TMMi® FOUNDATION

Test Maturity Model integration
results from the world-wide user survey

and how to get involved

Erik van Veenendaal

www.erikvanveenendaal.nl

Erik van Veenendaal

www. erikvanveenendaal.nl

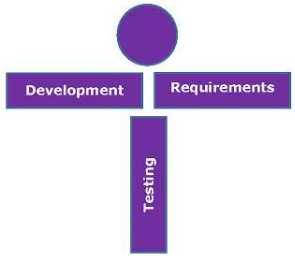
- In IT & testing since 1985 working for many different clients and in many different roles
- Author “TMap”, “ISTQB Foundation” and “TMMi” and many other books and papers
- Former Vice-President International Software Testing Qualifications Board (ISTQB)
- President Curaçao Testing Board (CTQB)
- CEO TMMi Foundation
- Winner European & ISTQB International Testing Excellence Award

Test Improvement Directions

Hero culture

ISTQB®

People



Poor job
Low cost

Infrastructure
Tools & Automation

TMMi® FOUNDATION

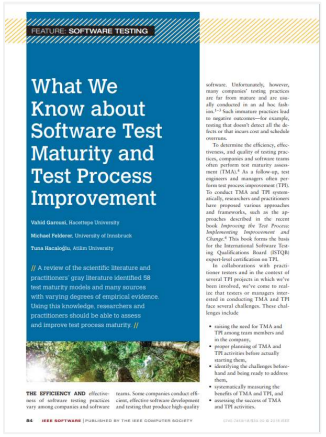
Test Process

Good job
High cost

TMMi Foundation

www.TMMi.org

- TMMi Foundation (2005)
  - Develop the TMMi model
  - Framework for TMMi assessments
- TMMi model published in 2010
  - ISTQB, IEEE, CMMI, best practices
  - Available in English, Chinese, French, Spanish and Portuguese
- Independent model
- *World leading model* for test process improvement
  - Confirmed by IEEE


FEATURE: SOFTWARE TESTING

What We Know about Software Test Maturity and Test Process Improvement

TMMi Process Areas

≈ 60% is at TMMi level 1

priorities and focus the test improvement process

LEVEL 5: OPTIMIZATION
- Defect Prevention
- Test Process Optimization
- Quality Control

LEVEL 4: MEASURED
- Test Measurement
- Product Quality Evaluation
- Advanced Reviews

LEVEL 3: DEFINED
- Test Organization
- Test Training Program
- Test Lifecycle and Integration
- Non-Functional Testing
- Peer Reviews

± 6 months

LEVEL 2: MANAGED
- Test Policy and Strategy
- Test Planning
- Test Monitoring and Control
- Test Design and Execution
- Test Environment

± 9 months

LEVEL 1: INITIAL

TMMi Level 2: Managed

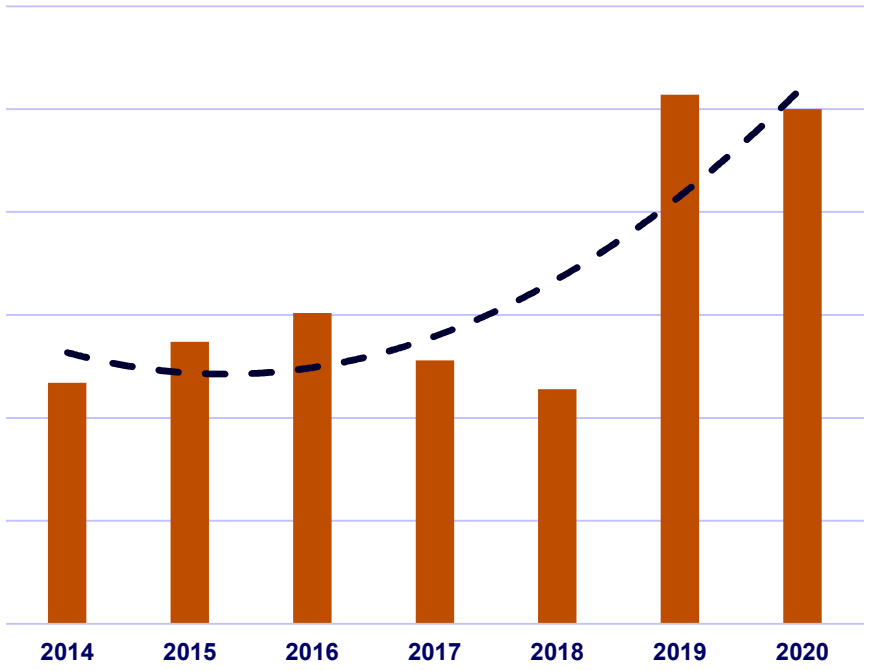
- Test Policy and Strategy
- Test Planning
- Test Monitoring and Control
- Test Design and Execution
- Test Environment

Project oriented process areas

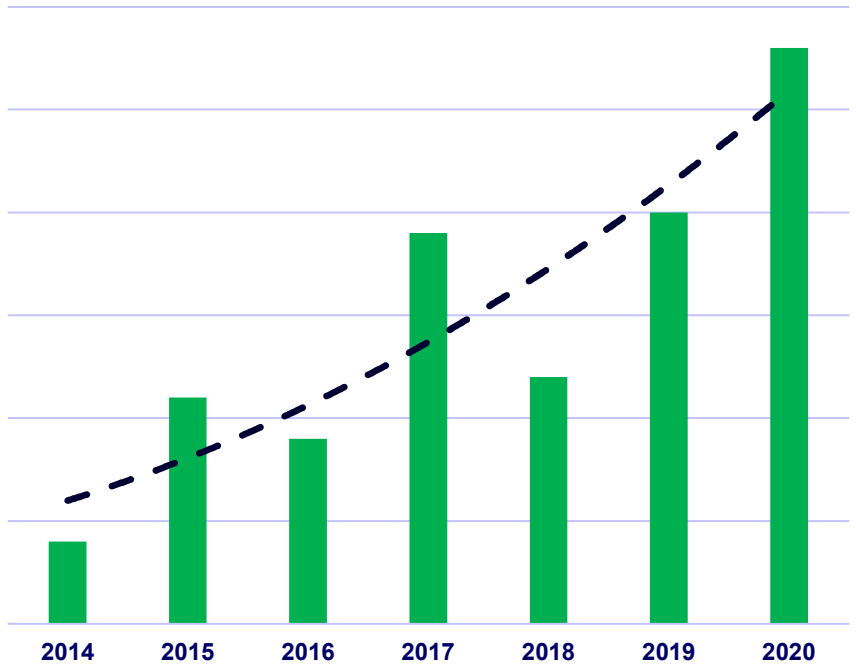
CMMI SM

Ensures compliance
Verification & Validation

TMMi Trends



Certified TMMi Professionals



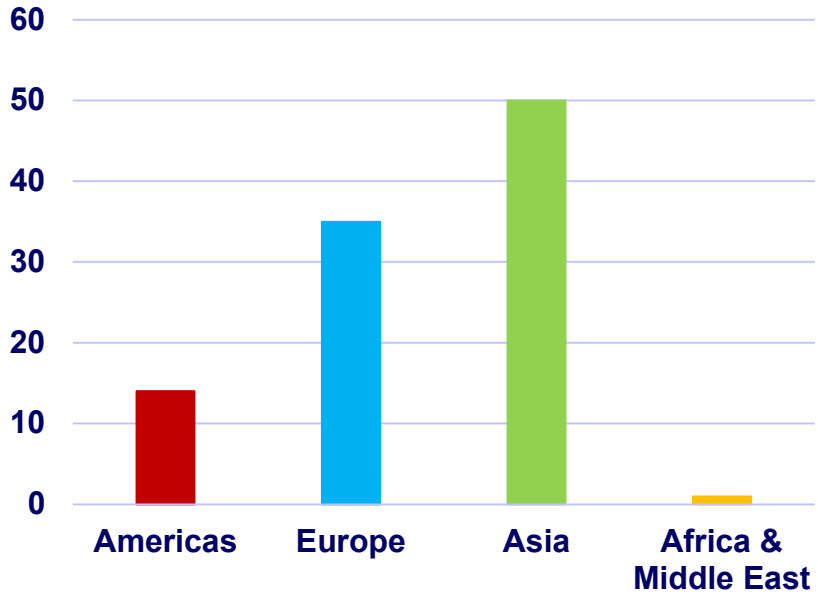
TMMi-based Certified Organizations

World-wide User Survey

- Survey designed together with university team
- Address market needs, understanding benefits of TMMi and challenges
- All TMMi assessed organizations invited
  - Both informal and formally assessed
  - Since inception of TMMi assessment framework

- Return rate 64% → Confidence level 85%!!
  - Real value is within ±5% of measured value
- Highly experienced TMMi users (≈ 4 years)

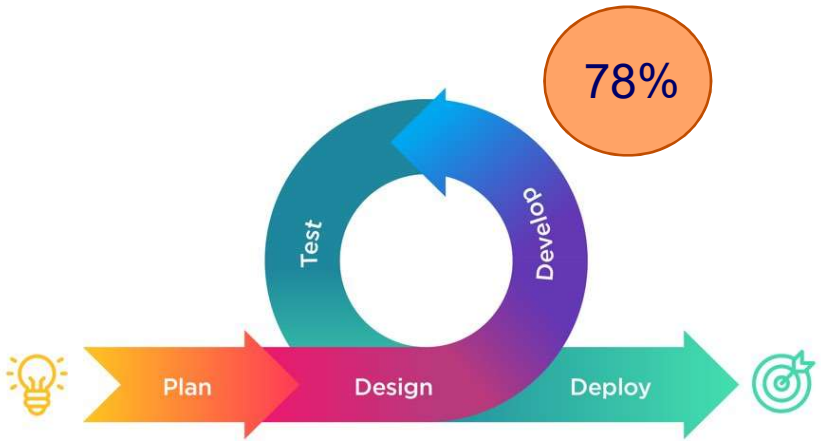
Location and Industries

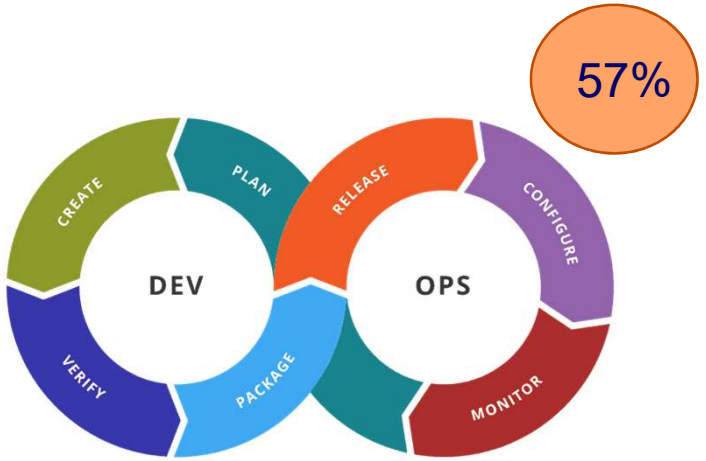


37%

30%

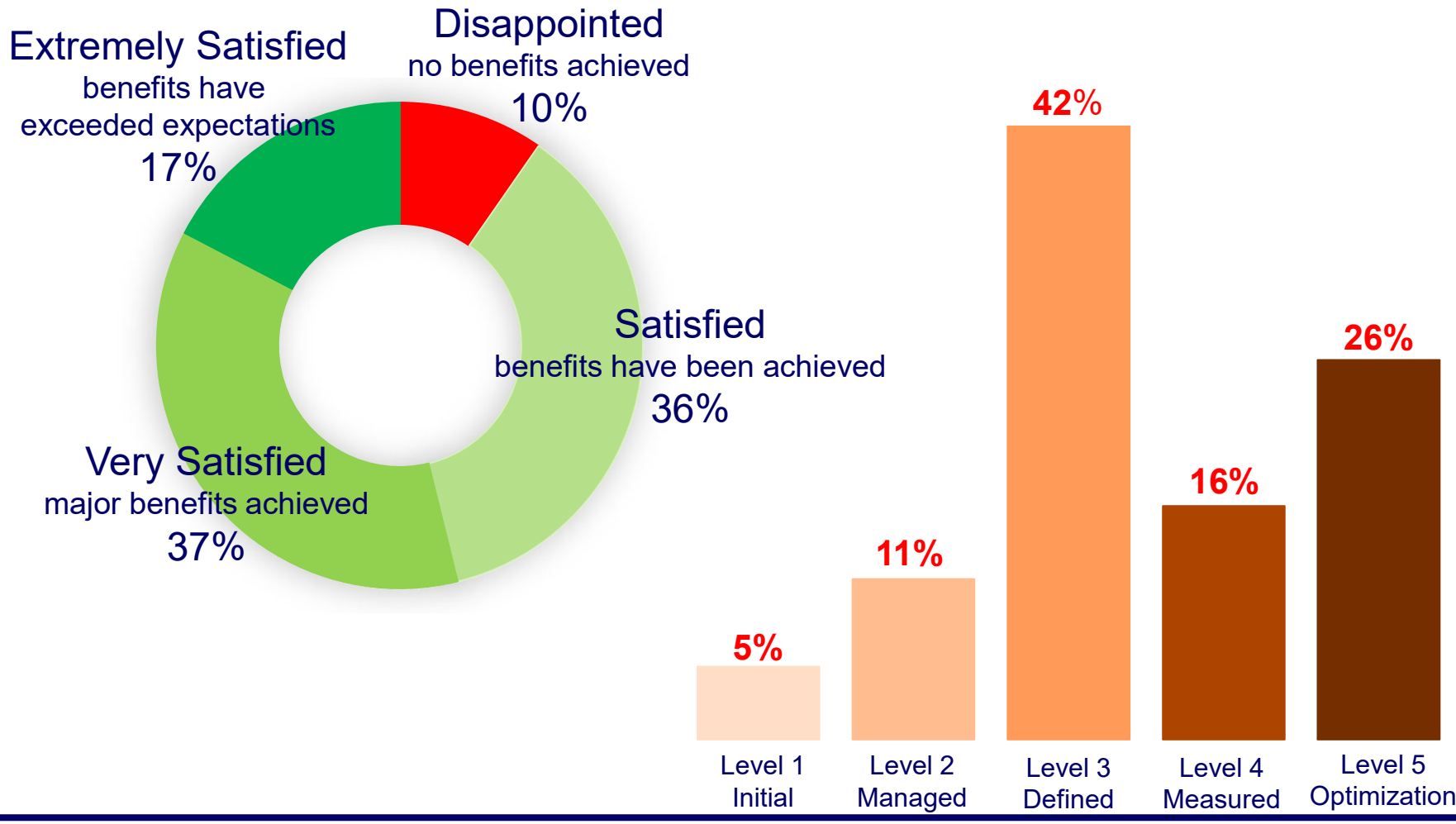
Software Life Cycle





69% of the TMMi users use multiple life cycle models!

Satisfaction & Maturity Level



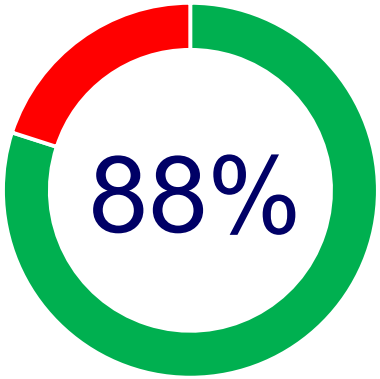
TMMi Benefits

Product Quality

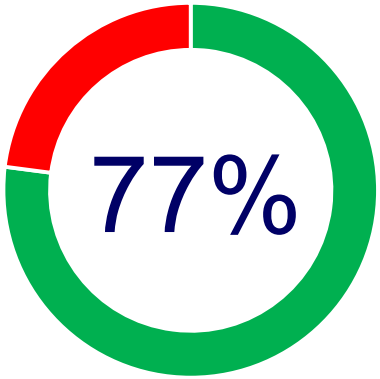
Enhanced product quality

Reduced product risks

Reduced number of defects



Test Efficiency



Increased test productivity

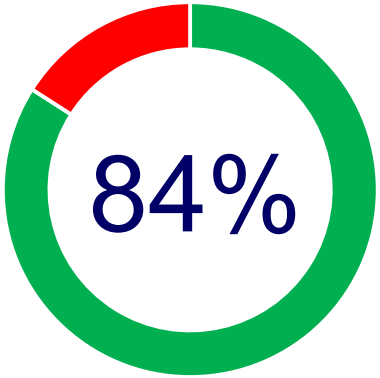
Accelerated software delivery

Reduced project costs

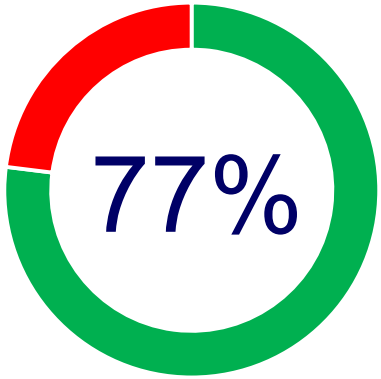
Compliance

Achieved TMMi certification

Achieved standard compliance



People



Improved test engineering discipline

Improved team morale

Quantified Benefits

TMMi CERTIFIED LEVEL 3

Test predictability increased by 70%

Number of test tools tools from 10 to 6

Higher product risk coverage (now at 80%)

DDP increase from 60 to 70% at system testing

TMMi CERTIFIED LEVEL 4

Time-to-market reduction by 7%

DDP at system level improved by 22%

Development cycle from 3 months to 1 month

Reduced cost of external testers by 10%

TMMi CERTIFIED LEVEL 5

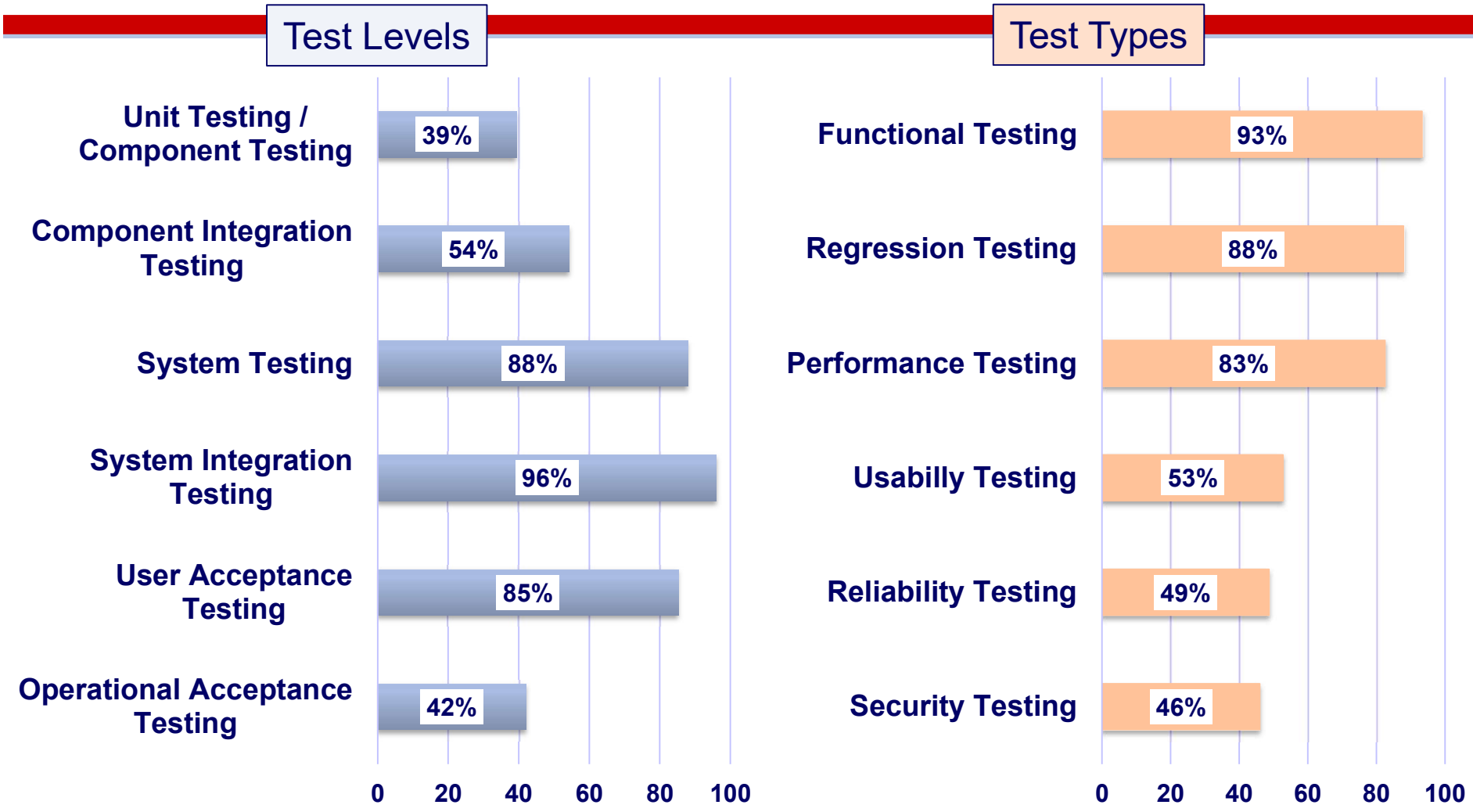
DDP to production improved by 30%

Test estimation now 95% accurate

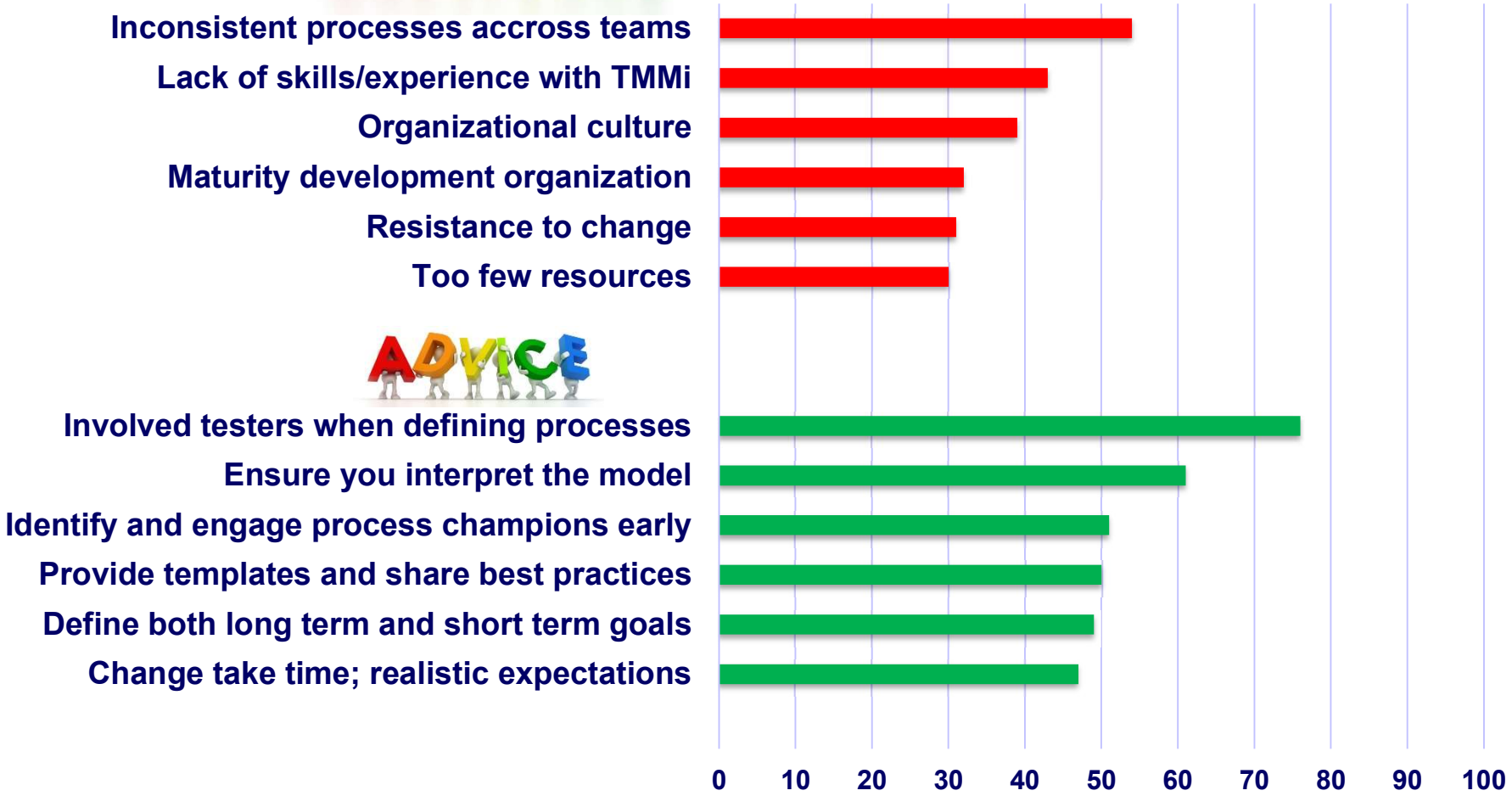
Test efficiency improved by 25%

Regression test cycle from 4 hours to 30 minutes

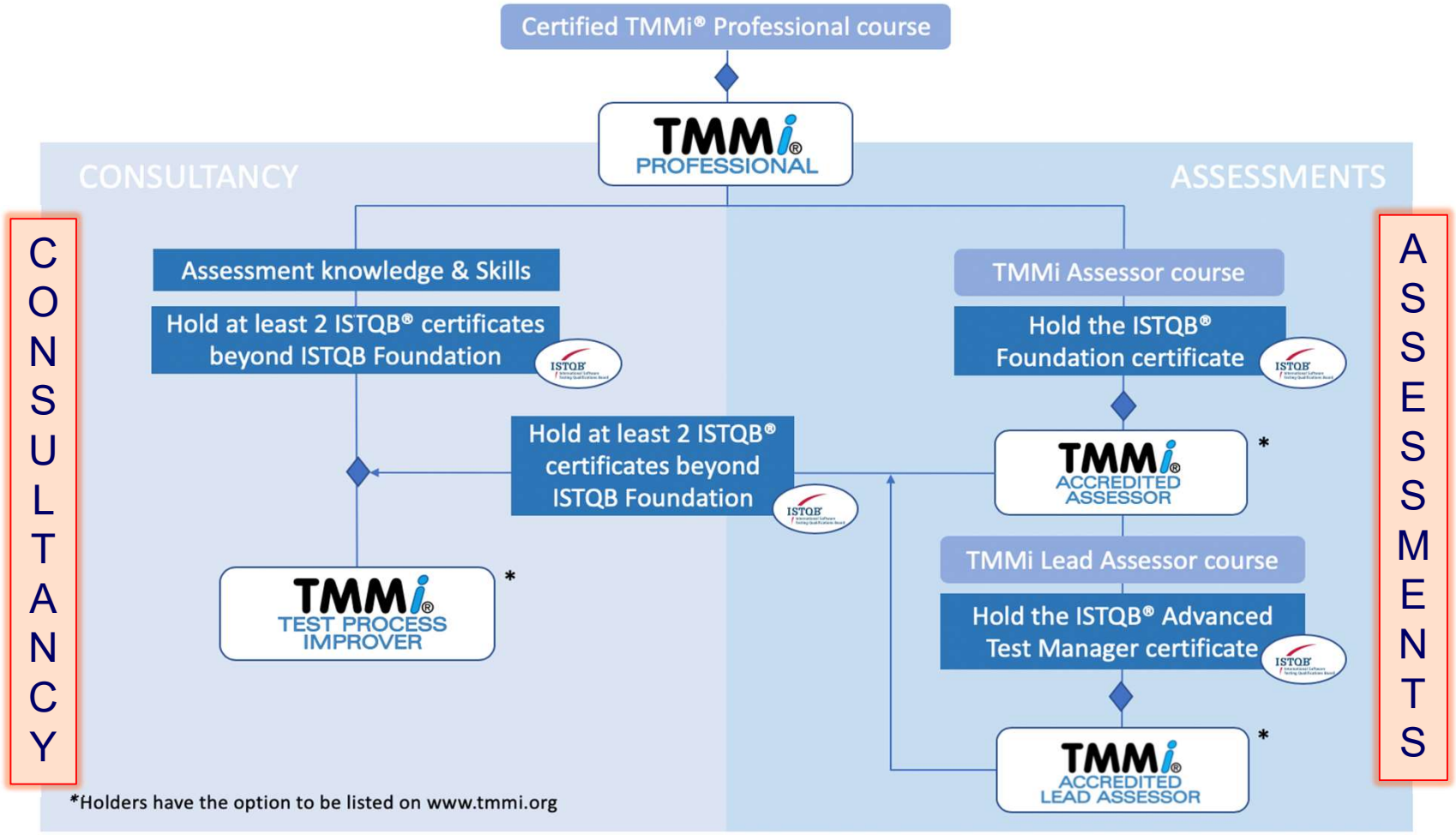
Test Levels and Test Types



Top Challenges and Advice



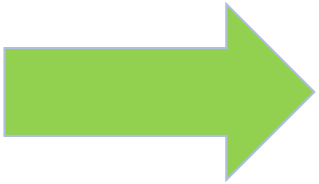
Professionals: Career Path



Organization: Supplier or User

TMMi® RECOGNIZED TRAINING PROVIDER

TMMi® ASSESSMENT SERVICE PROVIDER

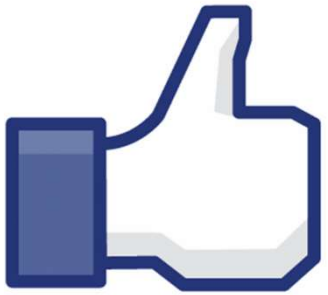


TMMi® CERTIFIED LEVEL 3

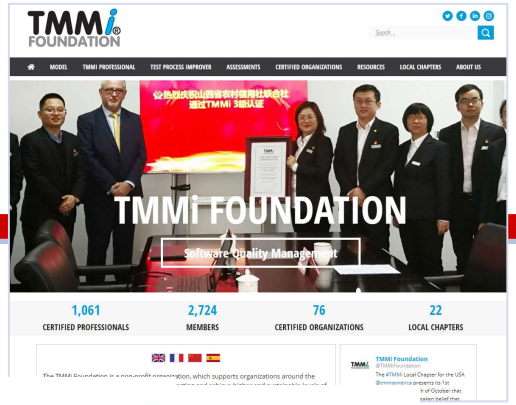
Country: Local Chapter

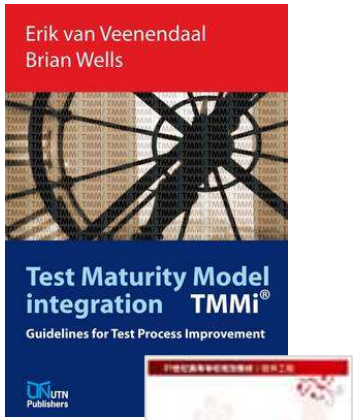
COURSE EVALUATIONS

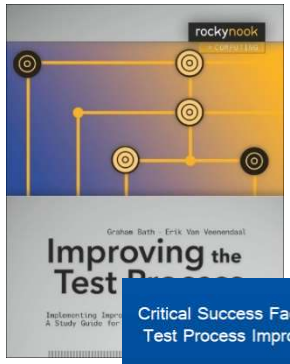
- Objective Driven
- ISTQB releated
- Well-founded
- Clear Priorities
- Self-Assessments
- Freely Available
- Also to be used with Agile
- Open community
- On-going development

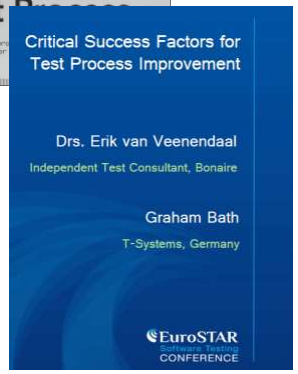


Further Reading









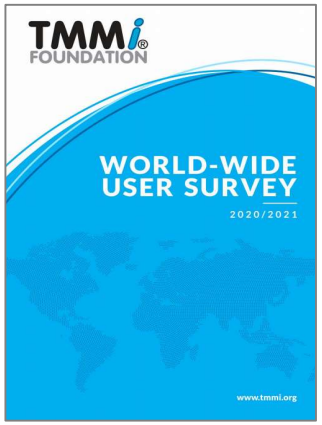
www.erikvanveenendaal.nl

A TMMi page with all documents for download

erik@erikvanveenendaal.nl

@ErikvVeenendaal

I will keep you updated on TMMi



Thank you !!