

An Address

by

K. A. RANDALL, CHAIRMAN
FEDERAL DEPOSIT INSURANCE CORPORATION
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The theme of today's sessions -- banking and automation -- is most thought-provoking, stimulating, and timely. We hear more and more about automation in banking every day and about its potential and its impact.

Because a computer can perform simple mental processes without getting tired or bored and without errors (if properly programmed), it is a logical candidate for increasing the efficiency of banking operations and eventually for broader applications in banking. At the same time, as automation is increasingly adopted by other segments of the economy, its impact on banking is magnified. Therefore, it is essential that we pause occasionally to take a hard and searching look at where we are going and whether our progress to date is moving us toward desirable goals.

When computers were first introduced, we were intrigued like a small child with a new toy. But as adults, we must guard against over-preoccupation with the shininess and the novelty of equipment that could readily become a new "plaything" -- and concentrate instead on ascertaining the advantages and the limitations of this machine. Mankind's achievements over the years -- and particularly in the development of our modern industrial state -- have been heavily supported by machines. Machines have exercised an useful discipline over man, who, nevertheless, must retain control.

As a Federal supervisor of banks, I should like to present briefly some of the implications of automation for banking. Then, I should like to discuss in somewhat greater detail one aspect of these developments that has important connotations for our supervisory responsibilities --

the role of bank management in automation. Finally, let me pose a few basic issues that have yet to be resolved -- and which should be resolved before too much time has passed.

In banking, the first and most obvious use of computers was in their application to those tasks within the institution which involved handling of masses of data generated by routine transactions wherein speed and accuracy are essential. As a consequence, the earliest applications of automation in banking related to check clearing, demand deposit accounting, and similar jobs that required untold hours of clerical assistance. Record keeping and report preparation therefore have been to a large extent computerized -- even for many of the smaller institutions through the use of correspondent services or participation in bank service corporations.

With the increasing sophistication and versatility of the current third-generation computers, however, banks are finding that they have a very interesting management tool with great potential at their disposal. This potential can be directed so as to provide strong support for management -- or, if directed improperly, can inadvertently result in the displacement of management. The direction in which this potential is channeled is a major decision about which I will have more to say later. Generally, it would seem that automation can play a major role in the bank management decision-making process.

Automation in banking has already influenced several aspects of banking -- some of them obvious, such as clerical applications, and some yet only dimly seen. Automation can modify banking structure -- by changing the optimum size of a viable institution, its internal organizational

structure, the geographical distribution of banking offices, and the number of banks. It can facilitate new ways of doing business -- for example, the introduction of bank credit cards to supplement the instalment loan business. Credit card operations are ideally suited to a computerized system because they involve a high-volume, relatively small-item type of operation.

Automation can also strengthen the long-run competitive position of banks by helping them to expand existing services at eventually lower manpower and equipment costs. And a computer can make data within a bank more accessible to management for its day-to-day operations as well as for long-range planning.

Through increased efficiencies and enhanced knowledge due to informed use of computer capabilities, it may be possible for banks to compete more effectively with other financial institutions in meeting the financial needs of the economy. And as banks become increasingly able to serve the community, they may develop into one-stop "financial supermarkets;" thus evolving into a wholly new type of financial institution.

But rather than pursuing this line of thought further -- the above examples are intended only to stress a few of the many prospects taking shape as a result of the application of computers to banking. I would like to discuss a more immediate and very real problem that is facing the banking industry today -- the management gap. Owing to a number of factors, banking has found itself with a noticeable management gap in the 35-50 year age group. There are many excellent management-level personnel currently in banks that

are in this age group -- but there are not enough to go around. The Depression years gave banks a reputation as unattractive business enterprises with little opportunity for advancement. The requirements of wartime for those trained in the natural sciences and technology further discouraged specialization in banking studies. After the end of World War II, programs designed to attract young talent to banks were late in starting. Nevertheless, with the growing magnitude of the problems facing banking -- and their increased complexity, top-quality management in sufficient quantity is essential. Banking is now obliged to pay dearly in financial terms and otherwise for this shortage of management talent.

The introduction of automation into banking is especially serious as a complicating factor. Generalizing only at a small sacrifice of precision, we see management consisting today of experienced men of 50 and older who are the repository of valuable experience and information. They are the possessors of a well-developed judgment proved under fire -- so to speak. At the other end of the age spectrum, there is a small but rapidly growing group of bright, imaginative young men skilled and knowledgeable in the use of the computer and other related management and analytic techniques. Notwithstanding their excellent qualifications, they lack the valuable background of experience and wisdom of their seniors. Their banking experience is limited -- both in duration and variety.

Sometimes we forget that experience develops wisdom, which is defined as "the ability to judge soundly, discern relationships, and deal sagaciously with facts," especially as they relate to day-to-day problems. Wisdom is to

a significant extent the end-product of accumulated experience tempered by good sense and judgment. It is not necessarily correlated with age or the mere passage of time -- but the time element tends to be crucial.

Banking therefore is confronted in this age of automation with a top-level management group not always completely conversant or "at home" with the new techniques and -- separated by the management gap -- with a young, technically-trained group that has not had the time to develop and test its capabilities for reaching sound and wise judgments.

The FDIC has launched a number of projects that are designed to strengthen the supervisory capabilities of our staff in this new environment of automation and computerization. All of our examination staff is being trained to understand the basics of computerized operations, while a smaller number are being trained as specialists. Not only must we be familiar with what can be extracted from the computer, but we must know what constitutes useful input and output and what safeguards are necessary to prevent fraud and manipulation. With this enhanced knowledge of the new techniques and an understanding of the limitations and capabilities, the examination process can serve as a valuable management tool, providing bank management with an enlightened perspective concerning its operations.

Some of our research activities are being directed toward new areas where automation in banking might be helpful -- whether in operations or in the decision-making process. Some of our research studies are attempting, for instance, to determine whether refinements in bank cost analysis might prove worthwhile in bank supervision and bank operations. From a supervisory standpoint but with anticipated benefits for banking also, we

are evaluating the desirability of a management information system which may enable us to identify more easily the shifting patterns and trends in banking and thus to supervise more intelligently. Better and more relevant information about banks could strengthen banking as well as bank supervision.

In addition to the projects listed above, the Corporation, of course continues to collect and maintain all bank data, conduct regular examinations of insured nonmember banks, process bank applications for insurance and other related matters, and be involved in analyses of current economic conditions and pending legislation. Added to these concerns now, however, is the need to assess the implications for banking of automation. We must be in a position to recognize both the potentialities and the problems that are involved, especially with regard to our bank supervisory responsibilities.

Some of the issues are not as yet clearly defined, but let me try to point out a few that have occurred to me. Starting from a broad, philosophical viewpoint, we have yet to evaluate the overall effect of automation -- particularly from the viewpoint of society. Techniques presently available in the field of automation undeniably offer many advantages, as far as efficiency and speed are concerned, in achieving results. But automation may not necessarily be of unadulterated benefit in many situations. Advantages must be weighed against disadvantages. This is particularly applicable to banking, where service to the public and profit considerations may occasionally diverge.

Computerization deals largely with quantities, concrete concepts, and readily identifiable units. In order to facilitate the processing or

collation of comprehensive data, for example, it might be considered "ideal" if all information concerning an individual could be distinguished by a personal identification number. Developmental work on such a system -- popularly characterized as PIP (Personal Identification Project) -- is already underway. Then all data concerning an individual, including his financial dealings, for example, -- his bank and nonbank borrowings, his savings habits, his payments record, the number of charge accounts maintained, the number of credit cards held, and security and other financial transactions -- would be collected in one large data bank for the purposes of analysis. It sounds so neat and logical -- and relatively simple in concept.

Nevertheless, we must consider the possible disadvantages that the loss of personal privacy might entail against the advantages to be derived from centralization of all this information in one place. The technicians assure us that the necessary safeguards to prevent tampering or leaks and to minimize errors can be readily programmed into any system -- and I do not intend to cast any doubts on their assessment of the problem. But technicians are human beings and as liable as the rest of us to develop a perspective influenced by their own interests and enthusiasms.

In the arena of bank supervision, we have been asking ourselves whether the data we are currently collecting from the banks and the additional data we want to obtain are really essential to our responsibilities. Do the aims of privacy and confidentiality of data override -- or coincide with -- the needs of bank supervision? I think the answer lies somewhat between the extremes of complete secrecy and unrestricted disclosure.

Even then, reconciliation of the alternatives could very well differ in accordance with differences in the size of the bank involved. There are many large banks in the United States where the institution has become impersonalized to some extent -- like our large business corporations. Ownership and management are divorced; the individual and the business firm are no longer identical. On the other hand, application of disclosure to the same extent to smaller institutions might endanger the right to privacy to which an individual is entitled because the situation is not impersonalized.

Let us turn next to some of the more pragmatic aspects of automation and consider the implications for banking structure and banking activities. The requirements of automation in terms of cost and scale of operations can have an important impact on banking structure. The optimum size of an automated bank may well be significantly larger than the majority of the banks that make up our banking system. What then is to become of the smaller institutions; are they to become anachronisms in the age of automation? Should we permit them to wither away -- or be absorbed by their larger competitors -- notwithstanding the fact that they have been functioning successfully and serving the community in their own limited market?

Small banks will -- and, I think quite properly, have a role to play in the economy of the future. Even if some very small banks do not become automated, their continued existence could demonstrate the strength and flexibility of our financial structure. Furthermore, the small bank will help to preserve a necessary amount of diversity in banking and in

the financial community in general. The small bank has contributed to the development of banking -- and can continue to do so, although perhaps on a somewhat different basis.

The bank supervisors in these circumstances can help to maintain a strong and viable banking system consisting of both large and small units. To do so, however, they will be obliged to promote management standards for these smaller institutions that are relevant to their needs as well as realistic. Possibly, these smaller units will not be as innovative or as daring as their larger counterparts -- but they can continue to serve the public.

From the standpoint of efficiency and cost economies, automation might also radically change our banking structure -- toward more widespread branching and possibly even banking across state lines! But, again, all of us involved and interested in the future of banking must weigh the advantages of these changes against their private and social costs.

Somewhat related also is the resolution of problems that may arise when the imperatives of automation -- whether for operations or in decision making -- conflict with the needs and convenience of the public. For instance, computerization might dictate the elimination of certain personalized features in banking services or the mechanization of approvals or rejections for small or medium-sized loans. But enlightened management will not forget their responsibilities to satisfy to the best of their ability the credit needs of the public. Furthermore, the supervisory authorities from their vantage point can encourage the development of a banking environment which will ensure adequate service to the public.

The advent of automation in banking is leading to a useful re-examination of traditional banking practices, procedures, criteria, and rationale. At the same time, it is posing some hard questions. Should machine processes supplant customary banking practices and procedures? Should the traditional regulatory criteria used in bank examination be modified to accommodate the demands of automation? If automation and banking conflict and the conflict involves a basic issue, the computer must defer to the needs of banking and not the other way around. This does not mean that banking operations must continue to be performed in the same way as before but automation must not distort the basic rationale behind the operation or the decision-making process in banking. The same holds true where automation and supervision appear to be at odds. The rethinking that is in progress is thus serving a most useful purpose in eliminating or modifying obsolete or meaningless practices and policies.

From the perspective of time, we are only entering the "age of automation" for banking. Consequently, now is the time to take a hard look at the issues and the problems and try to anticipate potential problem areas. We must be careful not to assume that banks will derive nothing but benefits from automation. The costs of automation -- from more than a dollars and cents standpoint -- must also be considered. I think the benefits will outweigh the costs -- but the costs cannot be ignored. It would be well for us to consider these costs now.