

DESIGN OF A SOCIAL INTERACTION ENVIRONMENT FOR ELECTRONIC MARKETPLACES

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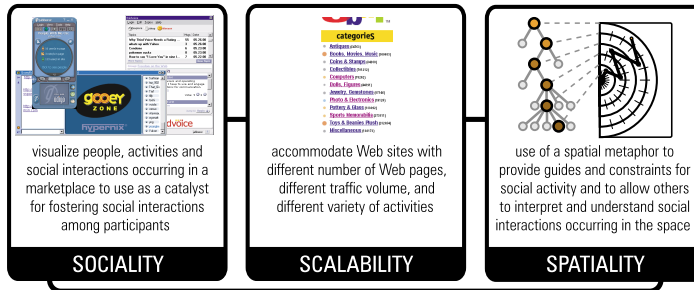
OVERVIEW

ePlace is an interaction environment for fostering social interactions in electronic marketplaces. It incorporates a novel, spatially organized, and interactive site map. The map provides visibility of people, activities and social interactions and incorporates access mechanisms for social interactions like chat and social navigation. We present its design, identify the four design constraints, and sketch scenarios of use.

DESIGN PROBLEM

As the Web is increasingly used for collaboration, there is much interest to develop social interaction environments. However, such efforts have taken a tools focus rather than a broader socio-technical focus. Prior CSCW and HCI research have shown the importance of a setting for social interactions and the need for tools and social practice to co-evolve. We apply these insights in creating an interaction environment that visualizes social information and facilitates social interactions in online marketplaces. Marketplaces are where people gather to interact and to conduct transactions.

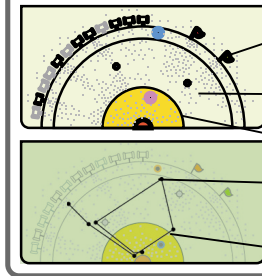
EVOLUTION OF DESIGN GUIDED BY FOUR DESIGN CONSTRAINTS



Components of Cognitive Map
 Kevin Lynch 1960, Image of the City

- LANDMARK
Point of reference for salient information
- DISTRICT
Areas with common characteristics
- EDGE
Strong demarcation of areas
- NODE
A spot
- PATH
Relationship between nodes

use of a visual representation that evokes a strong mental image in any observer of the social environment; one that is shared among many observers.

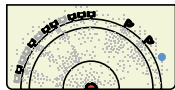


Features of Global Map Components
 In an electronic marketplace Web site

- LANDMARK
Marks notable information, transactions, people, activities, and social interaction.
- DISTRICT
Delineates groupings, affinities or similarities.
- EDGE
Demarcates disjoint collections.
- NODE
Locates the placement of a Web page.
- PATH
Shows temporal, logical, and physical relationships of a group of nodes.

SCENARIO SKETCHES

Visibility of People



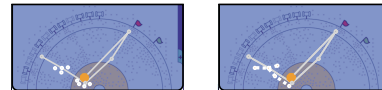
Different Site Maps

The site map can encode the identity of the Web site.



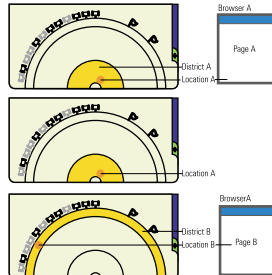
Social Navigation

Visualization of choices based on current and past user's actions



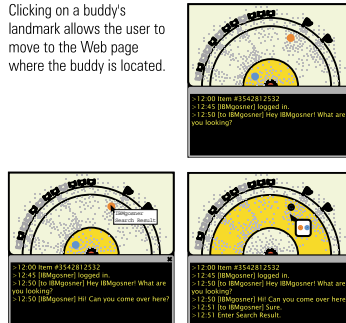
Navigation

Landmarks are navigable objects. The browser's content and the user's location change when users click on them.



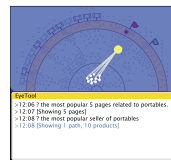
Buddies - Shopping Together

Clicking on a buddy's landmark allows the user to move to the Web page where the buddy is located.



Conversational Interface

Visualization of the result of a natural language query.



Access to Sales Representatives

Visualization of people queue up to talk to a business' sales agent.

