

ABSTRAK

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Judul : METODE PENYUSUNAN, MODEL KEMATANGAN, DAN PERANGKAT ASESMEN KOMPETENSI TIM SCRUM DI *GLOBAL SOFTWARE DEVELOPMENT*

Abstrak

Global Software Development (GSD) dan Scrum saat ini menjadi praktik yang umum berlaku di dunia industri *software*. Praktik Scrum dalam lingkungan GSD selanjutnya disebut Scrum GSD. Praktik ini menunjang kesuksesan proyek yang berdomain kompleks. Tim harus memiliki kompetensi khusus agar dapat mengatasi tantangan koordinasi, kontrol dan komunikasi. Penelitian ini merancang metode penyusunan kompetensi Tim Scrum GSD yang mencakup *role Product Owner, Scrum Master* dan *Development Team*. Selanjutnya disusun model kematangan yang berisi kompetensi, *maturity level*, dan pengukuran *capability level* dengan lingkup individu. Untuk mengukur *maturity level* dibuat perangkat asesmen. Metode penelitian yang digunakan adalah *exploratory sequential mixed methods study*. Pengumpulan, pengolahan, dan validasi data menggunakan metode studi literatur, wawancara, *in-depth interview*, kuesioner, dan *focus group discussion*. Pakar yang terlibat berasal dari beberapa negara untuk mendapatkan gambaran berbagai penerapan Scrum GSD. Mereka berasal dari kalangan akademisi, dunia industri, asosiasi, dan pemerintah. Metode pengolahan data menggunakan *content analysis*, statistik deskriptif, dan *Fuzzy Delphi Method*. Dari serangkaian kegiatan penelitian telah dihasilkan metode penyusunan kompetensi, kompetensi Scrum GSD, kompetensi berbasis *Knowledge Skill Attitude* (KSA), model kematangan, dan perangkat asesmen. Hasil dari penelitian ini bermanfaat bagi kalangan akademisi dan asosiasi untuk penyusunan pembelajaran, pelatihan, dan sertifikasi. Perusahaan dan pemerintah dapat menggunakannya untuk penentuan strategi dan kebijakan pengembangan tenaga IT terutama tim Scrum GSD. Para praktisi dapat memanfaatkannya untuk *self-assessment*.

Kata Kunci: *Global Software Development*, Tim Scrum, *Product Owner, Scrum Master, Development Team*, Kompetensi, KSA, Metode Penyusunan Kompetensi, Model Kematangan, *Maturity Level, Capability Level*, Perangkat Asesmen

ABSTRACT

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Title : DEVELOPMENT OF A METHOD, MATURITY MODEL, AND
ASSESSMENT TOOL OF SCRUM TEAM COMPETENCY IN
GLOBAL SOFTWARE DEVELOPMENT

Global Software Development (GSD) and Scrum are now common practices in the software industry. The practices of Scrum in the GSD environment in this study is called GSD Scrum. These practices support the success of projects with complex domains. The team must have specific competencies to address the challenges of coordination, control, and communication. This study designs a method for compiling the competencies of the GSD Scrum team, which includes the roles of Product Owner, Scrum Master and Development Team. A maturity model is developed that contains competence, maturity level, and measurement of capability level with individual scope. Made an assessment tool to measure the maturity level. The research method used is an exploratory sequential mixed-methods study. Collecting, processing, and validating data using literature study methods, interviews, in-depth interviews, questionnaires, and focus group discussions. The experts came from several countries to get an overview of the various applications of Scrum GSD. They come from academia, industry, associations, and government. The data processing method uses content analysis, descriptive statistics, and the Fuzzy Delphi Method. A series of research activities, competency formulation methods, GSD Scrum competencies, Knowledge Skill Attitude (KSA)-based competencies, maturity models, and assessment tools have been produced. The results of this study are helpful for academics and associations to prepare for learning, training, and certification. Companies and governments can use it to determine strategies and policies for developing IT personnel, especially the GSD Scrum Team. The practitioners can use it for self-assessment.

Keywords: Global Software Development, Scrum Team, *Product Owner*, *Scrum Master*, *Development Team*, Competence, KSA, Competency Development Method, Maturity Model, Maturity Level, Capability Level, Assessment Tool