Working Together Apart:

Collaboration over the Internet

Synthesis Lectures on Human-Centered Infomatics

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Human-Centered Informatics (HCI) is the intersection of the cultural, the social, the cognitive, and the aesthetic with computing and information technology. It encompasses a huge range of issues, theories, technologies, designs, tools, environments and human experiences in knowledge work, recreation and leisure activity, teaching and learning, and the potpourri of everyday life. The series will publish state-of-the-art syntheses, case studies, and tutorials in key areas. It will share the focus of leading international conferences in HCI.

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Working Together Apart:

Collaboration over the Internet

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ABSTRACT

Increasingly, teams are working together when they are not in the same location, even though there are many challenges to doing so successfully. Here we review the latest insights into these matters, guided by a framework that we have developed during two decades of research on this topic.

This framework organizes a series of factors that we have found to differentiate between successful and unsuccessful distributed collaborations. We then review the kinds of technology options that are available today, focusing more on types of technologies rather than specific instances. We describe a database of geographically distributed projects we have studied and introduce the Collaboration Success Wizard, an online tool for assessing past, present, or planned distributed collaborations. We close with a set of recommendations for individuals, managers, and those higher in the organizations who wish to support distance work.

KEYWORDS

distance work, virtual teams, teamwork, distributed teams, managing virtual teams, communication, coordination, technology support, infrastructure, cyberinfrastructure, team science, trust

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