

A conceptual model for coordination and control of virtual teams in software industry

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During the last couple of decades, we've witnessed a steady and irreversible trend towards globalization of business. Economic forces are relentlessly turning national markets into global markets while emerging competition and corporations reach across national boundaries. More than a decade ago, seeking lower costs and access to skilled resources, many organizations began to experiment with remotely located software development facilities with outsourcing. With this trend, emerges virtual teams. Virtual teams are work arrangements where team members are geographically dispersed, have limited face-to-face contact, and work interdependently through the use of electronic communication media to achieve common goals. Managing virtual teams is more difficult than managing co-located teams. As a result, virtual team leaders need additional leadership skills than co-located team leaders. Since there is a lower level of co-presence, team leaders also have less influence, impact and information on team status, progress and milestones. There is also a difficulty to develop strategies to manage and resolve conflicts, motivate team members, and build trust and cohesion among team members. The objective of this research is to identify the factors influencing virtual team work and strategies to facilitate better coordination and control among virtual teams in software development context.

Previous research literature was reviewed on the coordination process of co-located teams and virtual teams to find the factors that affect the coordination process of virtual teams in software development. Then, a conceptual model was developed to analyze the impact of each factor in virtual team coordination. The applicability of the model was reviewed by conducting interviews with software industry personnel. After that, a questionnaire will be used to collect data to validate the conceptual model which indicates the impact of the identified factors in the coordination process of virtual teams. Research was focused more on the middle level managers of the organizations, virtual team leaders and project managers in software industry that it can be used for better coordination of the software projects with virtual teams.

Keywords: Co-ordination, Control, Software industry, Virtual teams