

PRODUCT NAME	CLASS	YEAR
MeetingSuite: A Virtual Meeting Product	HCI 1 Project: Virtual Learning Model	Fall 2003

PROBLEM SPACE

There are a number of drawbacks to current methods of handling meetings. They are difficult to schedule. Finding a common time and place for a meeting is problematic. Setting up the facility prior to the meeting is time consuming (e.g. checking supplies, ensuring that the equipment is functioning). With more and more meetings being held among people in geographically diverse places, tools such as teleconferencing and videoconferencing are being used. This raises the bar on setting up the facilities since they need to be scheduled at several sites and there is more sophisticated equipment to check out.

GOAL

There are also a number of advantages to holding face-to-face meetings. They engender better engagement from the participants than, say, a teleconference where the participants cannot see one another. The participants have a more comprehensive view of the meeting environment than they do with the current state of the art in videoconferencing. The participants do not have to be encumbered with technology interfaces during a simple face-to-face meeting. There are also a number of subjective benefits of being able to look the other participants in the eye and experience their non-verbal feedback. We have tried to keep these advantages in mind with our design.

THE PRODUCT

What is proposing is an audio/visual conferencing tool that will run on a person's workstation and provide that person the ability to participate in a virtual environment based on a traditional meeting metaphor. Input will include audio, voice, keyboard, mouse (graphics device), graphics and video. Output will include audio, video, text and graphics. The product will perform many of the clerical tasks that are done by people today such as keeping minutes and preparing take-away materials. The text editing and sketching facilities are minimal. Much more sophisticated tools exist in the marketplace; our intent is to simplify the process of holding a virtual meeting, not compete with the specialty tool makers. The simplicity of the interaction of this product, accompanied by the real-time visual feedback, provides a simple way to keep in touch that is better than teleconferencing (or telephoning on a personal level). This sort of interaction tool will reduce, if not eliminate, the need for large-office project collaboration.

The *MeetingSuite* product line is seen as having three levels of sophistication. *MeetingRoom* is a small-group meeting facility that runs on individuals' workstations. *MeetingHall* adds services for groups of people gathering in different places to hold a meeting. Finally, the top-of-the-line, *MeetingCave*, adds a full-immersion, virtual conference room experience. Each member of the suite of applications is fully interoperable with each of the other members. In this way meeting leaders can mix and match the application to meet the needs of all the participants. We will only discuss *MeetingRoom* and *MeetingCave* below.

MeetingRoom

The *MeetingRoom* application runs from within a Web browser. They provide the conferencing support with a minimum of controls for ease of learning and use. Most of the functionality of the applications is contained within the applet that is downloaded to the participants' browsers when they activate the application. *MeetingRoom* navigation and menus, the illustration (Figure 1) shows the primary interface application. These displays remain on the participant's screen throughout the meeting. When one of the artifacts is brought to the foreground, it is enlarged and positioned on top of the full meeting display. When the artifact is put back in the background, it resumes its original place and size. While the operations may not be quite as visible with the artifact in the background, they are still taking place (e.g. scrolling text, sketching, and streaming video).

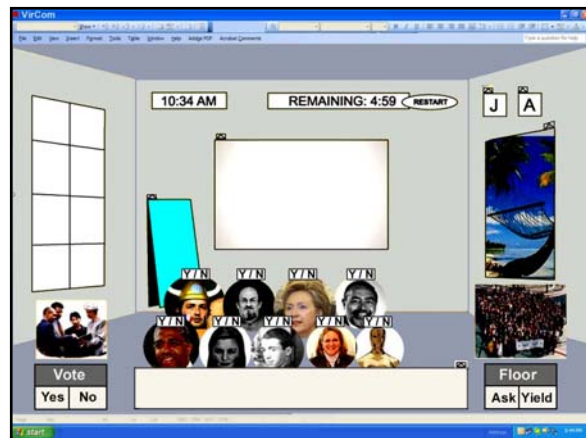


Figure 1. MeetingRoom with multiple communication tools.

MeetingCave

MeetingCave, also adds a full-immersion, virtual conference room experience. Each member of the suite of applications is fully interoperable with each of the other members. In this way meeting leaders can mix and match the applications to meet the needs of all the participants. The *MeetingCave* application requires much more specialized hardware, but otherwise works largely the same way as the lower level applications. Regardless of the application, each participant is obligated to create a configuration file that contains the individual's preference for the type of graphics to display in her/his cameo on the other participants' screens, the type of avatar to use for those participants in the *MeetingCave*, and the speech-to-text training data that can be used by the application during the meeting to capture the individual's voice input.



Figure 2. Back bird's-eye view of the *MeetingCave* Virtual Domain



Figure 3. Side bird's-eye view of the *MeetingCave* Virtual Domain



Figure 4. Closer look at *MeetingCave*