

Jason Shank
Dynamo

Dynamo is a communal multi-user interactive surface. The surface supports the cooperative sharing and exchange of a wide range of media that can be brought to the surface by users that are remote from their familiar organizational settings. The authors of this paper studied many other communal surfaces including electronic whiteboards, community noticeboards, shared awareness systems, single display groupware, multi-screen systems, situated displays, and interactive boards. After weighing the pros and cons of each system the authors implemented their own 'public interactive surface' using the best features from each system listed above.

'Public interactive surfaces' present some new challenges to the design of a CSCW system. The authors mention a few of these including the inherent level of trust that is found in private systems, but lacking from public systems. Prior to designing Dynamo, the authors established four main goals for the system:

- 1) The surface is communal.
- 2) The surface offers lightweight and familiar interactions.
- 3) The surface offers a place of display and exchange.
- 4) Users of the surface are remote from their normal network infrastructures.

These goals are followed by a thorough discussion of the how the system works and the infrastructure used to support it. For the purposes of this class, I have chosen to ignore the brief section discussing the technical infrastructure and focused more on the uses of the systems and how the users are able to interact within it. Users access the Dynamo system via base or mobile interaction points. Base interaction points make use of a wireless keyboard, mouse, and USB port. Mobile interaction points allow for laptops and PDAs to jump right into the environment. Users are represented by a palette on the display and can either share the entire public space or "carve off" portions of the space for their own private use. Users can share all sorts of media on the screen including documents, movies, music, pictures, graphs, etc. Other features of the system include the ability to use asynchronous parcels or place notes on the display.

Finally, the authors briefly discuss two field studies done on the Dynamo system and illustrate their results. The first study leads the developers to implement the carve and drag capability as a resolution for users overlapping one another on the display. The second study shows this implementation to be an improvement and allows the authors/developers to begin studying the social

interaction amongst the users and the protocol they develop while working together.

The above is simply a brief summary. I find this system to be very novel and I plan on presenting more details about the system in class. Please give some thought to how this system affects topics such as social cognition (esp. in a public place such as an airport), the attitudes of the users when faced with a new, novel system such as Dynamo, and whether or not this system is even feasible. Can you think of other uses besides those mentioned in the paper?