

# Week 2 hand-in -2

Technology, Information Technology



Week 2 Hand-in Assignment From its humble beginnings in 1969, when Chemical Bank established the first primitive Automatic Teller Machine (ATM), it took a huge blizzard to establish the ATM as a popular banking device. When New York received over seventeen inches of snow in early 1978, Citibank's customers found it easy to go to the tellers for money for the basic necessities. Privacy was increased and although mortar and brick banks and their tellers still exist, there are more than 400, 000 ATM's throughout the United States alone and not just in banks. From Antarctica to Buckingham Palace and beyond, the ATM accounts for eleven billion transactions each year (CNN 2004).

But how does that rectangular box, on the wall of the bank, in a private booth, or maybe in a convenience store, dispense all of that cash? What are the user requirements? The ATM is a classic example of the textbook definition of Chapter 4. 1. 1 " The functional requirements for a system describe what the system should do". The European Community basically agrees in its ATM Protection Guidelines (2000).

Although it is relatively old, the University of Maryland issued a very good document on this subject (1996). The following steps must be undertaken before the customer can receive his or her money. Any answers of no will cause a rejected transaction and the person will be turned away.

1. Customer inserts card into machine (sometimes he swipes it).
2. Normally, a closed circuit camera begins to record the transaction for security purposes.
3. ATM, through its network (Major networks in the US are Star, Pulse and Cirrus), contacts the customer bank. Is the card valid?

4. If valid, customer is prompted to enter his Personal Identification Number. Is it correct? (Depending upon the policies of the bank, the customer is given a number of chances [usually three] to enter the correct number).
5. Is the customer bank account valid?
6. If the answers to questions two, three or four or no, depending upon the type of machine and again the bank or network policy, an error message is displayed on the screen. The card is either returned or seized without printing a receipt.
7. The customer is then given several options for the transaction, i. e. withdrawal, balance inquiry or deposit. For purposes of this paper he has chosen withdrawal.
8. Does the ATM have sufficient cash on hand for the withdrawal? If no, an error message is displayed and the card is returned.
9. Does the customer have sufficient funds in his account?
10. Has the customer exceeded the daily withdrawal limit (issued by his bank)? This is the only exception, for a “ Yes” will reject the transaction.
11. If all questions other than Item Ten are “ Yes”, then cash is dispensed, a receipt is printed, and the customer is reminded to remove his card. The ATM also notifies the customer bank of the transaction, along with any fees assessed.

All of these steps are completed (most of the time) in a matter of seconds, probably less than two minutes. Some say the increased use of debit cards, twenty per cent in the last fifteen years (FED 2006), may spell the demise of ATM. Yet the recent credit card crunch and tightening of bank regulations have led to the use of more cash and that means the little boxes will

continue to exist.

References:

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