Case 8

Central Bank: Automatic Teller Machines

Robert E. Stevens
David L. Loudon
Bruce E. Winston

As Mark Chappell, vice president and manager of the Automatic Banking Services department at Central Bank, reviewed the latest month's ATM transaction data and the consumer survey on ATM usage, he wondered about what pricing strategy to recommend to the executive committee. Should he recommend an annual fee for all cardholders, continuation of the current $.50 fee transaction, or a raise in the current fee to $1.00 per transaction? The impact of this decision could dramatically affect the bank's earnings and ATM usage.

Background

Automatic teller machines (ATMs) emerged in the early 1970s and have experienced relatively widespread acceptance by both the industry and its customers with many financial institutions aggressively promoting the use of ATMs to their customers. Increasing the base of ATM users can contribute to an institution's profitability in a number of ways. Such transactions can help the institution to (1) stabilize or reduce staff, (2) cut paper processing costs, (3) generate fee income, (4) generate investment funds from high average balance accounts, and (5) reduce labor hours or avoid extending hours. The key to obtaining these benefits is to direct market to those consumers who are most likely to obtain and use an ATM card on a regular basis.

ATMs are extremely important to Central Bank's overall strategy for two reasons: (1) the bank is domiciled in one of the last states to eliminate antibranch banking laws which prohibit a bank from building branches, and (2) studies had shown that the bank's cost per transaction for an ATM was only about $.50, compared to $1.00 per transaction with a "live" teller. Since an earlier test case declared that ATMs did not constitute a branch, their proliferation gives banks the opportunity to expand geographically to reach new markets. Central Bank currently has fifteen ATMs in various locations throughout the city with a monthly average of 5,576 transactions per ATM (see Table C8.1). The services offered at each ATM are (1) cash withdrawals, (2) balance inquiries, (3) account transfers, and (4) deposits. The cash withdrawals may be from a checking account, savings account, or credit card. All of the bank's ATMs (except for the one in the bank's main lobby) are "stand alones," meaning not inside a store but in their own constructed facility. All the ATMs can be accessed twenty-four hours a day, seven days a week. Each ATM is also equipped with a phone for recorded messages on how to use the ATM or what to do if a problem occurs.

TABLE C8.1. Average Transactions per Machine

Machine number	**Average monthly transactions**
1	3,894
2	7,227
3	6,423
4	8,270
5	3,721
6	2,112
7	6,340
8	7,432
9	4,565
10	5,541
11	5,212
12	4,613
13	4,825
14	6,130
15	7,328
Total	83,633

The average use per machine of 5,576 per month was higher than the national average of 4,310. Chappell attributed this to the state antibranch banking laws that prohibited branches prior to 1985. Consumers became more dependent on ATMs to conduct banking transactions and carried on these behavior patterns even after branches were permitted.

The Consumer Study

The bank hired a marketing research firm to study ATM usage in the area to determine reasons for ATM use, services used most, average usage, problems encountered in use, and questions about ATM fees. During a six-week period, the marketing research firm conducted a telephone survey of a random sample of 500 area residents who used the services of a financial institution. The sample is believed to be representative of Central Bank's 10,500 noncommercial clients.

ATM Usage

Tables C8.2 and C8.3 show ATM usage patterns among respondents. Table C8.2 shows that withdrawals and deposits were the two most frequently used functions among study respondents. These figures correspond to national percentages on usage characteristics.

Table C8.3 shows frequency of use among respondents. The first two categories of users were called *active users* based on their frequent use of ATMs. These consumers have altered their banking patterns to include frequent use of ATMs.

TABLE C8.2. Function Performed by ATM Users

Function	**Percentage***
Deposits	35.6
Withdrawals	77.6
Transfers	3.80
Balance inquiry	3.80
Bill payment	1.00

*Percentages add to more than 100 percent due to respondents giving more than one answer.

TABLE C8.3. Usage Frequency

Frequency of ATM use	Percentage*
Three or more times per week	26.4
One or two times per week	35.2
Once every two weeks	9.90
Once every three weeks	12.1
Less than once a month	8.80
Don't use anymore	7.70

*Does not add to 100 percent due to rounding

Price Sensitivity Among Cardholders

Price sensitivity was measured by asking respondents about (1) current card charges, if any, (2) desired transaction charge alternatives—annual fee versus transaction fee, and (3) maximum charge under their choice of fee payment before they would stop using their card. This permitted establishing a method of payment and a level of payment for card usage.

Seventy percent of the respondents reported that they were not currently paying a fee for ATM use. About 17 percent said they were paying a fee and about 13 percent did not know whether they were paying a fee at the current time.

When respondents were asked their preference for an annual fee or a fee per transaction, 46.3 percent preferred an annual fee, 29.1 percent preferred a fee per transaction, 20.1 percent said they would not use their card if a fee were charged, and 4.5 percent were undecided. Active cardholders showed a stronger preference for an annual fee than inactive cardholders. Only 23.8 percent of the inactive cardholders reported that they would not use their card if the bank charged a fee.

The fee schedules for both the annual fees and the fees per transaction were presented as alternatives by asking if the respondents would be willing to pay a given amount. These results are shown in Tables C8.4 and C8.5. The percentages shown in each column represent the proportion of respondents who were willing to pay a maximum given fee before they would stop using their card.

TABLE C8.4. Alternative Fee Levels for an Annual Fee by Card Ownership

Maximum annual fee	Central Bank %	Non–Central Bank %	Both combined %	All cardholders %
Less than $5 a year	4.7	6.1	0.0	5.5
Pay $5 a year	32.6	24.2	9.10	25.3
Pay $10 a year	30.2	33.3	9.10	29.7
Pay $15 a year	9.30	27.3	54.6	20.9
Pay $20 a year	11.6	0.00	18.2	7.70
Pay $30 a year	9.30	0.00	0.00	5.50
Over $30 a year	2.30	9.10	9.10	5.50

TABLE C8. 5. Alternative Fee Levels for a Fee per Transaction by Card Ownership

Transaction fee	Central Bank %	Non–Central Bank %	Both combined %	All cardholders %
Less than $.25 per transaction	9.1	18.0	0.0	12.5
Pay $.25 per transaction	27.3	33.3	66.7	34.7
Pay $.50 per transaction	45.5	28.2	33.3	31.9
Pay $.75 per transaction	13.6	7.70	0.00	11.1
Pay $1.00 per transaction	4.60	10.3	0.00	8.30
Over $1.00 per transaction	0.00	2.60	0.00	1.40

For those who preferred an annual fee (46.3 percent), almost all (95.4 percent) would be willing to pay $5 a year for the use of their card. For those who preferred a fee per transaction (29.1 percent), at least 90 percent were willing to pay at least $.10 per transaction to use their card. There were no significant differences between active versus inactive cardholders and all cardholders combined on fee preferences and fee levels.

Awareness of ATMs in the study area was very high overall (94.3 percent), but awareness of specific transactions was concentrated on cash withdrawals and deposits. About 64 percent of the adult population reported owning a card that could be used in an ATM.

Among cardholders, 64.5 percent were classified as active, i.e., they used their card at least once every two weeks. Of the active cardholders, 36.4 percent used their card three times a week and 51.2 percent used their card one to two times a week. The majority of cardholders (68.1 percent) used their cards close to home, on Friday, Saturday, and Sunday, and between 3 p.m. and 10 p.m., which corresponds with the hours banking facilities are traditionally closed.

The overriding motivation for ATM usage was "convenience." Cardholders ranked "overall convenience" more frequently (51.9 percent) than any other reason for getting an ATM card. The second-highest ranking reason was "open twenty-four hours a day" (17.3 percent) which implies convenience and availability.

The Pricing Dilemma

Chappell's review of banking literature revealed three schools of thought about pricing ATM services. The first was not to charge customers at all for ATM use. This was based on the cost savings associated with ATM use compared to "live" tellers. Since financial institutions actually cut costs through ATMs, not charging a service fee should encourage their use.

The second approach was to charge customers for the use of ATM services either with an annual fee (fifteen to twenty dollars per year) or a fee for each transaction ($.50 to $1.00 per transaction at Central Bank's ATMs). This would create an additional source of revenue for the institution and help recover the cost of ATM installations. (ATM installations ranged from $35,000 for an in-store location to $100,000 plus for a "stand-alone" location.)

A third school of thought, which was gaining popularity among banks, was to provide some free transactions, say three to four per quarter, and then charge for additional transactions on a quarter-by-quarter basis.

Chappell was convinced that the bank should continue to charge for ATM services but wondered if the annual fee might cause nonusers of ATMs to complain or even switch to a competing financial institution.