The Conference Room as a Toolbox Technical and Social Routines in Corporate Meeting Spaces

Christopher Plaue John Stasko Mark Baloga

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College of Computing

School of Interactive Computing





Routine

a sequence of actions regularly followed

knowledge on where does (or should) technology make its place in the conference room











The Technical "How"

- Developing interaction techniques
 - Interactive Workspaces [Johanson et al 2002]
- Improving tech infrastructure
 - obje Display Mirror [Newman et al 2006]
 - IMPROMPTU [Biehl et al 2008]
 - DICE [Golovchinsky et al 2009]





Research Question

What are the technology and social routines involved in a collocated meeting?

"Recognizing the subtle character of the often complex, yet unremarkable, details that surround our everyday routines places powerful requirements on any technology that might become embedded in such activities." --Tolmie et al CHI 2002

[Designers need to increase] support for the social aspects of meeting process.

-- Miner 1979





Field Studies: Project Room



Project Room

@Alpha Corp

Supply Chain Department

13,000 Employees Worldwide

Room is "Owned"

Mobile Employees



Field Studies: Conference Room

Wholly Owned Subsidiary

Workspace Tools

Traditional Desks/Cubicles

Managers, Industrial Engineers, Marketing, Financial Analyists



Conference Room

@Beta Corp.





Field Studies



Project Room



Conference Room

Initial Interviews



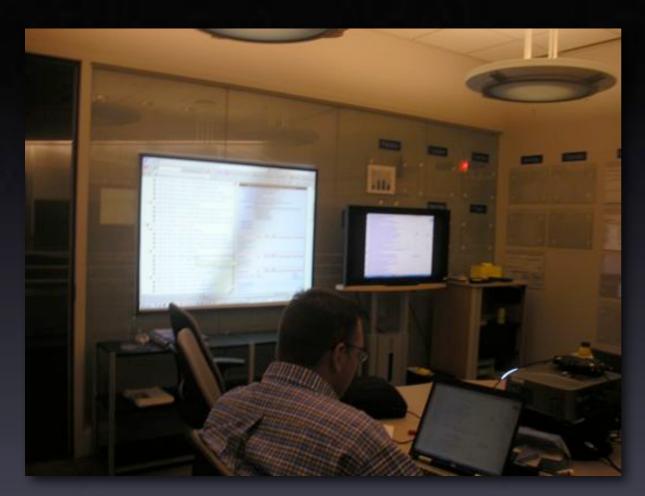
How do these populations use (existing) shared displays? What are the common routines?

Direct Observation (Existing Displays)

INFORMATION Project 15 / Conference 6



Display Intervention





"Project Room"

"Conference Room"

Initial Interviews



Add in 2nd Display Interviews



Interviews

Direct Observation
(Existing Displays)
NFORMATION Project 15 / Conference 6

Direct Observation (Original + 2nd Display) Project 17 / Conference 9



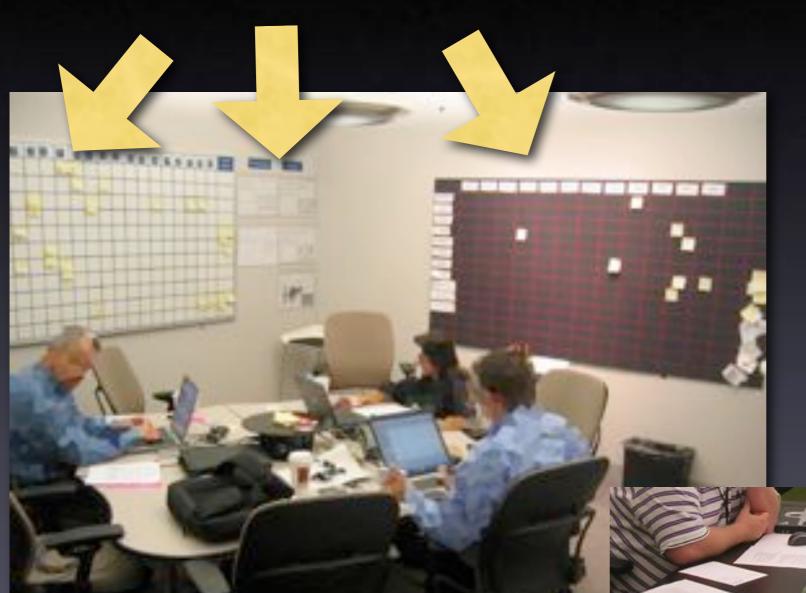


Data Collection

- Time-stamped field notes
- Digital pictures
- Interviews
 - Beginning of the study
 - Midway (before display intervention)
 - End of study



Information Routines: Static Displays



At-a-Glance Information Awareness



Personal Device Routines

When are devices brought in?



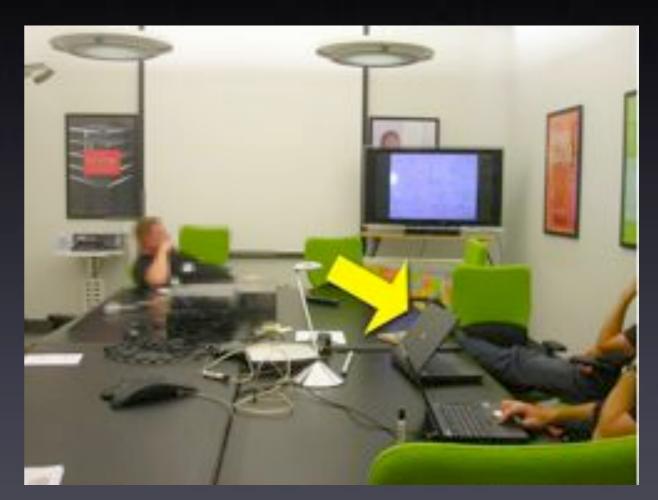


Social or Technical?



Personal Device Routines: Laptops/Phones





Signaling Engagement - Ephemeral Laptop Usage





Information Routines: Shared Displays

	Project Room	Conference Room
Projector	50%	67%
Usage:	Presentations Collaborative Work Public Display of Info	Presentations Collaborative Work

(Before Intervention)



Shared Display Routines

Connections to displays







Key Observation

Connections to displays



Arrival Retrieval Plug in Cable Arming Shared Using ... Display Putting Away Leaving



Information Routines: Shared Displays

	Project Room	Conference Room
Projector	50%	67%
Usage:	Presentations Collaborative Work Public Display of Info	Presentations Collaborative Work
Projector LCD Display	70% 53%	44% ***



Technology Barriers

- False sense of complexity
 "You need it [technology] done neatly so folks can
 still feel comfortable and homey and still have good
 conversations amongst the technology..."
- Complexity of technology
 "I try to hold short meetings, maybe 15-20
 minutes long. It's not worth spending 5
 minutes setting up equipment or software
 that will last 15 minutes."

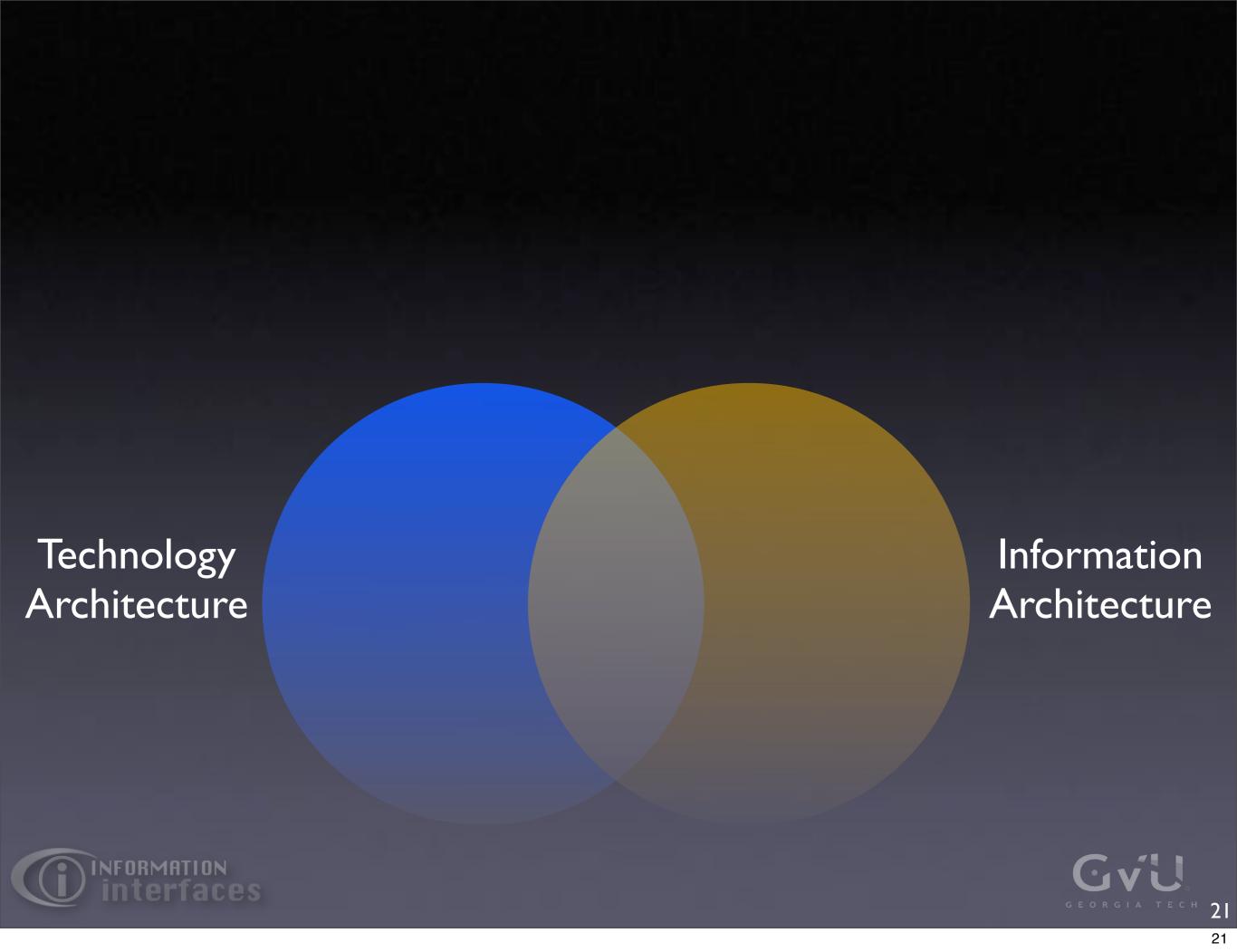




Technology Barriers

- Physical environment matters
 Improvements to technology were infrequently desired opposed to improvements to the physical space
- Learned "helplessness" for troubleshooting
 - Willingness to tackle physical hardware troubleshooting but not software





Physical Architecture

Technology Architecture

Information Architecture





Recap

- Device "arming" and ephemeral personal device usage are common routines that are both technological and social in nature
- Managing at-a-glance information is important, especially for mobile workforces
- Physicality comforts and reassures
- Non-technical factors influence technology usage



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