

An Empirical Study of a Multimedia Group Support System for Distributed Software Requirements Meetings

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ABSTRACT

Supporting geographically distributed workgroups in software development is becoming a necessity in today's world. Requirements meetings that bring together various stakeholders in resolving requirements conflicts or addressing strategic issues are an integral part of software development. Requirements engineering is a task difficult enough when done locally -- but it is even more difficult when cross-functional stakeholder groups specify requirements across cultural, language and time zone boundaries.

In this paper we report on our evaluation of a Web-based meeting system (Microsoft's NetMeeting) for distributed requirements meetings. The system incorporated high quality audio/video channels and real-time access to shared applications, and emerged as a meeting tool appropriate for requirements communication. An exploratory study was designed to investigate the use of the group support system in several important distributed group settings of requirements meetings. Technological impacts on group performance are identified and findings of technology usage patterns in computer-mediated distributed software requirements meetings are discussed. The empirical findings indicate successful support for distributed requirements meetings and allow the formulation of recommendations for software practitioners and designers, in providing groupware support for requirements meetings in distributed environments.