

EXSYS Case Study

Detecting Insider Trading

American Stock Exchange



The American Stock Exchange is a self-regulating organization responsible for monitoring market activity in a number of investment areas of the AMEX, including equities. The equity surveillance department receives information on unusual activity from a number of sources. This department performs an initial screening of referrals to determine whether or not to investigate further.

The Market Surveillance Knowledge Automation system is designed to support analysts in making recommendations on whether to open an investigation of suspected insider trading. The user makes an inquiry to a database of stock price history, which is transferred, to a PC via an IRMA board. The analyst then uses a spreadsheet with menus and macros to determine a period of interest for investigation. A custom interface reads the data and provides a format for rapid user input similar to a questionnaire. The spreadsheet provides data to the knowledge automation system, which then provides the appropriate questionnaire. The system asks a few additional questions and gives the user two scores. One score is the probability for opening an investigation, and the other for not investigating.

The entire system runs from a batch file. At the end of a user session, the system prints the results and saves the data and rule set on a diskette, which is then filed with the investigation folder.