

Research in interior design can take one of two routes. The first is design evaluation . . . oriented toward real settings, especially assessing what works and what does not . . . Theory development . . . focuses on understanding basic relationships and concepts.

necessary, but not sufficient, condition for innovation. Other factors also matter, such as the nature of the work and how the organizational culture and policies affect workers' willingness and motivation to share information and work collaboratively.¹

A recent study of a high-tech firm in Silicon Valley shows that many of the informal team spaces located in easily accessible locations throughout the building were seldom used. The designers had assumed that the technical staff worked in teams and that they needed to get together frequently and spontaneously. However, a post-occupancy evaluation showed that many of the engineers worked primarily alone, not in teams. Furthermore, when the engineers wanted to meet as a group, many found that the informal meeting spaces did not have the kinds of tools, equipment, and furniture they needed. The openness also made it easier for noise to spill into the private work areas bordering the group spaces. Similar results were found in numerous studies described by Sims et al.² This does not mean that informal team spaces should be abandoned. Rather, it means that their design should be linked more carefully to the nature of the work and the organizational context. In both the Silicon Valley study and in studies described by Sims et al. some groups found the informal spaces to be very useful and supportive of their needs. When this kind of variability exists (and this is almost always true in design evaluation), it is very important to understand what is producing the variability. For instance, were the teams or their projects different in some fundamental way? Did the spaces have different features and attributes that made some more useful than others?

Without a deeper understanding of these kinds of issues, design can go astray not only in small ways, but also in major ways. Brown and Duguid call this "design that bites back."³ The example they cite is the decision by the advertising firm Chiat/Day to implement nonterritorial workspaces in its New York and Los Angeles offices several years ago. According to a case study presented by Sims et al., the objectives of the Chiat/Day workspace redesign were to reduce status distinctions, increase collaboration, build collective intelligence, improve quality of work, produce better/quicker products, raise the technology competence of employees, and give employees the freedom to work wherever they wanted. Employees were encouraged to store all information on their computers. If they had hard files they needed to be returned to hall lockers each night and checked out again the following