Test Maturity Model integration

the world standard for test improvement

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
Common Testing Challenges

- Increasing business importance
- Increasing code size and complexity
- Technology advancement
- Systems-of-systems
- Variety of devices, OS’s, browsers
- Security vulnerabilities
- Outsourcing
- Time-to-market critical
- Number of defects hardly decreases
Test Improvement Directions

- Hero culture
- Poor job (Low cost)
- Good job (High cost)

- People
- Infrastructure
- Tools & Automation
- Test Process
Test Process Model (e.g., TMMi)
TMMi Foundation

- TMMi Foundation (2005)
  - Develop the TMMi standard
  - Framework for TMMi assessments
- TMMi model published in 2010
  - ISTQB, IEEE, CMMI, best practices
  - Translated into Chinese, French, Spanish, Portuguese
- Independent model
- *World leading model* for 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

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

LEVEL 1: INITIAL
- Test Design and Execution
- Test Environment

± 6 months

± 9 months
TMMi Level 2: Managed

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

Ensures compliance Verification & Validation
Level 3: Defined

Institutionalization

Test Organization
- Test Training Program
- Test Life cycle and Integration
- Non-Functional Testing
- Peer Reviews
Results TMMi Levels 2 & 3

- Defect detection percentage
- Alpha / beta test lead time
- % deviation - spent vs. planned
- Tester satisfaction
TMMi Benefits (Survey 2020)

- Enhance Software Quality
- Reduce Product Risks
- Increase Testing Productivity
- Improve Test Engineering Discipline
- Standard Compliance
- Reduce Number of Defects
- Improve Team Morale
- Improve Business Alignment
- Improve Delivery Predictability
- Accelerate Software Delivery
TMMi & Agile

1. Ability to manage changing priorities
2. Improved project visibility
3. Business/IT alignment
4. Time-to-market
5. Increased team moral


- Start from business objectives and goals
- Looks for alternative practices - look for the intent
- TMMi reminds you of critical testing practices
- Keep it Simple (this is difficult!)
TMMi Today

- 1,061 Certified Professionals
- 2,724 Members
- 76 Certified Organizations (37% growth in 2019!)
- 73 Accredited (Lead) Assessors
- 22 TMMi Local Chapters

note, many/most “just” use TMMi
Trends

Number of formal TMMi assessments

Number of TMMi Professional exams

147% growth Q1/Q2 2020!
Career Path

Certified TMMi® Professional course

TMMi Professional

Assessor

Lead Assessor

*Holders have the option to be listed on www.tmmi.org

* Hold at least 2 ISTQB® certificates beyond ISTQB Foundation

* Hold at least 2 ISTQB® certificates beyond ISTQB Foundation

* Hold the ISTQB® Foundation certificate

* Hold the ISTQB® Advanced Test Manager certificate

TMMi Lead Assessor course

Test process improver

Consultancy

ASSESSMENTS

TMMi Assessor course

Leading Assessment

Assessor

Lead Assessor
Local Chapters
COURSE EVALUATIONS

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

EN ESPAÑOL

Erik van Veenendaal
Brian Wells

Test Maturity Model integration  TMMi
Guidelines for Test Process Improvement

Erik van Veenendaal
Jan Jaap Cannegieter

The little TMMi
Objective Driven Test Process Improvement

De kleine TMMi

TMMi简华

Improve the Test Process

Critical Success Factors for Test Process Improvement

Drs. Erik van Veenendaal
Independent Test Consultant, Bonaire

Graham Bath
T-Systems, Germany
www.erikvanveenendaal.nl

A TMMi page with all documents for download

erik@erikvanveenendaal.nl

@ErikvVeenendaal

I will keep you updated on TMMi
Any questions.....?

Thank you !!