Office automation

Daily, new uses appear for computers in the general office environment. While the area is still dominated by word processing, other applications are becoming widespread. Special systems for administrative tasks, records management, document distribution, and communication integrate new activities into the standard word processing and data processing activities.

With these new applications, however, come endless problems—discovering and refining the applications, choosing equipment from the constant new offerings, devising appropriate accounting methods, restructuring organizations, and determining the impact on the corporation—all are complex issues.

The first session will review the history and current state of office automation. The evolutionary changes of the field from the technical and marketing point of view will be reviewed. The history of the industry will be developed and will be compared to the data processing industry. Finally, the surprising diversity of the office automation industry will be outlined with a review of the range and applications and the present areas of concentration.

The architecture of systems for office automation is diverse and rapidly changing. The second session will present three views of these architectural changes; firmware to software, stand-alone to distributed, and maxi to micro. While we observed these changes initially in hardware, they greatly impact the applications. The long range user effects will be the focus of the session.

The third session will address organizational trends in office automation, and will cover methodologies for designing automated office support. They include: integration into computer-based, multi-function terminals for total automated support, cost/benefit analysis for managerial work, increased user participation in the design and revision of automated office systems, and increased attention to organizational and human factors in system design and implementation.

Even with these methodologies, however, the implementation of automated office systems has been difficult. Cost-benefit data is confusing, and overall productivity gains are difficult to determine. This fourth session will present a different, controversial position.

Office automation systems imposed on existing organizational information flows will increase inter-group conflict, confuse assignments, cloud responsibility and provide no overall improvement in performance. If office automation only provides faster switching of messages and easier access to files it will increase
the problems inherent in current information flows and be rejected by the users. What is needed is formal reconstituting of information flows by the major activities of data collection, data base analysis, information packaging and knowledge acceptance. The delineation of basic processes will make possible scheduling and planning models, resource allocation, and assignment of overall objectives and responsibility. Unless these improvements are made in information processes office automation will not realize its full potential.

Finally, some users have begun to reconstitute their information flows and address the issues raised in the previous session. This final, fifth, session focuses on several applications of computer-based message and document distribution systems. Emphasis is on implementation approaches and system value within the organizational context, and on the introduction of such systems to prospective users. Case presentations will be made in which three organizations are represented—one multi-national non-profit, one corporate, and one federal government agency. Each has actually implemented a system and will discuss its usage and related impacts.