Adaptive structuration theory (AST) has become an important theoretical perspective in understanding the processes of technological appropriation in the workplace. Invoking Giddens’ (1984) notion of “duality of structure,” AST seeks to understand the recursive relationship between advanced information technologies (AIT) and participants in social interaction on the emergent social structure. This process of social structuring, termed structuration, is composed of rules and resources. Rules are the normative constraints on social behavior. These are the ideological frameworks that prescribe courses of appropriate action. Resources are the structured properties that social actors may draw upon to enable or influence social interaction. Group decision making techniques and GDSS technologies provide such structured properties. The instance of calling upon a structural property of AIT is termed appropriation, or an appropriation move. My study examines the structuration process in accordance with the precepts advanced by DeSanctis and Poole (1994) in their seminal article on AST. My examination seeks to reveal what, if any, dominant patterns of appropriation occur in decision groups and how these patterns may differ across groups. Specifically, I examine and report the appropriation moves that occur over the course of a single-session decision task meeting. In the course of the examination, observation is made for appropriation moves in forty-eight videotaped sessions of four and five member groups utilizing group decision techniques and GDSS technologies for the first time. My study also extends the theoretical precepts of AST in order to describe the effects of technological appropriation in structuration and process outcomes. Giddens (1984) describes resources as the media through which power is exercised. This means that the influence an appropriation move has in changing the social structure is an exercise of power. Therefore, the examination reveals how appropriation moves alter or change the course of decision-making processes and effect outcomes. Specifically, I show how the social structure changes as a result of an appropriation move or a cluster of appropriation moves.