Research Department
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Money Machines

Money transfers and all the attendant paperwork present fertile territory for the application of computer technology. In recent years, the annual volume of checks has been increasing by nearly a billion a year, and this has led financial institutions to search for less costly and less unwieldy methods of handling payments. Programming resources thus have been increasingly devoted to streamlining the payments mechanism. Some programs, such as the direct deposit of salary checks and social-security payments, are already widely utilized, while the pre-authorized payment of recurring bills is beginning to catch on. It is the programmer's nature, however, to build systems of maximum flexibility, in order to anticipate broader applications of both hardware and software.

In the last several years, the technical feasibility of automating financial transactions has been proven, and the burden of determining economic feasibility has been transferred to management. Although a National Commission on Electronic Fund Transfers has been formed to study all facets of the issue, many firms are not waiting for the Commission's recommendations but are plunging ahead in an effort to gain a competitive advantage in this new field.

Managers not only have to become educated to the computer's capabilities, but they also have to work their way through an array of cost-benefit calculations before they can justify the installation of new equipment. A key factor in these calculations is projected volume. Since the automating of payments transfers does not involve a new product line, the volume growth that would justify the considerable front-end costs involved in such a shift frequently is greater than what historical trends would indicate. Financial institutions thus might come under significant pressure to broaden their markets in order to cover such costs.

Remote service units

Many of the new developments center around remote service units (RSUs). An RSU is an automated device linked to a mainframe computer which can make financial transfers at locations off-premise to the financial institution involved. The machines are largely owned by depository institutions, data-processing firms, nonbank credit-card firms, or large retailers.

Since more checks are written at grocery stores and other retail outlets than at banks, many of the experiments in this field have been conducted at such establishments. In fact, most cash registers installed today are point-of-sale (POS) terminals, which are adaptable to immediate debiting of accounts but have not yet been used for that purpose. Many of these terminals are now limited to credit and check clearance, along with such business functions as maintaining a running inventory. But planners expect that, in full operation, the clerk's insertion of the customer's coded plastic card into the RSU would debit the

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customer's account for the amount of each sale—debit either his regular charge account or his account at a bank, savings-and-loan association, or credit union.

From the consumer's point of view, there are several potential problems. The system would require a central information file on participants, which could be regarded as an invasion of privacy. It would also tend to eliminate float—the period of time between payment by check and its recording by the depository institution—which many consumers regard as useful in emergencies or when circumstances require a stop-payment order. Some consumers also resist any involvement with computers and statement revisions. However, since customer convenience is the carrot being used to entice mass acceptance, the industry will strive to find some means of overcoming such objections.

Another type of remote-service unit is the customer-bank communications terminal (CBCT). In some activities, the CBCT overlaps with a POS—that is, where the machine simply functions between a bank and a customer to debit an account at the point of sale. For the most part, however, CBCT's are envisioned as having broader functions. Through CBCT's, a customer may withdraw or deposit funds, transfer funds between his checking and savings accounts, and transfer funds from his account to accounts maintained by other bank customers. These automated teller machines are being placed initially at heavily-trafficked sites such as transportation terminals and shopping centers. According to a recent industry estimate, some 1,000 U.S. financial institutions have installed about 4,000 automated banking machines and have roughly the same number on order. About 75 percent of the machines are automated tellers, and most of the rest are cash dispensers.

New challenges

The traditional structure of financial institutions is straining under the weight of these technological breakthroughs, as challenges have developed to present geographic and legal barriers to fund transfers. The Federal Home Loan Bank Board now allows federally-chartered savings-and-loan associations to establish as many limited-service "satellite offices" as they wish. However, each satellite must be located within five miles, and within the primary service area, of an existing branch office or home office of the sponsoring association. These RSUs are allowed to take deposits, pay out funds and accept mortgage payments.

As a counter-move to the liberal FHLBB stance, the Comptroller of the Currency moved, in December 1974, to authorize national banks to establish CBCTs. Each bank was allowed an unlimited number of terminals within 50 miles of its main office or nearest branch, but outside the 50-mile radius, terminals would have to be shared with at least one other financial institution. The Comptroller's ruling was based on the position that CBCT's do not constitute branches under the meaning of the 1927 McFadden Act. However, that ruling was overturned in U.S. District Court, under challenge by the Independent Bankers Association of America. The court's decision is being appealed; meanwhile, the Comptroller has advised national banks "to make their own business and legal judgments" on the matter. A high level of activity is continuing in this field, with the greatest challenge to traditional ways of doing business coming at this time from the S&L's and unregulated enterprises, and not only from large banks.

Sharing the burden

For many small banks and S&L's, the front-end costs of establishing their own automated teller units are prohibitive. (Estimates range from $30,000 to $50,000 per unit.) Wherever possible, therefore, these institutions are organizing cooperative arrangements, usually with some large institution. This development can create difficulties because of the necessity of differentiating the service product and its pricing from delivery costs, in order to avoid any appearance of collusion. In some states, large banks have set up nonexclusive networks, inviting small banks and thrift institutions to share the benefits (and costs) of the facilities; in other instances, the primary investor has been an S&L which then seeks out linkup partners. For consumers, the distinction between the two types of financial enterprise is becoming increasingly blurred. The consequence may be the side-by-side activation of many systems, with the marketplace gradually culling the herd. There is likely to be a great deal of money made and lost—as has already occurred among the machines' manufacturers—before the outlines of a lasting institutional framework take shape.

Legislation now being debated in Congress could liberalize many of the restrictions on money machines, thus intensifying competition in the new world of electronic fund transfers. For both the new and old players, the road to success seems to lie in wooing consumers with convenience, economy, simplicity, accuracy, safety and confidentiality safeguards.

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