

# Fostering Social Interaction in Online Spaces

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**Abstract:** People can derive a great deal of value from social interactions. This holds whether the interactions are casual (i.e., of a single or small number of occurrences) or committed (i.e., of a repeated nature). For example, Mary might ask Jane, a neighbor in a dressing room, which of two dresses she thinks Mary should buy. In response, Jane may make reference to the color of the dresses, noting that one of the dresses works better with Mary's skin tone. This is a casual interaction, in which the two participants have met for the first time and might never meet again. The value that Mary derives from this interaction is Jane's calling attention to a criterion which Mary might want to consider in making her decision. Mary is likely to derive additional value if Jane is someone who has come to know her through repeated interactions, perhaps spanning an extended period of time. Such a long-term acquaintance or friend might point out that given Mary's lifestyle, she is not likely to have many occasions to wear the sequined evening gown, even though the color is certainly flattering to her skin tone.

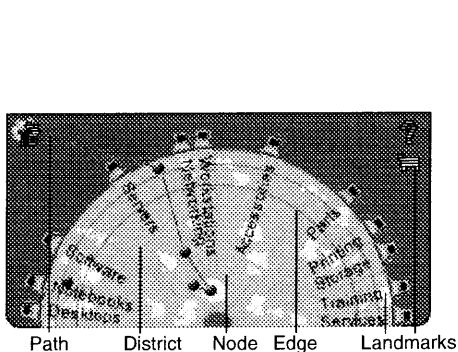
These two situations are one of many ways in which value can be provided through social interaction. Others include sharing experience, endorsing behavior, surfacing tacit knowledge, sharing information, recommending options, and providing companionship or support. In the online world, we expect people to derive value from social interaction, as well. However, given the paucity of social information in online environments, including the inability to see who is around, little of the value is currently enjoyed by participants in online spaces.

I will discuss how one might "seed" online environments to be rich in social interaction. The argument presented is based on an analysis of research on the support of collaboration among distributed work teams. This research demonstrated the importance for fostering social interaction in the physical world. It revealed four elements for fostering interaction among team members. These are a sense of place, common ground among participants, awareness of people and activities, and mechanisms for effecting social interaction. I present techniques that give expression to these factors in online environments. They are:

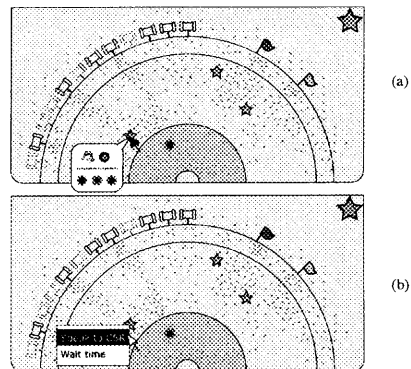
1. Exploit spatial metaphors to frame and interpret social information and exploit spatial properties to guide social interactions in the online space.
2. Expose the spatial, semantic, and sharable elements of a context to foster common ground.
3. Render social information visually to enable participants to become aware of the social activity occurring in the online space.
4. Include enablers and mechanisms for people to choose when and how to interact with others.

These techniques are embodied in a design for an online environment called ePlace which provides a spatial model of interaction, sharable, spatial, semantic context, awareness through social visualization, and enablers for social interactions. Lessons acquired from an implementation of ePlace for an online retail site are discussed.

**Keywords:** Awareness, common ground, context, place, social information, social visualization, space, Web.



**Figure 1:** ePlace site map and elements from the ShopIBM implementation. The pie segment for each major category occupies an area proportional to the Web pages at the Web site.



**Figure 2:** In this design sketch, a user identifies a customer service agent who is most likely to help her with her inquiry (one located in the same topic area) and (a) determines the number of people ahead and (b) decides to line up to talk.