

completed management study of retirement and insurance operations indicated that over the next decade more than \$3 million can be saved through further automation.

Increased automation is to be expected. But it is time to ask searching questions about these systems and what they should be doing for us. Automated personnel systems put into use during the past few years are basically record-keeping and reporting systems. But it is a serious mistake to think of personnel offices primarily in terms of records and reports.

Personnel management is principally concerned with finding the best qualified people to fill vacancies, insuring maximum utilization of manpower resources, improving working conditions and thereby improving work—and providing equal employment opportunities to all our citizens, not only at the point of entrance into the service, but through training, promotions, and full career development. Seen from this perspective, automation of personnel operations is just beginning.

As we advance, the question facing us is this: Which parts of the job can a computer do better—and which can men do better? We know that a large part of management is actually clerical decisionmaking, though we have often dignified it in the past with the word "judgment." It requires the identification of relevant facts and the selection of predetermined action on the basis of those facts. This a computer can do beautifully.

In scheduling civil service examinations, for example, our computer makes "decisions" of this kind by the thousands. Why should the time of a man or woman be devoted to such work with less accuracy and little satisfaction? We have other work for men and women, in which they can do a far better job using the huge data resources of the computers. This work involves decisions on personnel planning, the matching of men and jobs, the forecasting of manpower needs, and the important decisions of career-planning.

For proper decisions in these areas we must have integrated information systems. This will require the use of information across departmental boundaries. It is here that current efforts to standardize symbols and codes will pay dividends. Direct tape-to-tape feeding of data from one department to another may become common. These systems will mesh well with developing plans for an executive-level staffing program which will be designed to locate the best possible man for any given top-level assignment, no matter where in government he may be serving.

The computer's ability to search its perfect memory and pick out records of individuals with specific characteristics has been applied in the search for candidates for Presidential appointments. A computerized file containing the names and employment data of some 25,000 persons, all considered likely prospects for federal appointive positions, is searched electronically. This talent bank, with its automated retrieval system, broadens the field of consideration for the President in critical decisions of leadership selection.

Throughout the Government, one of the great responsibilities is to provide true equality of opportunity in employment. To know where we have failed to provide it, where we have succeeded, and how best to plan, we need a multitude of data. Through head counts we know only that a certain number of Negroes, for instance, were on the rolls in certain grades at a certain time in the past, and now we can count that there are fewer or more. But these data do not reveal whether the people in certain jobs came from lower jobs or from outside the Government. They do not assist us in recommending training or evaluating it. They fail to give us the management information required to do a conscientious job of creating conditions that will make a reality of equal opportunity.

To obtain additional and more accurate information, a new effort has been initiated in this area. By means of a voluntary racial designation prepared by employees themselves after employment, reliable information now can be fed into computers where it can be confidentially stored and used.

Most Federal managers need more knowledge of computers in order to best use their capacities. With this in mind the commission last year established an ADP Management Training Center in Washington. More than 2,300 Federal employees have attended its sessions.

There seems no doubt that increasing use of computers in Government, accomplishing many of the clerical tasks by machine, will affect the skill requirements and the "occupational mix" of government service in the future. The Civil Service Commission has made an extensive study of this question, and is giving it continuing attention. Employee displacement has not been extensive; with intelligent planning an agency can prevent hardship for the employees affected.