I don't want an arrest record, but once I have an arrest record I might be less concerned about having a second. I don't know, but these are some of the things that have to be considered.

We also need such analysis techniques to decide where to invest technological resources so that they can be effectively applied to our basic objective or reducing crime. To illustrate this, we collected data from Los Angeles on the factors that give rise to apprehension of criminals. We found, as we expected, that rapid police response to a crime call gave rise to more apprehensions.

But we were surprised to find that unless the suspect is caught at the scene of the crime, or is identified by a victim or witness, the chances of ever catching him may be less than 12 percent. We then compared alternative technological means for getting to the crime scene faster: more patrol cars, more telephone clerks answering citizens' calls, car-locator devices to find the closest patrol cars, and computer-assisted command and control systems in the command center. For the conditions of the hypothetical city we examined, we found that delay could be reduced most inexpensively by the most expensive investment: computer automation of the command center, and this needs further development and adaption to particular cities.

This was the best investment to reduce delay, which is correlated with apprehension by the police, which by the theory of deterrence is presumed to reduce crime. Such a chain of reasoning is necessary to make optimum technological choices, and all the links in any such chain need considerable strengthening.

Another place such analysis techniques can be beneficial is in the management of the courts. Through a computer simulation of the processing of persons arrested for felonies through the District of Columbia court system, we were able to show that the processing through the grand jury was the critical bottleneck, and to experiment with various possible changes in the operation of that court system—all without disrupting the critical ongoing operations of the court.

These very preliminary steps we have taken in only a few areas have convinced us that there is a significant contribution to come from a major research and development program. And we have not even touched on such areas as identifying basic causes of crime, treating drug addiction, planning a strategic attack on organized crime enterprises, selection and training of criminal justice officials, and many other areas that properly belong in a research and development program. In view of this potential, it is surprising that until the Office of Law Enforcement Assistance was established in 1965, the Justice Department was the only Cabinet Department in the Federal Government with no research and development progam.

Need for a Federal role

It may very well be that the application of science and technology to criminal justice has been retarded so long as a result of the fragmentation of the criminal justice system. Only a handful of criminal justice agencies are large enough and rich enough to undertake major research or equipment development projects on their own. There may be little incentive for them to do so, since that would probably be an inefficient investment of resources for any one of them. Although the results would benefit all, the innovator alone would have to bear the high cost. Even if the individual agencies independently conducted