

Software development is increasingly performed in an Agile way. There are less boundaries between different functions and people will perform different roles. Many organizations struggle to fit testing into this new way of working. The objective of TI4Agile is to make this easier. It provides insight in the maturity of testing in Agile context and it helps development teams to grow to a higher maturity level. The approach is fit for organizations that just started applying Agile as well as for organizations experienced in the Agile way of working.

TI4Agile

The basis for Agile testing lies in structured testing, applied by people that live by the Agile values. The emphasis within Agile is more on individuals and less on processes. Development team members will perform different roles: testers help with build and design and all others help with testing. This requires teamwork and communication, the reason why soft skills are central in TI4Agile.

To gain insight in the current situation, an assessment is performed with TI4Agile as reference model. The model consists of checkpoints in twelve different key areas. The result of the assessment is presented in a matrix. Starting from these results, TI4Agile is used a second time, by identifying improvement suggestions. These suggestions originate from good practices that, when implemented, help to reach a higher maturity level for testing in Agile context.

Scrum

Scrum elements are integrated in TI4Agile to provide grip and make checkpoints concrete. Most Agile development teams practice Scrum.

The TI4Agile model

The architecture of the model is similar to many other improvement models. Twelve key areas provide the necessary coverage of relevant aspects. Within each key area, growth is expressed by means of the levels *Forming*, *Norming* and *Performing*. Each next level builds on the previous one (from left to right). Furthermore the model consists of checkpoints. A checkpoint describes a practice that reflects something of significant value to reach a particular level.

The levels are typified as follows:

- **Forming:** *Set the basis and the first steps towards working in an Agile manner*
- **Norming:** *Adopt a process that facilitates the Agile view on working*
- **Performing:** *Continuously improve the way you work by living the Agile way*

Follow the hyperlinks in the matrix to the key areas for details.

Key area	Forming				Norming				Performing			
Stakeholder commitment	1	2	3	4	1	2	3	4	1	2	3	
Planning & Estimation	1	2	3	4	1	2	3	4	1	2	3	4
People	1	2	3	4	1	2	3	4	1	2	3	
Interaction	1	2	3	4	1	2	3	4	1	2	3	4
Teamwork	1	2	3	4	1	2	3	4	1	2	3	4
Environments	1	2	3	4	1	2	3	4	1	2	3	4
Test process	1	2	3	4	1	2	3	4	1	2	3	
Test management	1	2	3	4	1	2	3	4	1	2	3	
Test profession	1	2	3	4	1	2	3	4	1	2	3	
Test automation	1	2	3	4	1	2	3	4	1	2	3	
Regression & E2E testing	1	2	3	4	1	2	3	4	1	2	3	4
Defect management	1	2	3	4	1	2	3	4	1	2	3	

[Download TI4Agile model in xls format.](#)