

Evaluasi dan perbaikan proses pengembangan perangkat lunak menggunakan kerangka kerja CMMI-Dev dan scrum: Studi kasus PT. Gemawidia Solusi Komputer = Software development process evaluation and improvement using CMMI-Dev framework and scrum: Case study PT. Gemawidia Solusi Komputer

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Abstrak

[Bisnis perangkat lunak kini semakin berkembang. Organisasi pengembang perangkat lunak dituntut untuk memproduksi perangkat lunak yang berkualitas, tepat waktu, tepat biaya dan memenuhi kebutuhan pelanggan. Namun saat ini masih saja terdapat kasus perangkat lunak yang tidak memiliki kriteria tersebut, salah satunya adalah PT. Gemawidia Solusi Komputer yang masih mengalami masalah pada penyampaian perangkat lunak terutama mengenai keterlambatan jadwal dan biaya. Masalah tersebut diakibatkan dari tidak adanya kegiatan evaluasi dan perbaikan proses pengembangan perangkat lunak itu sendiri sehingga terjadi masalah-masalah serupa dan dapat merugikan perusahaan. Melalui penelitian ini penulis mencoba mengatasi masalah tersebut dengan kerangka kerja CMMI-DEV versi 1.3 sebagai kerangka kerja perbaikan proses pengembangan perangkat lunak serta dipadukan dengan praktek-praktek Scrum yang sinergi dengan CMMI-DEV. Scrum sendiri adalah suatu metodologi pengembangan perangkat lunak berbasis metodologi tangkas (agile) yang cocok untuk menjawab permasalahan yang ada. Pada penelitian ini akan diukur sejauh mana tingkat kemampuan organisasi dalam proses pengembangan perangkat lunak hanya pada area proses yang berhubungan dengan proyek atau dengan roadmap proyek yang membantu menerapkan CMMI-DEV dengan representasi kontinu (continuous). Area proses yang akan dinilai adalah Project Planning, Project Monitoring and Control, Requirement Management, Configuration Management dan Process and Product Quality Assurance. Setelah diukur maka akan didapatkan rekomendasi perbaikan untuk membantu PT. Gemawidia Solusi Komputer dalam memperbaiki proses pengembangan perangkat lunak. Setelah melakukan penilaian, didapatkan tingkat kapabilitas kelima area proses masih level 0 atau incomplete menyebabkan perlu banyak perbaikan dengan mencari akar permasalahan dengan Fishbone Diagram dan rekomendasi disusun untuk perbaikan tersebut dan setelah rekomendasi dibuat disusun pula prioritas menggunakan Pareto Chart.

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Development only in areas related to the project or the Project Roadmap that helps implement CMMI-DEV with Continuous Representation. Process areas to be assessed are : Project Planning, Project Monitoring and Control, Requirements Management, Configuration Management and Process and Product Quality Assurance. Then after measured it will get recommendations for improvement to help PT. Gemawida Solusi Komputer in improving the Software Development Process. After the assessment conducted, author obtained five area of process capability level is level 0 or incomplete, so it needs a lot of improvement with findings the root of the problem with Fishbone Diagram and prepared recommendations for the improvement and after the recommendation was made then also prepared the priority to using Pareto Chart., Business software is now growing. Software Development Organization are required to produce quality software, on time, on budget and meet customer needs. However at this time there are still cases of software industry that does not have those criteria, one of which is PT. Gemawida Solusi Komputer which still experiencing problems in deliver software especially regarding schedule delays and cost. These problems result from the absence of the evaluation and improvement of the software development process itself, causing similar problems and can be detrimental to the company. Through this study, author try to resolve the issue with the CMMI-DEV framework version 1.3 as a framework for Software Development Process Improvement and combined with the practices of Scrum that synergies with CMMI-DEV. Scrum itself is a software development methodology based on Agile Methodologies which suitable to address existing problems. In this study author will measure the ability of the organization in the process of Software Development only in areas related to the project or the Project Roadmap that helps implement CMMI-DEV with Continuous Representation. Process areas to be assessed are : Project Planning, Project Monitoring and Control, Requirements Management, Configuration Management and Process and Product Quality Assurance. Then after measured it will get recommendations for improvement to help PT. Gemawida Solusi Komputer in improving the Software Development Process. After the assessment conducted, author obtained five area of process capability level is level 0 or incomplete, so it needs a lot of improvement with findings the root of the problem with Fishbone Diagram and prepared recommendations for the improvement and after the recommendation was made then also prepared the priority to using Pareto Chart.]