Applying Virtual Team Software Process Methodology in Business Process Reengineering Software Development

Ramadan Moawad
Professor

Abstract

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Business Process Reengineering (BPR) is developed as „the fundamental rethinking process and radical change of three isolated business process management information system (BPMIS) as financial, industrial, and marketing and research departments in an Eastern non-IT Development firm in order to reduce cost and improve quality, service and speed”.
The Rational Unified Integrated Process (RUIP) is developed to break down BPR barriers and efforts. RUIP has two phases: 1) the reverse reengineering where legacy waterfall system is rationally unified and refactored and 2) the forward reengineering where processes are unified and integrated. Then, the RUIP is a large application. RUIP may fail to meet expectations, over time and over budget. The Software Development Methodology scored high ratings in BPR and RUIP critical success factors. Thus, the paper compares the most matured and CMMI acceptable software process methodologies: the team software process (TSP) and the eXtreme Programing software (XP). The paper proposes VTSP methodology to deploy the ability of the plan driven TSP to accelerate quality of software development and to deploy the simplicity of eXtreme programming (XP) and its ability to break down large projects into small iterations and to involve onsite customers and end users. The VTSP proposed a new adaptation to simplify and to automate TSP project monitoring and documentation.
Key words: VTSP methodology, BPR life cycle, RUIP application, Legacy system, Software Engineering, TSP methodology, XP methodology

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