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COMPUTER ASSISTED DECISION AIDS

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Problem Addressed

Distribution managers have the responsibility for making an ongoing series of critical decisions in the areas of backhaul evaluations, labor scheduling and elsewhere. Typically an experienced manager using a calculator and pad probably makes the correct decision 90 percent of the time, or comes within 90 percent of the optimal decision. The 10 percent margin nevertheless represents a considerable cost, as labor, at up to \$19 per hour, and trucking, at approximately \$1.35 per mile, are major costs of the distribution operation.

Methodology

A series of user-friendly programs have been developed for use by the manager. These programs have two significant attributes. First, they are

designed for the unfamiliar user, who is at best neutral to computer use. The visual prompts allow immediate access to sophisticated analysis without the necessity of referring to a manual. Second, the programs are adapted for use on hand-held and/or portable computers, placing them in the control of the manager.

Major Findings

To date, computers have generally remained in the control of the finance office or, increasingly, the upper-level executive. Yet these applications leave a large gap at the operational level where many key decisions are made. The decision aids programs are an attempt to replace the relatively unsophisticated techniques currently employed with state-of-the-art analysis in a way which is meaningful and palatable to a generally skeptical client.