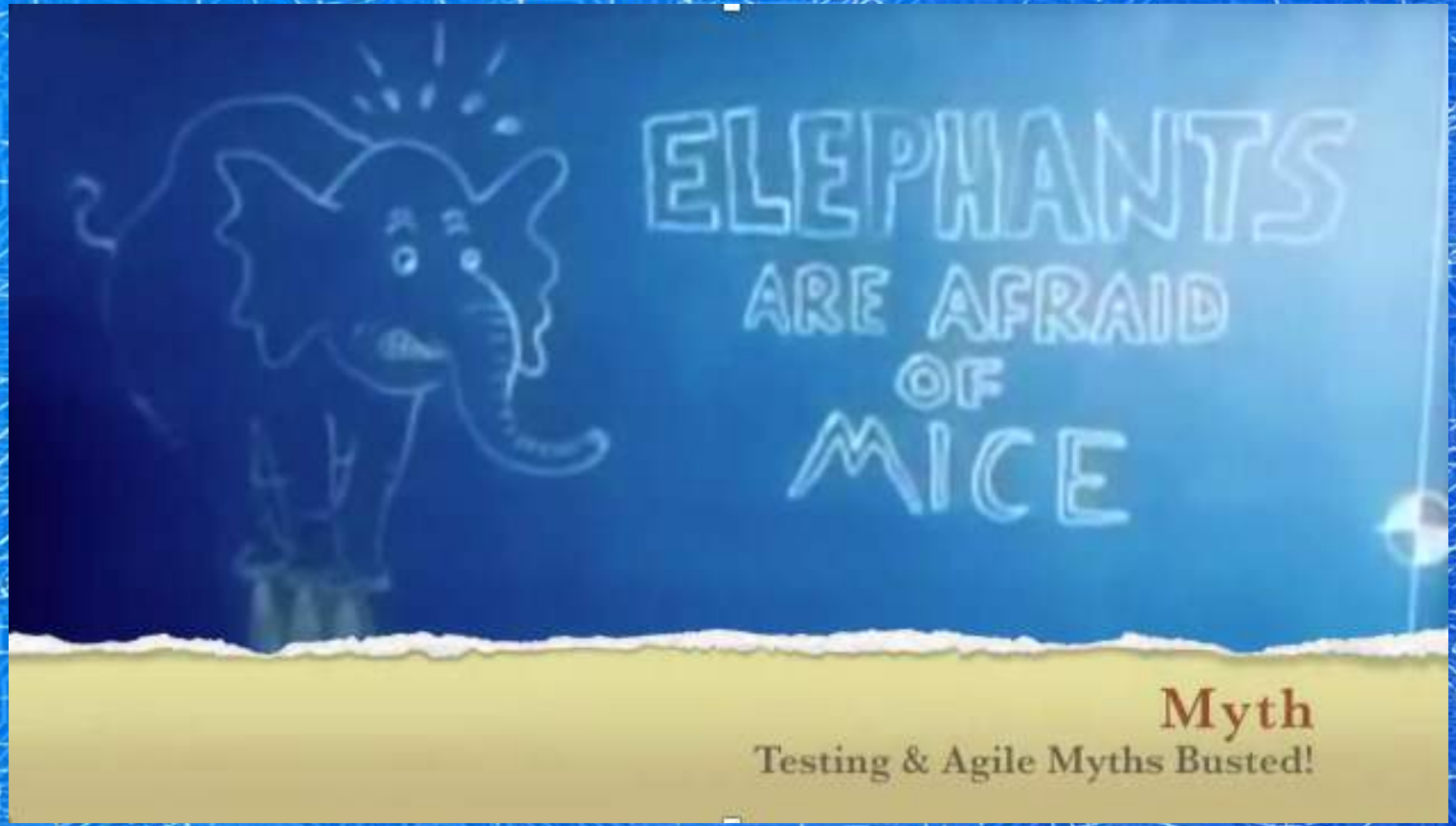

Ask a Question
Do Background Research
Construct a Hypothesis
Test with an Experiment
Procedure Working?
No
Yes
Troubleshoot procedure. Carefully check all steps and set-up.
Analyze Data and Draw Conclusions
Results Align with Hypothesis
Results Align Partially or Not at All with Hypothesis
Communicate Results
Experimental data becomes background research for *new/future* project. Ask new question, form new hypothesis, experiment again!

Scientific method

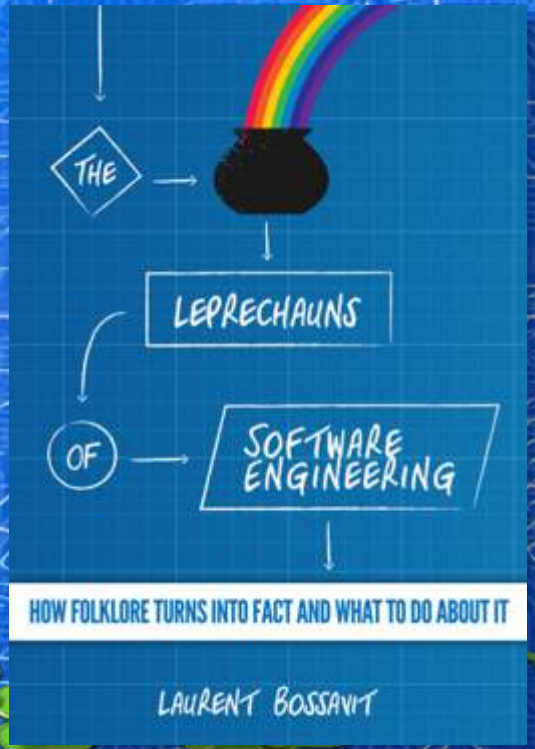
- Ask a Question
- Do Background Research
- Construct a Hypothesis
- Test Your Hypothesis by Doing an Experiment
- Analyze Your Data and Draw a Conclusion

This is the part where Alex is gonna say stuff about

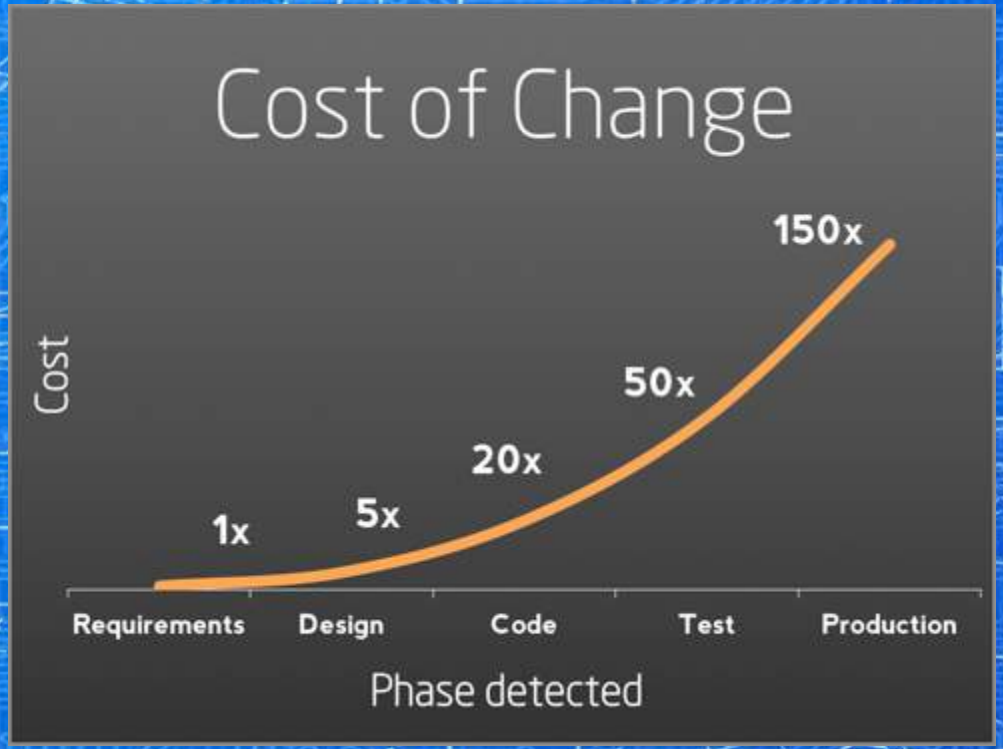
Musophobia


ELEPHANTS
ARE AFRAID
OF
MICE
Myth
Testing & Agile Myths Busted!

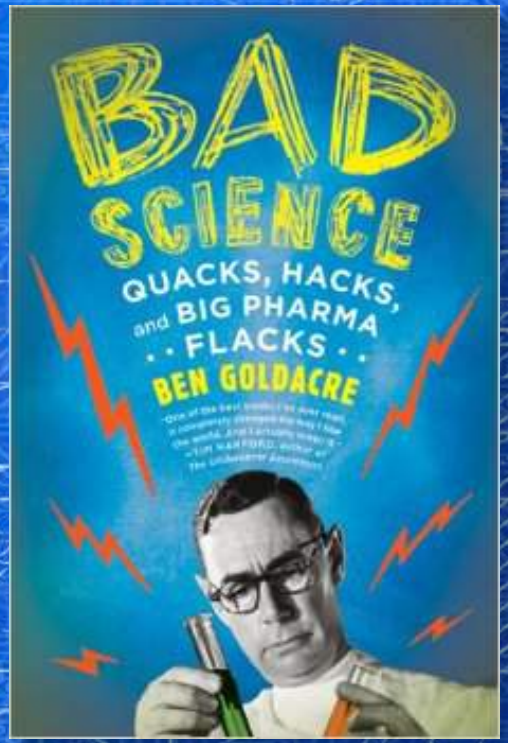
LEPRECHAUNS?



Boehm curve


Cost of Change
Cost
150x
50x
20x
5x
1x
Requirements
Design
Code
Test
Production
Phase detected

Bad Science?


BAD
SCIENCE
QUACKS, HACKS,
and BIG PHARMA
FLACKS
BEN GOLDACRE

Now let's bust some myths together

Myth I

- Myth: people can be managed

Manage comes from the Italian word "maneggiare"
which means: train horses!

Workers, this approach held, were like parts in a complicated machine. If they did the right work in the right way at the right time, the machine would function smoothly. And to ensure that happened, you simply rewarded the behavior you sought and punished the behavior you discouraged

Google

manage people

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Ongeveer 948.000.000 resultaten (0,43 seconden)

6 Tips For Managing People Who Are Hard To Manage ...
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9 jun. 2014 - But then it wouldn't be **management**. It would be sitting around doing little while legions of highly motivated **people** worked happily and ...

How to Learn to Manage People: 10 Steps (with Pictures)
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How to **Manage People**. **Managing people** is much more of an art than it is a science. There is no secret formula or set of rules to follow. Like any true art it takes ...

Afbeeldingen van manage people Afbeeldingen melden

Meer afbeeldingen voor manage people

How to Manage People Who Are Smarter than You
https://hbr.org/.../how-to-**manage-people**-who-are-sm... Vertaal deze pagina
6 aug. 2015 - The best managers hire smart people to work for them. ... How do you **manage people** who have more experience or more knowledge? How do ...

Team Management Skills - Team Management Training ...
www.mindtools.com › Team Management Vertaal deze pagina
The Core Skills Needed to **Manage** Your Team ... A good starting point is the Warren G Bennis quote that "Leaders are **people** who do the right things; managers ...

Managing People Is an Art: 32 Ways to Do it Right.
www.entrepreneur.com/article/234199 Vertaal deze pagina

Myth I

- Myth: people can be managed

Now let's try this...

A human experiment!

Myth II

- Myth: We need clear expected values in order to test

Expected results should be produced as part of the specification of a test case and include outputs, changes to data and states, and any other consequences of the test. If expected results have not been defined, then a plausible, but erroneous, result may be interpreted as the correct one. Expected results should ideally be defined prior to test execution.

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Myth II

- Myth: We need clear expected values in order to test

More Myths...

Myth III:

Testers alone are responsible for Quality

More Myths...

Myth IV:

Testers break things

Testers don't break your code, they break your **illusions** about the code.

-- adapted from James Bach

More Myths...

Myth V:

Exploratory testing is unstructured testing

More Myths...

Myth VI:

Doing the job is recognition enough.

More Myths...

Myth VII:

If developers write perfect code, no one needs to test

More Myths...

Myth VIII:

Working software is the primary measure of progress

More Myths...

Myth IX:

Agile testing always needs automation
(or automation always helps)

Why myths are dangerous

Audience participation!!

Why myths are dangerous

- Everyone says it so it must be true
- I believe what I see

BBC TWO

Why myths are dangerous

- Everyone says it so it must be true
- I believe what I see
- WYSIATI (What you see is all there is)
- Myths will trick you if you do shallow thinking

Critical Thinking done fast!

- Huh?
  - You may not understand. (Errors in interpreting and modeling a situation, communication errors)
- Really?
  - What you understand may not be true. (Missing information, observations not made, tests not run)
- And?
  - You may not know the whole story. (Perhaps what you see is not all there is)
- So?
  - The truth may not matter, or may matter much more than you think. (Poor understanding of risk)

How to avoid falling for Myths

- Don't believe what you hear/see/feel...
- Be clear on variables
- Form hypotheses
- Critical thinking: question everything
- Consider everything: system thinking

Myths in Agile and Testing?

- User story
- Acceptance criteria
- Done
- Bugs

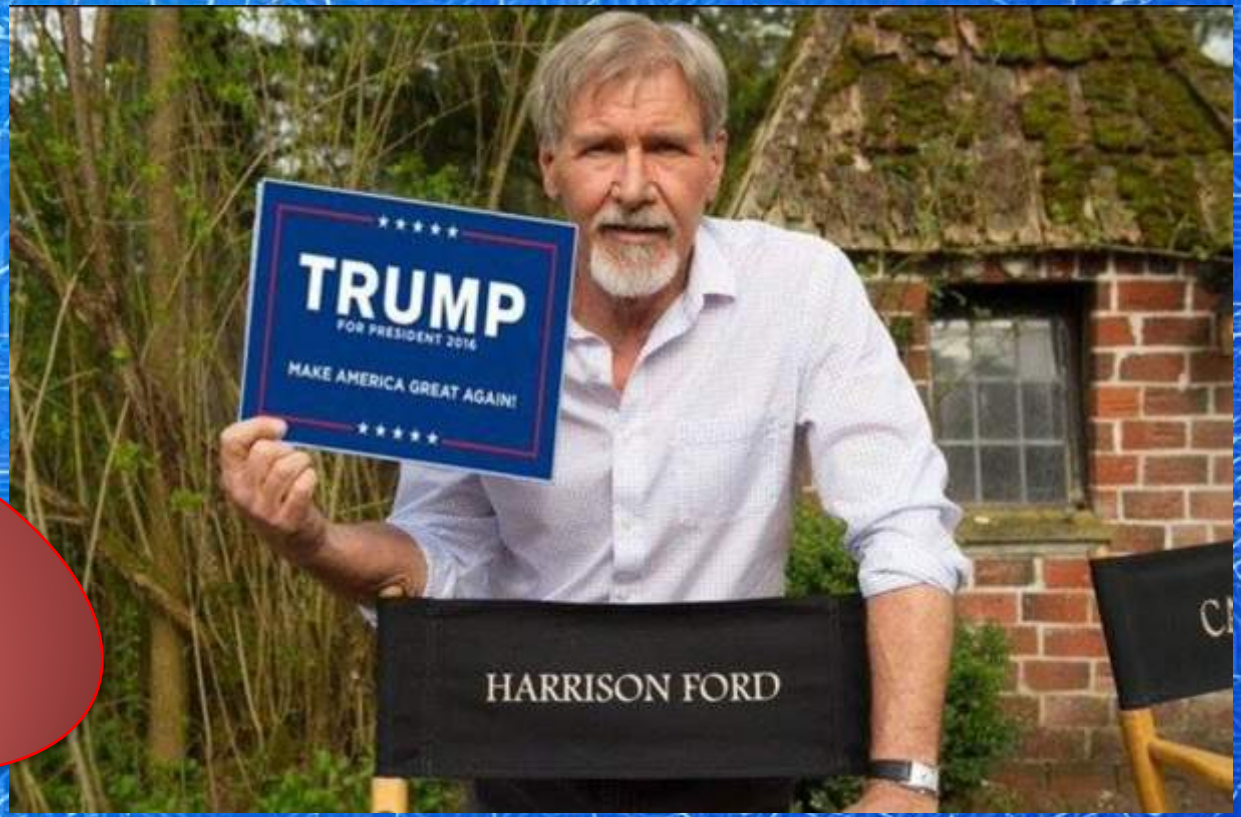
Takeaways

- Don't get fooled
- Use the Scientific Method
- Apply Critical Thinking
- Be mythbusters

DON'T GET FOOLED...

Muslim refugees from Libya??

DON'T GET FOOLED...



Han Solo voting for Trump??

DON'T GET FOOLED...

Test Automation ROI ??

QUESTIONS

- What type of application are you automating?
- Number of test cases executed per release?
- Estimated cost to automate each test case?
- Number of testers per release needed for manual execution?
- Projected number of testers needed to maintain and execute automated tests?
  * - include testers needed to execute and maintain automated scripts.
- Number of releases per year?
- Days of testing per release?

Once you eliminate the impossible, whatever remains, no matter how improbable, must be the truth

TEST US!
ANY QUESTIONS?

AGILE TESTING DAYS

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  http://youtu.be/8TX6rzz60xQ
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  https://en.wikipedia.org/wiki/Penn_%26_Teller:_Bullshit!