

can be designed to fit a specific situation is the form in which the information is presented. Many single-user systems designed to support strategic decision making provide the user with the ability to display and use ~~essential~~ information. Thus, it is essential that the limited body of knowledge regarding the interface between an individual decision maker and an ~~information system~~ <sup>information system</sup> be expanded. The form in which information is presented to a decision maker is a significant aspect of that interface.

Proponents of graphic forms of presentation claim that graphics, as opposed to tabular presentations enable users to make faster and better decisions. Graphic presentations allow the display of large quantities of information in a compact, meaningful, and easily understood form. <sup>(Scott-Morton, 1971)</sup> The empirical evidence regarding the effects of graphic and tabular information presentations on performance is equivocal. <sup>(Moriaty, 1979), (Zmud, 1979), (Gonzalez and Schneider, 1972)</sup> One set of studies <sup>(Lucas, 1981), (Lucas and Weller, 1980), (Watson and Prider, 1983)</sup> indicates that graphic presentations result in superior performance, another set <sup>(Lusk, 1979), (Ghani and Lusk, 1981), (Lusk and Kersnick, 1979)</sup> indicates that there is no difference between performance with graphics and tabular presentations, and a third set <sup>(Lusk, 1979), (Ghani and Lusk, 1981), (Lusk and Kersnick, 1979)</sup> indicates that tabular presentations are superior. Regardless of the results, all of these studies suffer from at least one of two weaknesses: (1) Most were done in an ad hoc fashion - they were done without a theoretical foundation.

Consequently, there is a failure to systematically specify, control, and study the variables which affect performance with information presentations. For instance, few researchers have recognized that task characteristics influence performance with an information presentation. Lack of a sound theoretical model also results in little theory