

Integrating a Geographically Distributed Workplace by Means of High-Quality Video

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- Brief overview of *Community at a Distance*
- Theoretical background
- Earlier applications
- Technology
- Layout of project
- Research process
- Interim results



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Community at a Distance

- Collaboration between Stockholm County Police, Arbetstagarkonsult AB, and KTH

To connect a distributed workplace by using video-mediated communication



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Community at a Distance

- The Stockholm County Police Call Centre
- Three islands – one workplace



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Community at a Distance

Overall research question:

Is it possible to create connections to distant places so they are experienced as natural extensions of the local environment.



VideoSpace

Based on the research tradition, *Media spaces*.

Aim: To support informal communication in geographically distributed organisations.

They are NOT video conference systems.

Background: Xerox Parc (1986), EuroParc (1992), BellCORE Cruiser (1988), Videowindow (1990), etc



Edison's Telephonoscope



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Videocafé

Ericsson

Together with Ericsson Media Lab, 1995 – 99



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Rågsved – Arlanda

Art project to connect school children in Rågsved with travellers in Arlanda Sky City, 1998.



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KomHem

Telia

Concept apartment with video communication.



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PowerPlace

Swedpower

Testbed for distributed workgroups.



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Technology

KTH-AMT

- Expertise in fibre technology
- Expertise in transmission technology
- Eyeline-matching via a mirroring system



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Community at a Distance

Stockholm County Police Call Centre



Sandhamn



Arholma



Ornö



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Community at a Distance

Background

- The Call Centre is one organisational unit
- There is a continual need for communication, and co-ordination of work between the three sites is needed
- Travelling, in order to meet in person, is problematic



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Community at a Distance

- Started 1999, full use since June 2001
- Approximately 40 employees
- Many work part time
- Opening hours: 7 am – 10 pm
- Telephone reports from general public concerning committed crimes (except ongoing)



Community at a Distance

Challenges and prerequisites

- 'Real' workplace
- Project group with mixed competences
- Active work with the staff, inspired by anthropology



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Community at a Distance

Pre-study

A pre-study, funded by the Stockholm City Council, was performed in November - December 2001.



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Community at a Distance

Results of the pre-study

- A media space for informal contacts is a good idea.
- There are many possible uses within the organisation.
- The project is feasible from a technical point of view.



Community at a Distance

Goal

Design usable installations at the three locations and evaluate them in use

- How should such technology be introduced in an existing work situation?
- What are the main scenarios of use?
- What are the effects on work efficiency, social well-being and work satisfaction
- What other kinds of use scenarios are there?



Project Team

KTH

Mats Erixon

Technical Manager (KTH-AMT)

Sören Lenman

HMI (Project Manager)

Björn Thuresson

Cinema studies (doctoral student)

Minna Räsänen

Social anthropology (doctoral)

Bo Westerlund

Industrial design

Gullström Architects AB

Charlie Gullström-Hughes

Architect

Arbetsdagarkonsult. AB

Anders Wiberg

Work organisation, work environment,

Stockholm County Police

Sven-Olov Bäcker

Chief of staff

Ulf Rohdin

Project manager



Project Organisation

Phase 1 (September 2002 - December 2003)

Understanding communication needs and use scenarios.

Phase 2 (January 2003 - April 2003)

Construction and installation.

Phase 3 (April 2003 - September/October 2003)

Evaluation in practical use, adaption and modification.



Community at a Distance

Aim with the project phase

Common understanding of work and living conditions for the staff.

- Define the communication needs
- Inform the design



Community at a Distance

Participatory observation

Interviews

Probes

Workshop I – III

Feedback



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Community at a Distance

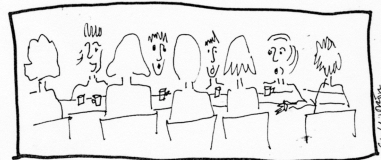
Participatory observation

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Gnällsnack och småsnack konkurrerar i arbetsrummet.

Gnällsnacket hindrar det sociala välbehövliga småsnacket att komma fram.

Om alla tog paus samtidigt så skulle småsnackandet öka.



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Community at a Distance

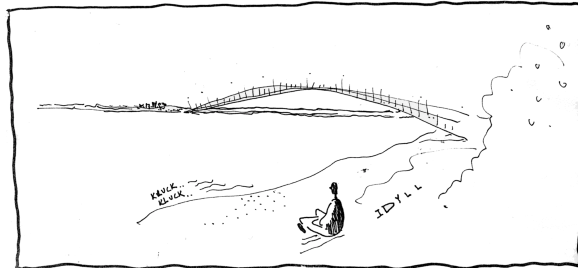
Participatory observation

Interviews

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Workshop I – III

Feedback



-Hur ofta vill vi att färjan ska gå? För ofta och det blir nästan en bro. Vi vill inte vara en förort.



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Community at a Distance

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Community at a Distance

Principles for the installation

- In the office
- Always open
- Reciprocity



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Community at a Distance

Phase 2 Building and installations

Phase 3 In use (for at least 6 months)

Project end in September/October 2003



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Community at a Distance

Financing



Sponsors



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Community at a Distance


Furniture


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Community at a Distance

QuickTime™ and a H.263 decompressor are needed to see this picture.

Quicktime of trip to Sandhamn March 19, 2003



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