

The Agile Methods: ‘taking their word for it’

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Abstract

Methodology assessment *in-situ* must be carried out with care as the agile method used by the organisation may be tailored to such an extent that the question arises; are the developers using ad hoc development or an agile method? Results from the assessment of XP techniques on nine projects using a variety of system development methods are presented.

Keywords: Agile methods, system development methodology assessment.

1 Introduction

I report on one aspect of the results of a research study into the use of agile methods (AgileAlliance, 2001) in system development projects (Strode, 2005). Nine projects were studied that used XP (Beck, 2000), Scrum (Schwaber & Beedle, 2002), DSDM (Stapleton, 1997), RUP (Kruchten, 2000), combinations of the above, or ad hoc development (no systematically applied will-defined methodology).

2 Method and Results

It is difficult to assess a methodology *in-situ*. The methodology is frequently tailored in the workplace to fit the particular characteristics of the project. I found that when assessing the usage of agile methods in projects careful assessment is needed. When project leaders nominated their development method, tailoring was occurring to such an extent in some cases that an ad hoc project and an agile project are using the method to a comparable extent. This is because some of the agile method techniques are practices carried out in many software development projects (e.g. 40 hour week). The following calculation to determine usage was made:

$$\% \text{ extent of agile method usage} = (\sum T_q / (3T_m)) \times 100$$

Where: T_q = extent of usage of a particular technique
 T_m = total number of techniques in the method

The extent of usage of each technique was 0, 1, 2, or 3 (never used, seldom used, often used, always used the technique). If the respondent selected techniques that did not belong to their nominated method then the technique was not included in the summation. Agile method usage and tailoring are related (the higher the extent of usage is for a particular method; the less the method is tailored). The lowest usage of XP techniques on an XP project was 56% and the highest usage of XP techniques on a project where XP was not used was 54% (see Table 1).

Table 1: XP techniques used

Project	Method used on project	Extent of XP usage (%)
Alpha	XP	96
Beta	XP	56
Delta	Scrum/XP	67
Zeta	DSDM	86
Theta	RUP/XP	63
Iota	RUP	40
Rho	Ad hoc	18
Tau	Ad hoc	54
Chi	Ad hoc	30

3 Implications for research studies

If a method is nominated by a research subject then ‘taking their word for it’ is not enough. Assessment of actual usage is needed before conclusions can be drawn about the effects of using an agile method on projects. For example care must be taken when drawing conclusions about the relationship between agile method use and project success, agile method use and customer or developer satisfaction, or agile method use and technology uptake. These results are important for researchers into agile methods and other systems development methodologies, for those drawing conclusions based on this research (e.g. lecturers), and for those using agile methods.

4 References

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