Service Oriented Architecture with Hybrid Modelling of Business Process Driven and Domain Driven Design on Case Study of Project Management

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ABSTRACT

Service Oriented Architecture was a paradigm of model design of the software engineering for the enterprise scalable that was built in a distributed system that was intended to provide application functionality as a service. SOA required a Service Oriented Modelling Architecture (SOMA) Framework to realization, which was intended to built relationship between Enterprise Architecture, Service Oriented Architecture, and Business Process Modelling. The solution to simplify and build continuity of SOMA in the Rational Unified Process can be used Model Driven Development. MDD that was used in this study are hybrid Business Process Driven and Domain Driven Design. BPD having roles to design modelling on top level management to alignment strategy and goal of Business Processing using Business Process Modelling and DDD plays a role on low level of software developer to design modelling for application and service producing base on component base model and object oriented Analyze. To support the integration of BPD and DDD was used two combinations of service protocol that was SOA standard protocol as Simple Object Access Protocol where was named service method and the additional protocol of other architecture by Resource Oriented Architecture (ROA) that are represented as Representational State Transfer REST where was named service resource. Overall implementation of this system was used to developing of the Enterprise Project Management software on accordance with PMBOK methodology.

Keyword : Service Oriented Architecture (SOA), Model Driven Design (MDD), Domain Driven Design (DDD), Business Process Driven (BPD).