



# TEST MATURITY: A CONTEXT-DRIVEN APPROACH

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DEWT & QBM Meetup

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# OUR GOALS FOR TONIGHT

- We want to share and test an idea & MVP of an approach on you
- Discussion:
  - Does this make sense?
  - Is it valuable?
- If yes: feedback and possible improvements to our model

# **WHAT IS MATURITY?**

... and why does it matter?

# WHAT IS MATURITY?

- The quality of behaving mentally and emotionally like an adult  
a very advanced or developed form or state  
(Cambridge Dictionary)
- In psychology, maturity is the ability to respond to the environment in  
an appropriate manner.  
(Wikipedia)
- Maturity is the degree to which a system has realized its potential and  
adapted to its context.  
(James Bach)

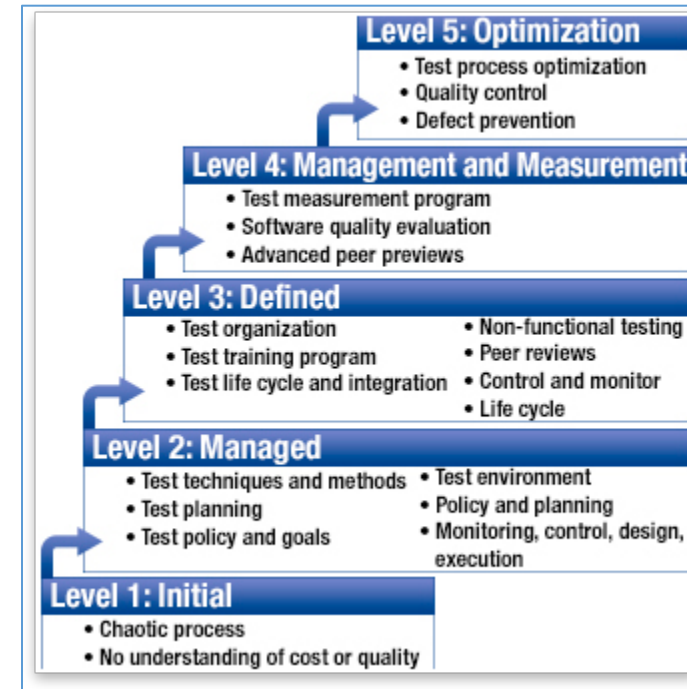
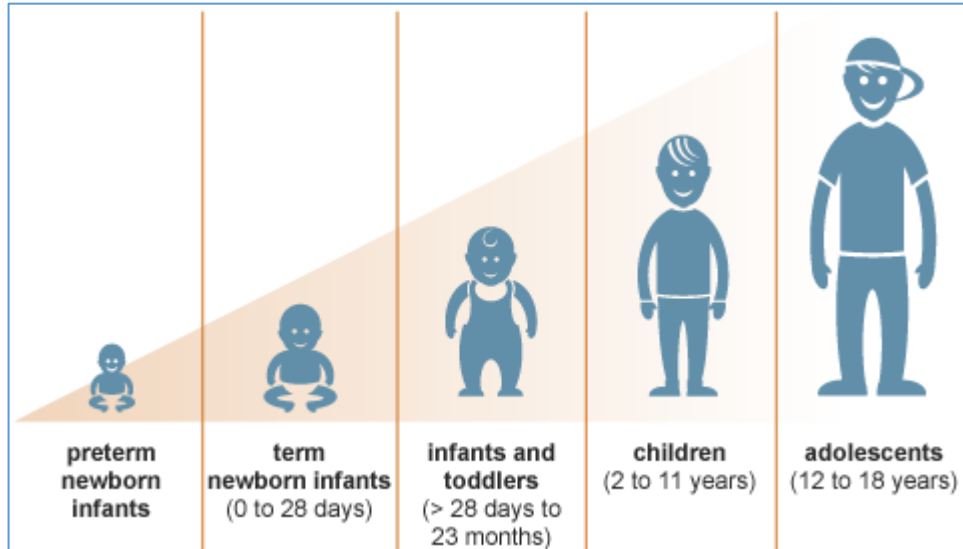
# CONTEXT

- Rabobank International
- Story by Joep

# WHAT IS A MATURITY MODEL?

- A maturity model is a business tool used to assess people/culture, processes/structures, and objects/technology  
(wikipedia)
- A maturity model is plan for achieving maturity  
(James Bach)

# HOW IS IT DONE?



Key Area		Initial	Controlled				Efficient			Optimizing			
1	Stakeholder commitment		A	B	B	C	F	H	H	K	M	M	
2	Degree of involvement		A	B	C	E	H	H	J	L	L		
3	Test strategy		A	A	B	E	F	F	H	K	L		
4	Test organization		A	D	D	E	I	I	J	J	K	L	L
5	Communication		B	C	C	D	F	F	J	M	M		
6	Reporting		A	C	C		F	G	G	K	K		
7	Test process management		A	A	B	B	G	H	J	K	M		
8	Estimating and planning		B	B	C	C	G	H	I	I	K	L	L
9	Metrics		C	C	D		G	H	H	I	K	K	
10	Defect management		A	A	B	D	F	F	H	J	K	L	L
11	Testware management		B	B	D	E	I	I	J	L	L	L	
12	Methodology practice		C	D	E		F	H	J	J	M	M	
13	Tester professionalism		D	D	E	E	G	G	I	I	K	K	M
14	Test case design		A	A	E		F	I	I	J	K	K	M
15	Test tools		E	E	E		F	G	G	I	L	M	M
16	Test environment		C	D	D	E	G	H	J	J	L	M	M

# WHY DOESN'T THIS WORK FOR US?

- TPI/TMMi doesn't focus on the people doing the testing
- Fixed model: everybody uses the same model
  - The model is pre-defined, doesn't take into account the context
  - The authors of the model have determined what is important and how to measure the areas
  - Growth is predefined: this implies that all organizations have the same growth model
- The model itself is not part of the evaluation
- Scores are the only way to express what is important and what needs to improve



# QUOTES FROM TMMI

- A maturity level is a well-defined evolutionary plateau towards achieving improved organizational processes
- The evolutionary testing model of Gelperin and Hetzel has served as a foundation for historical-level differentiation in the TMMi ... Testing has, according to Gelperin and Hetzel, since progressed to a “prevention-oriented” period, which is associated with current best practices and reflects the highest maturity level of the TMMi.
- The achievement of a specific maturity level must mean the same thing for different assessed organizations.
- Degree of process improvement across a predefined set of process areas in which all goals in the set are attained.

*TMMi Reference Model, release 1.0, 2012*

# GELPERIN AND HETZEL

*SPECIAL ARTICLE*

## **THE GROWTH OF SOFTWARE TESTING**

*We can trace the evolution of software test engineering by examining changes in the testing process model and the level of professionalism over the years. The current definition of a good software testing practice involves some preventive methodology.*

**DAVID GELPERIN and BILL HETZEL**

*June 1988 Volume 31 Number 6*

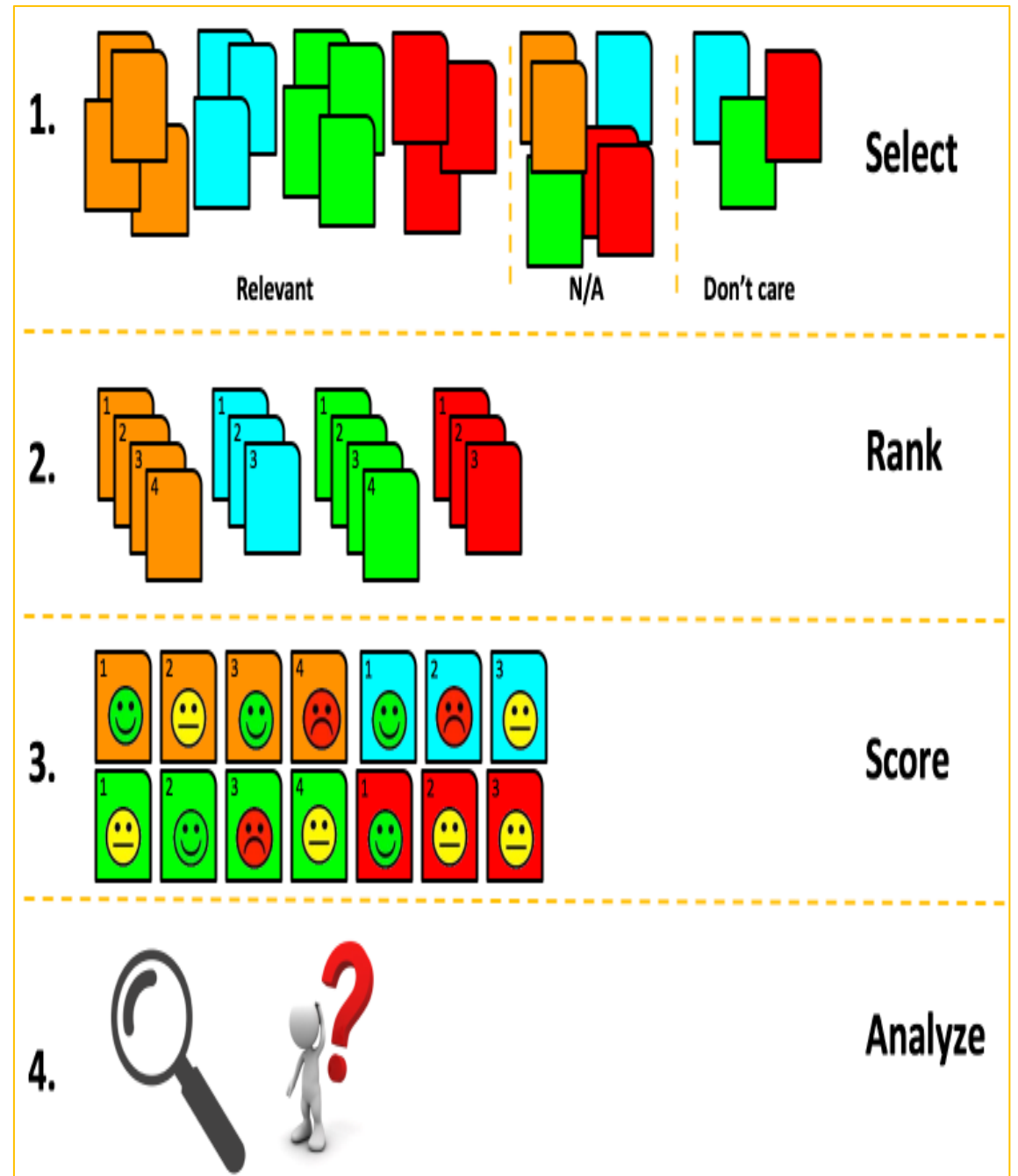
# GOALS

*The end result of a “maturity assessment” should be valuable information on what is your vision on good testing and to what degree you live up to that vision*

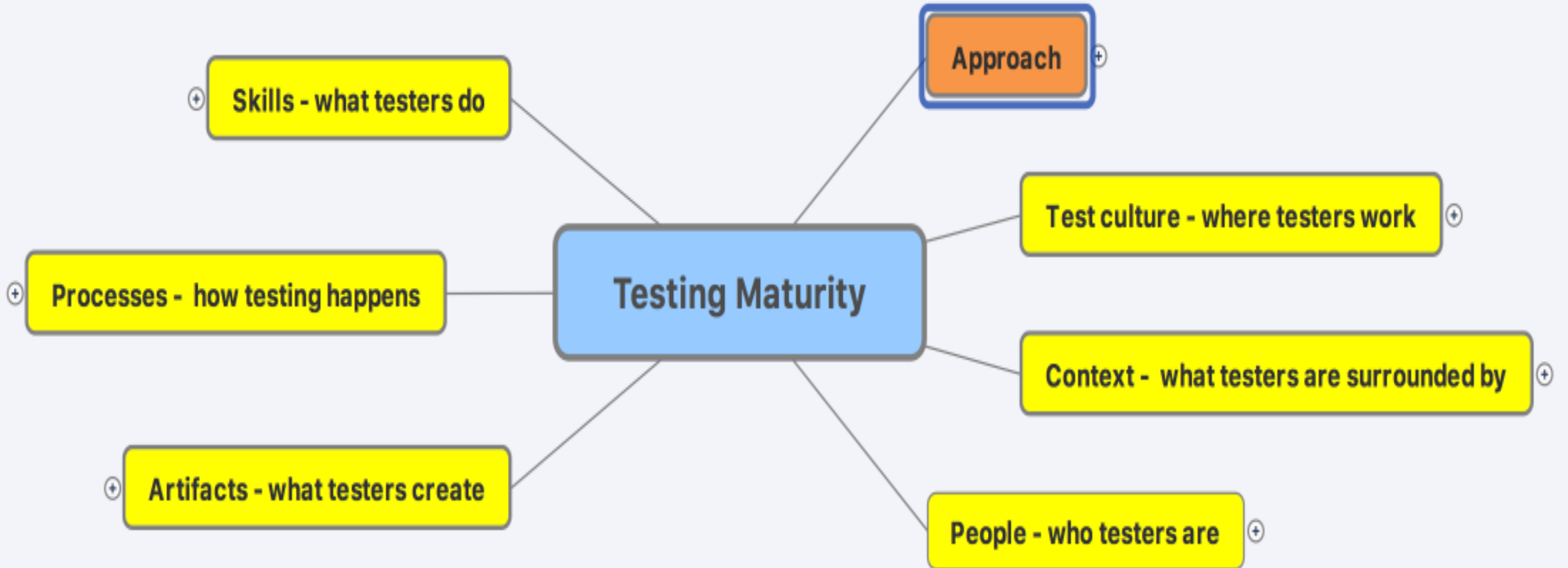
- Facilitating discussion
  - Creating insight in what is important
  - Creating insight in how good are we at this?
- Helps analysing possible areas of improvement
- A heuristic model

# APPROACH

1. Decide on the relevant of the criteria
2. Stack rank the relevant criteria
3. Score the relevant criteria
4. Analyze the results



# CATEGORIES OF CRITERIA



**DEMO**

# EXERCISE

- Groups of 5/6
- Take a project of one of the members of the group
- Discuss current situation and create your model:
  1. Select relevant criteria
  2. Stack rank
  3. Score
  4. Analyze
- Debrief
- Evaluation of the approach/model

# DEBRIEF

- How did that go?
- What did you do?
- How do you feel?



# EVALUATION

- Does this makes sense?
- What can be improved?
- What is good about this?

## **Our questions:**

- Stack rank per category? Or all together?
- Is this a maturity model or just an approach to assess possible areas of improvement? Or both?

# REFS

- Testing maturity in an agile/CDT environment  
<http://www.huibschoots.nl/wordpress/?p=2543>
- Testing maturity in an agile/CDT context  
<http://testingcurve.wordpress.com/2017/02/05/testing-maturity-in-an-agilecdt-context/>
- Blogs by Michael & James:  
<http://www.developsense.com/blog/2009/10/maturity-models-have-it-backwards/>  
<http://www.developsense.com/blog/2011/10/xmmwhy/>  
<http://www.satisfice.com/blog/archives/581>