

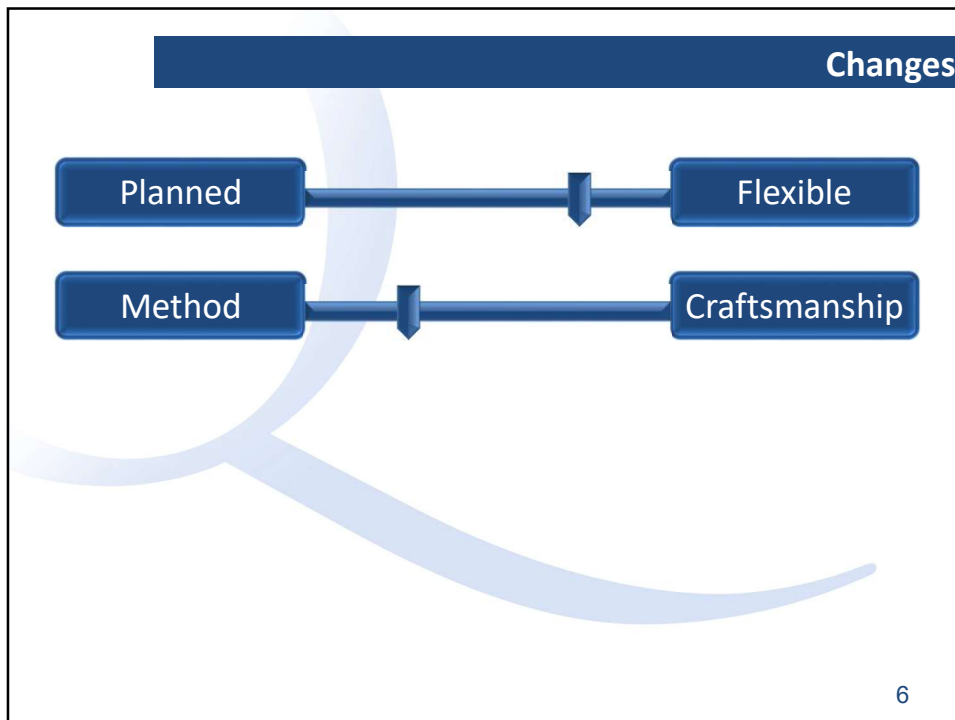
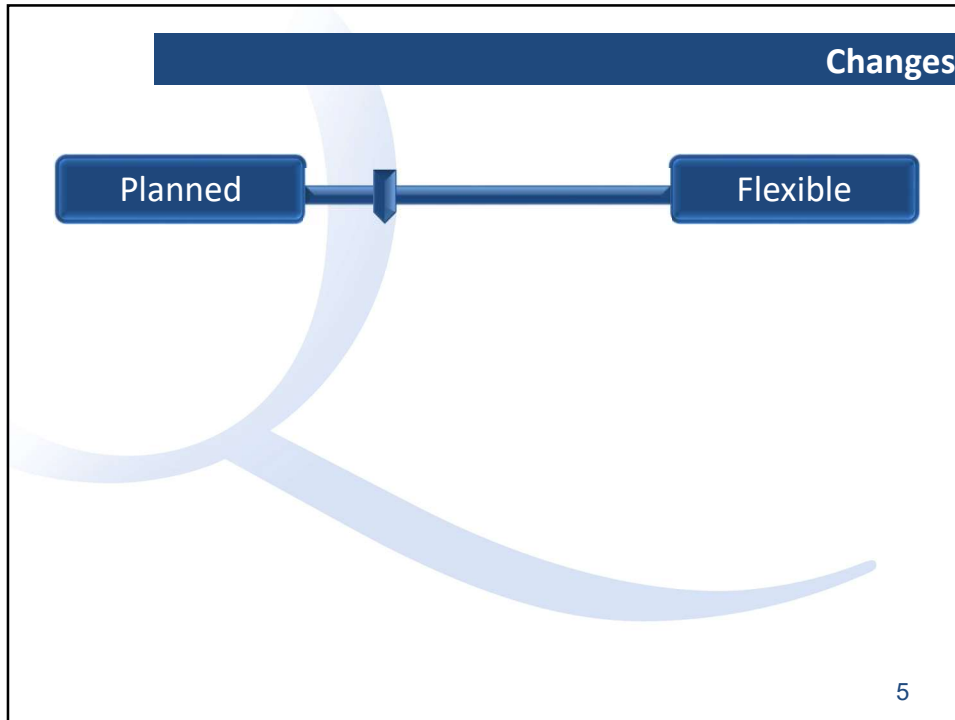
My opening statement for this talk

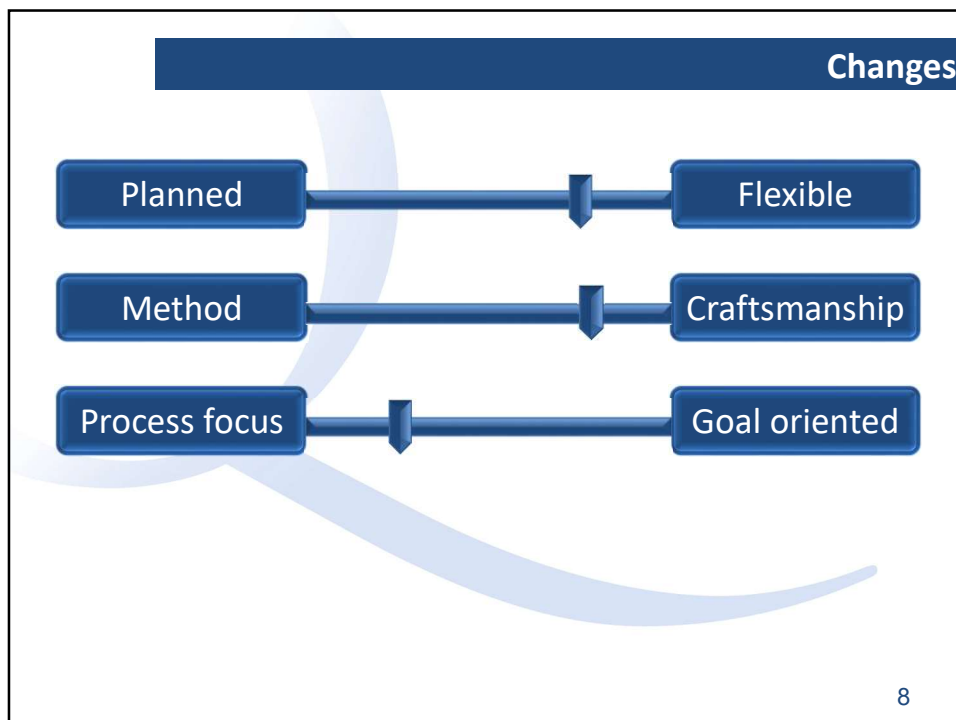
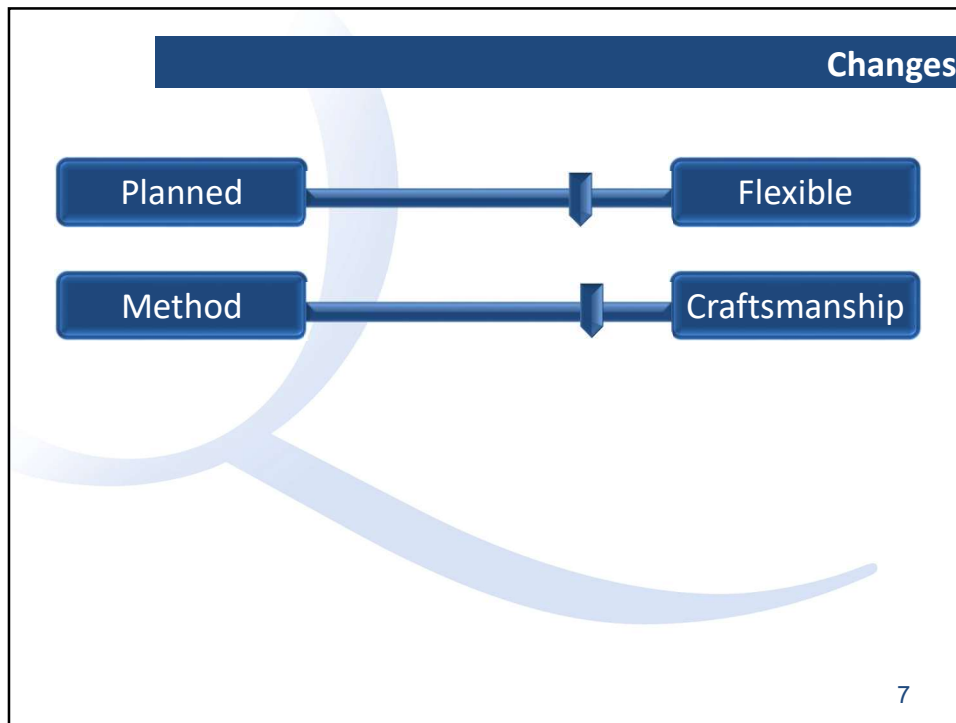


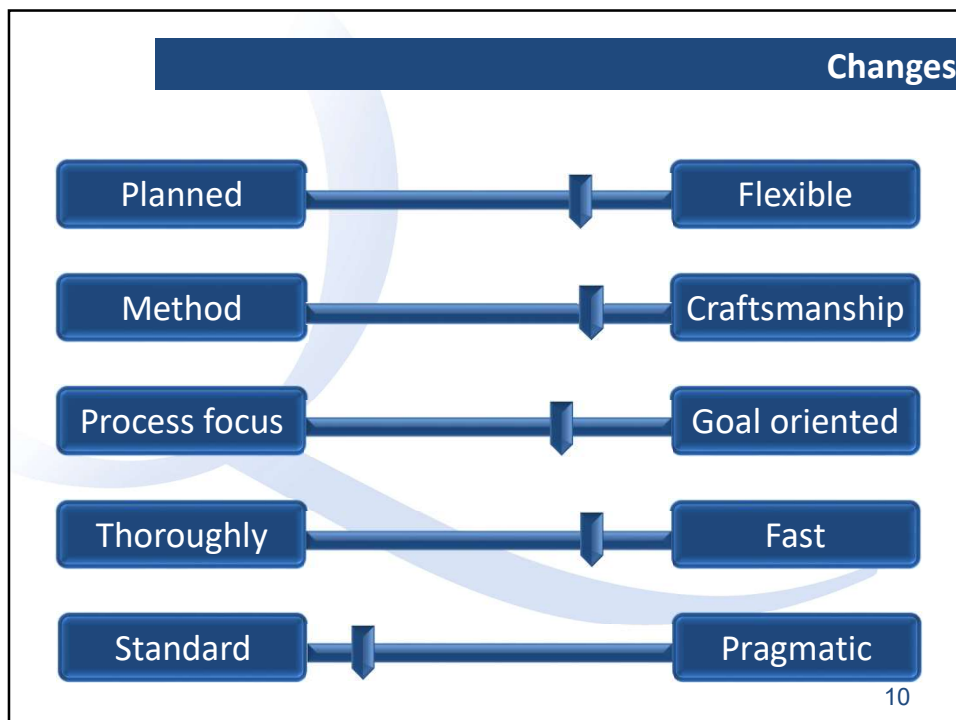
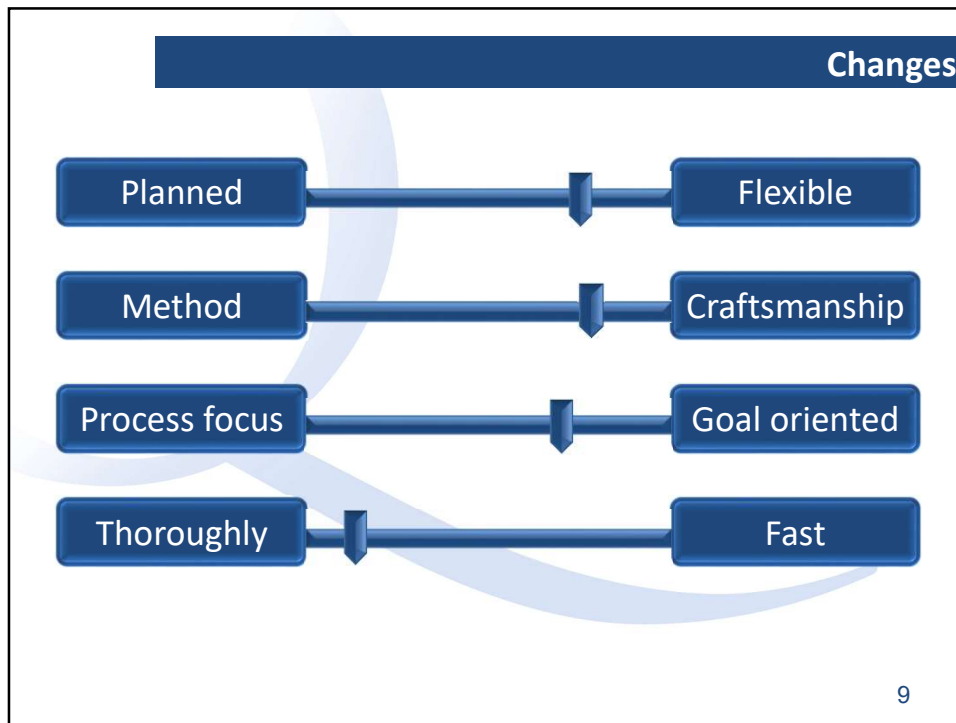
Subjects of this talk:
Why different ways of testing?
An overview over different ways of testing
How to decide which way is best in your situation

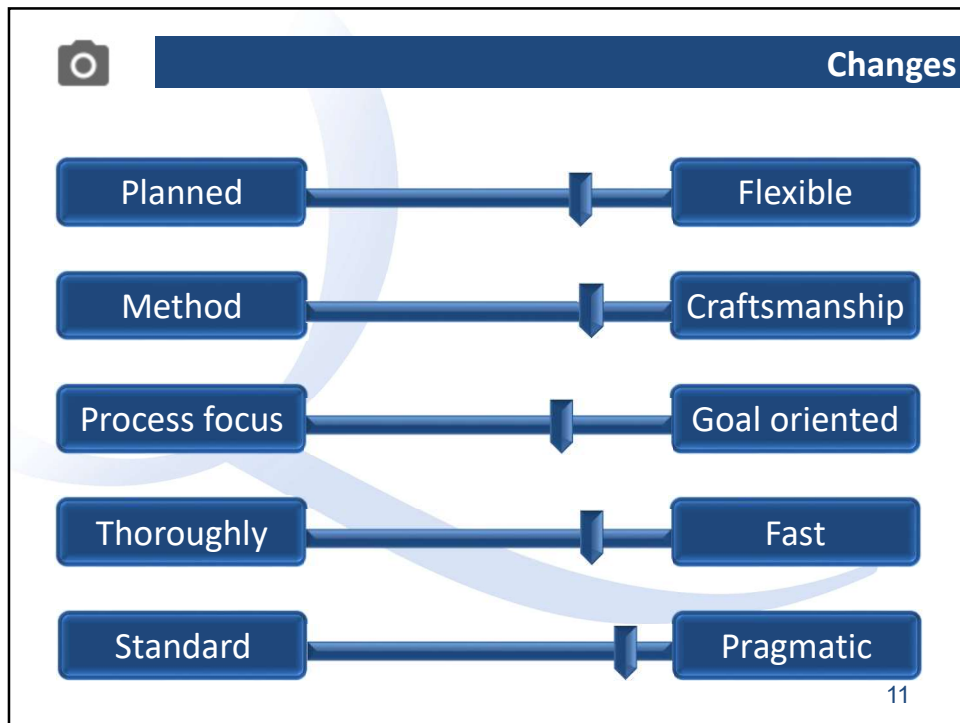
3

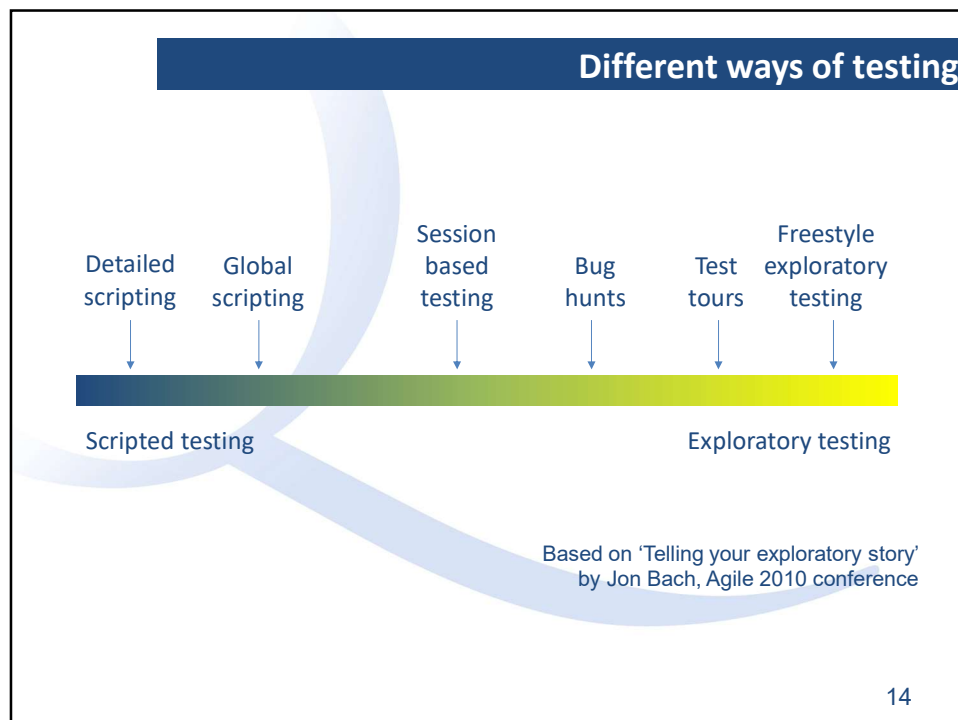
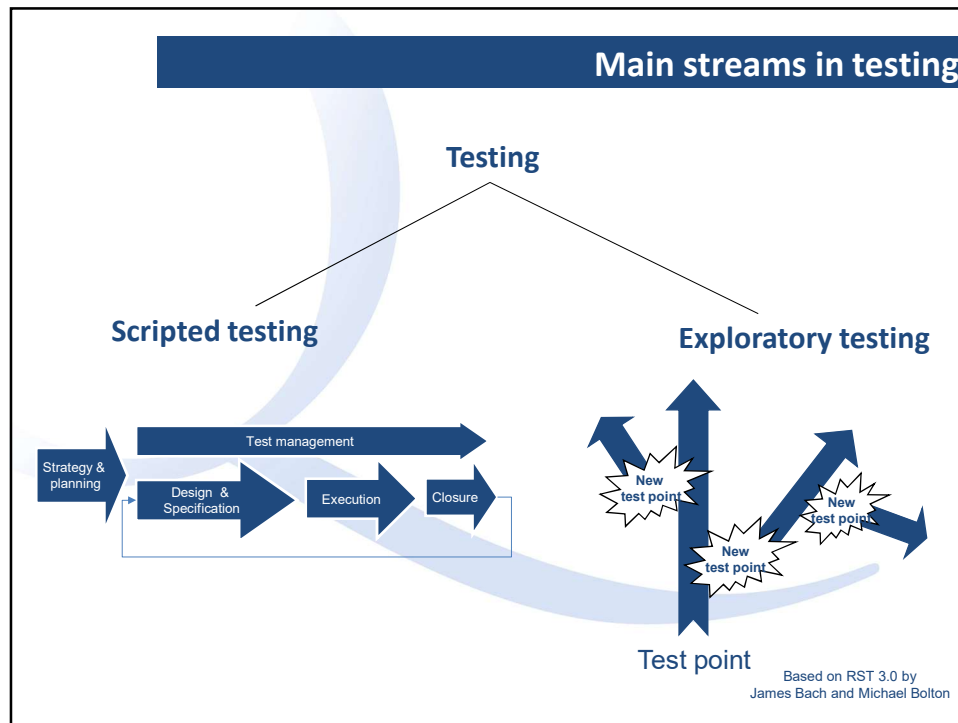


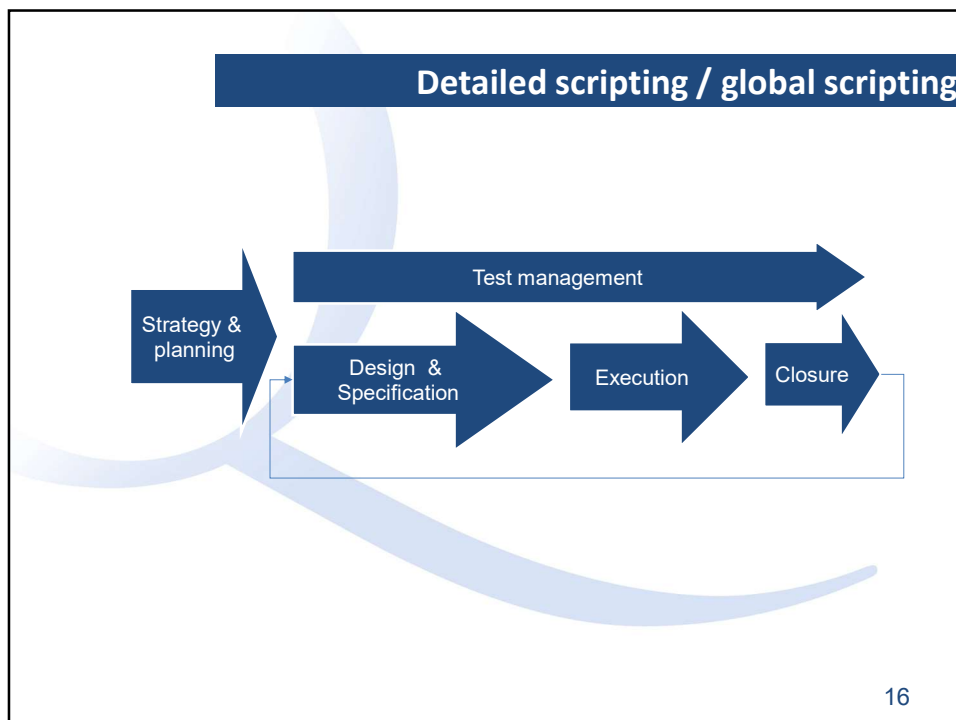
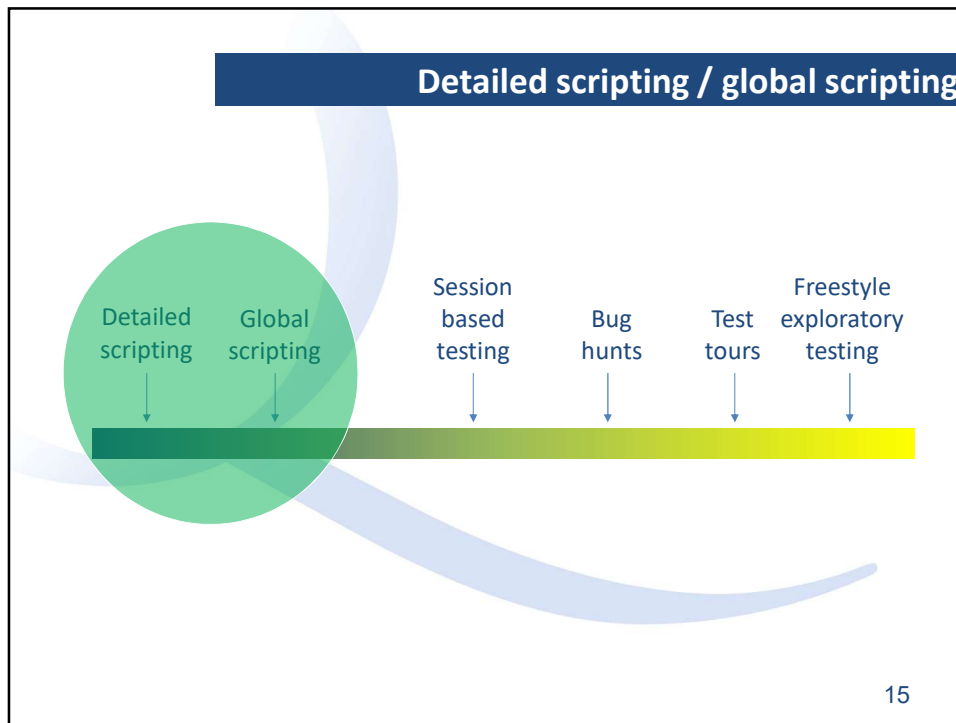












Detailed versus global scripting

Detailed scripting

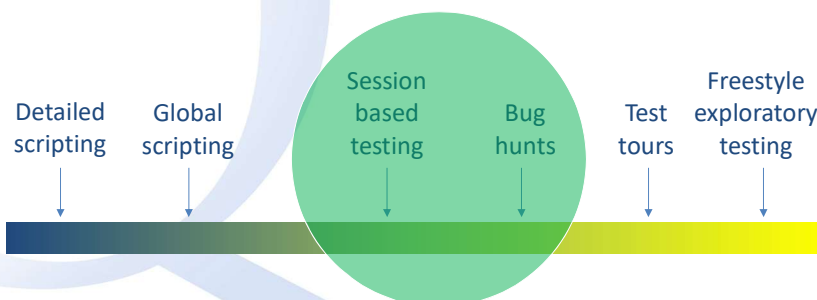
- Go to the home screen
- Push the button 'New'
- Enter in the field 'To':
j.cannegieter@squerist.nl
- Push on 'File'
- Select the document 'Test 1'
- Enter in the field 'Subject':
Test attachment <date>
- Go to the email box of
jcannegieter
- Check whether the email and the
attachment is delivered

Globale scripting

- Make and send an email with an
attachment to one recipient
- Check whether the email and the
attachment is delivered

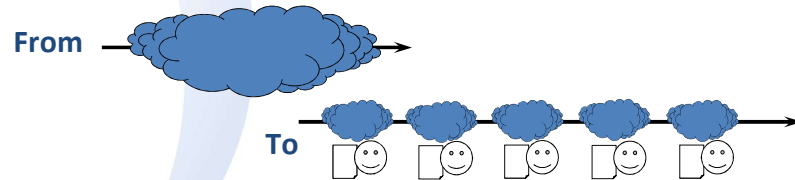
17

Session based testing / bug hunts



18

Session based testing



- Test sessions
- Testcharters
 - Mission
 - Test points / test ideas
- Session notes
- Session debrief

Source: How to Measure Ad Hoc Testing by Jon Bach, <http://www.satisfice.com/>

19

Bug hunts



20

Session based testing vs bughunts

Same in bug hunts

- Sessions
- Testcharters
 - Mission
 - Test points
- Testers
- Test manager
- Goal: get info

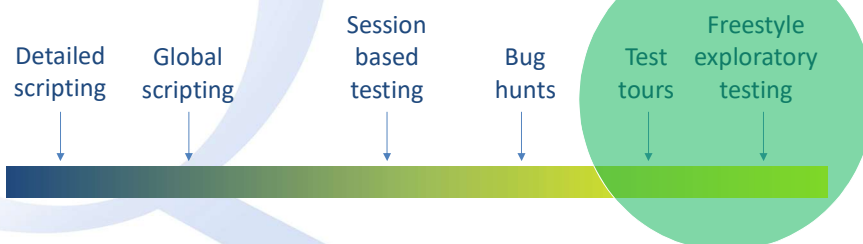
Different in bug hunts

- Length of a session
 - SBT: 60-120 min
 - BH: 180-240 min
- More freedom in charters
- Pairing with others
- Goals: get info and acceptance

Read the article 'The Way to Involve Stakeholders' in Testing Circus april 2014
<http://www.testingcircus.com/testing-circus-2014-april-edition/>

21

Test tours and freestyle exploratory testing



22

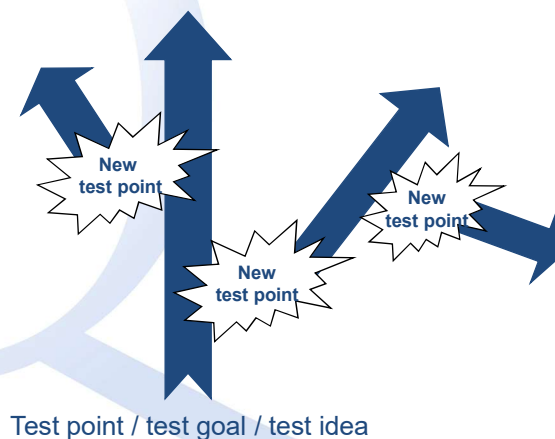
Exploratory testing is...

- ...a style of software testing...
- ...that emphasizes the personal freedom and responsibility of the individual tester...
- ...to continually optimize the value of her work...
- ...by treating test-related learning, test design, test execution, and test result interpretation as mutually supportive activities that run in parallel throughout the project.

Source: <http://kaner.com/?p=46>
and 'Explore it!' by Elisabeth Hendrickson

23

Essence of exploratory testing



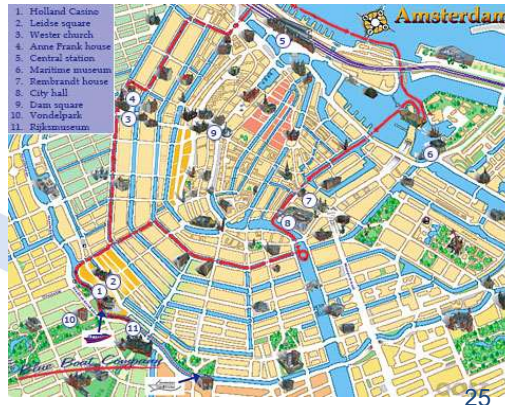
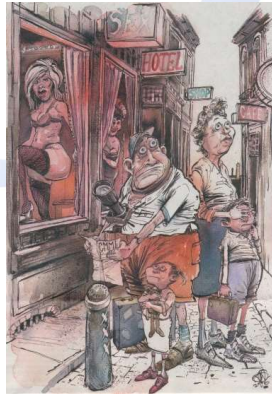
Based on RST 3.0 by James Bach and Michael Bolton

24

Test tours

Exploratory testing without good guidance is like wandering around a city looking for cool tourist attractions. It helps to have a guide and to understand something about your destination.

James Whittaker



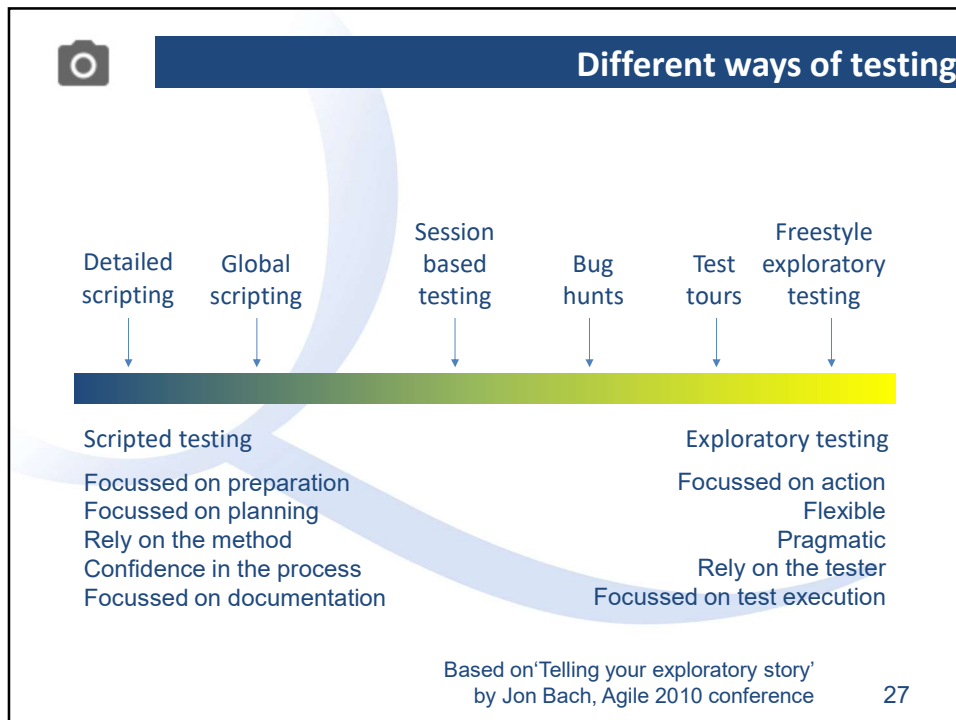
25

Examples of tours

- Feature tour – test all features in the application
- Claims tour – test whether the (commercial) claims are met
- Data tour – Test the handling of data
- Calculations tour – Test all calculations
- Process tour – test whether the application supports the work processes
- Screen tour – Test all screens
- Bad parts tour – Test those parts of the application where there were a lot of defects before
- Interfaces tour – test all interfaces
- A-social tour – test on improper use
- Burglar tour – test if an unauthorized person can get in
- ...

Based on 'Exploratory software testing' by James Whittaker

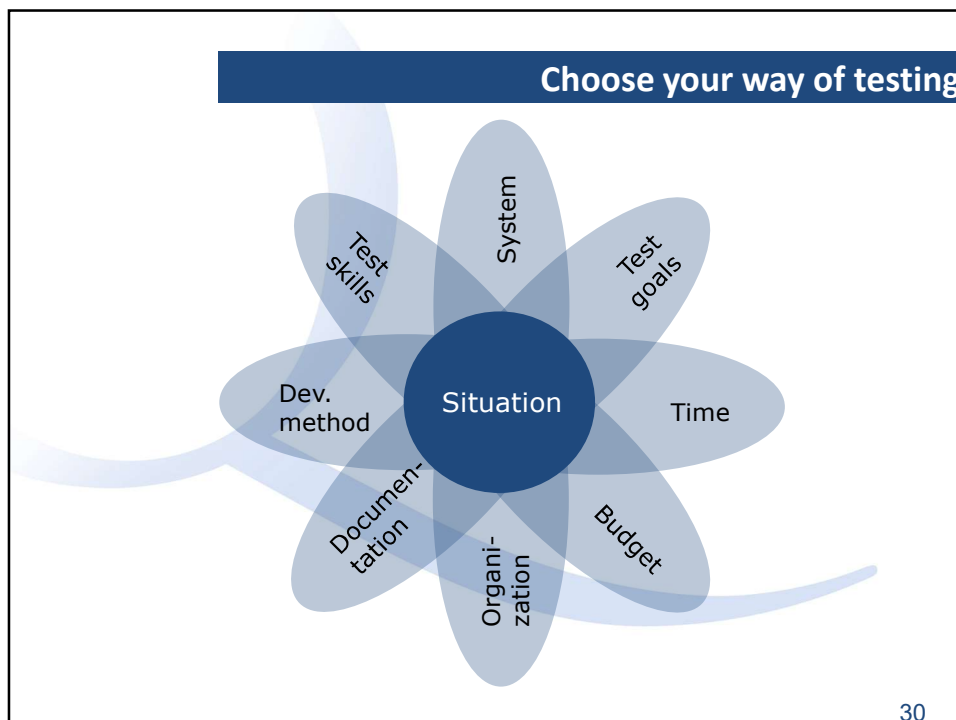
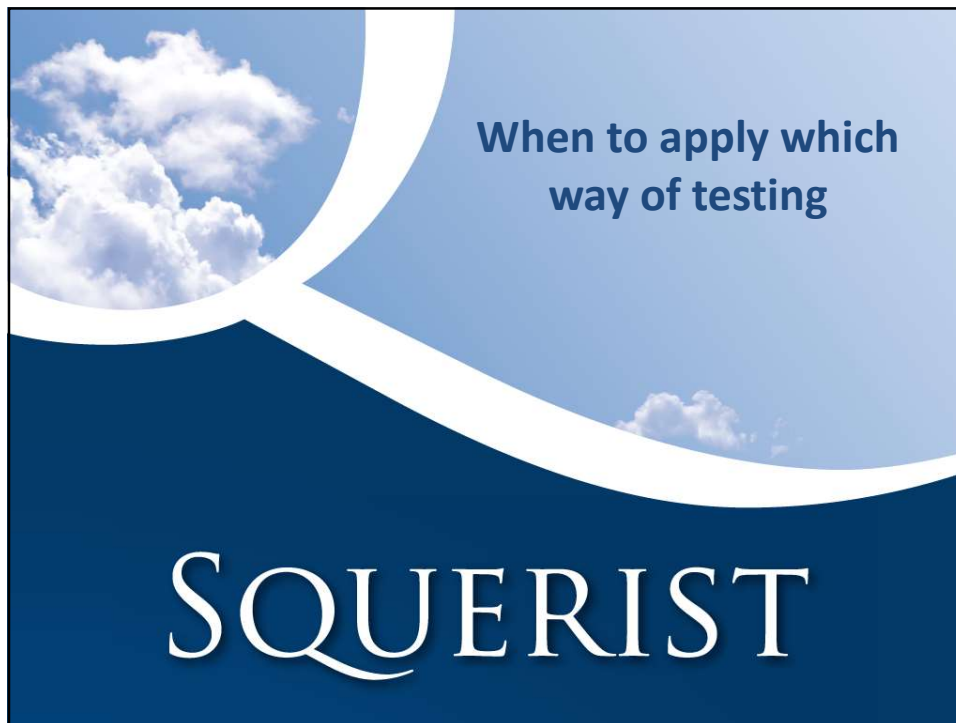
26



Effectiveness/efficiency of ET compared to ST

- Juha Itkonen, Mika Mäntylä and Casper Lassenius (2007): Defect Detection Efficiency of exploratory testing is higher compared with test case based testing
- W. Afzal, A. N. Ghazi, K. Bhatti, J. Itkonen, R. Torkar, A. Andrews (2014): We conclude that ET was more efficient than TCT in our experiment. ET was also more effective than TCT when detection difficulty, type of defects and severity levels are considered.
- Ed Allen and Brian Newman: Experiences of test automation, chapter 27, page 503:
 - Automated tests: 9,3%
 - Manual scripted: 24%
 - Exploratory tests: 58,2%
 - Fix verification: 8,4%

28



When to choose which way of testing - I

Category	Situation	Scripted testing	Exploratory testing
System	Calculations		
	User interface oriented system		
	Backend oriented system		
	Mobile app		
Test goals	Checking a set of req. / regulation		
	Value based testing		
	Usability		
	Business rules testing		
	Performance		
	Automated checking		
Organization	Security		
	Planning and preparation oriented		
	Young, modern startup		
	Hierarchical, traditional organisation		
	Self management, resp. low in org.		

31

When to choose which way of testing - II

Category	Situation	Scripted testing	Exploratory testing
Documentation	A lot and detailed documentation		
	Little documentation		
	Constantly changing documentation/req.		
System	Waterfall		
	Agile		
Budget	A lot of budget		
	Little budget		
Time	Early involved		
	Late involved		
	A lot of time available		
	Little time available		
Test skills	Analytical, accurate testers		
	Critical thinking (question everything)		
	Flexible		
	Professional testers		
	Non-professional testers		

Conclusion

It depends...

...on the system, test goals,
budget, documentation,
organization, development
method and test skills

Is there someone who
wants to change his/her
way of testing after
this workshop?

Please share it with us

Watch out, an opinion!

В будущем тестирование
программного обеспечения будет
представлять собой комбинацию
автоматизированного тестирования
и поискового тестирования

Software testing in the future
will be a combination
of automated testing and
exploratory testing

35

Большое спасибо



Thank you very much, have a good conference
and I hope to see you again