Chapter 3
Existing System

Before develop the simulation model of such system, it is very necessary to understand that existing system. The aim of this chapter is to describe the system that will be simulated by illustrating the process flow of IVR and call center as well as listing the services of IVR and agent.

3.1 Call Center Flow Chart

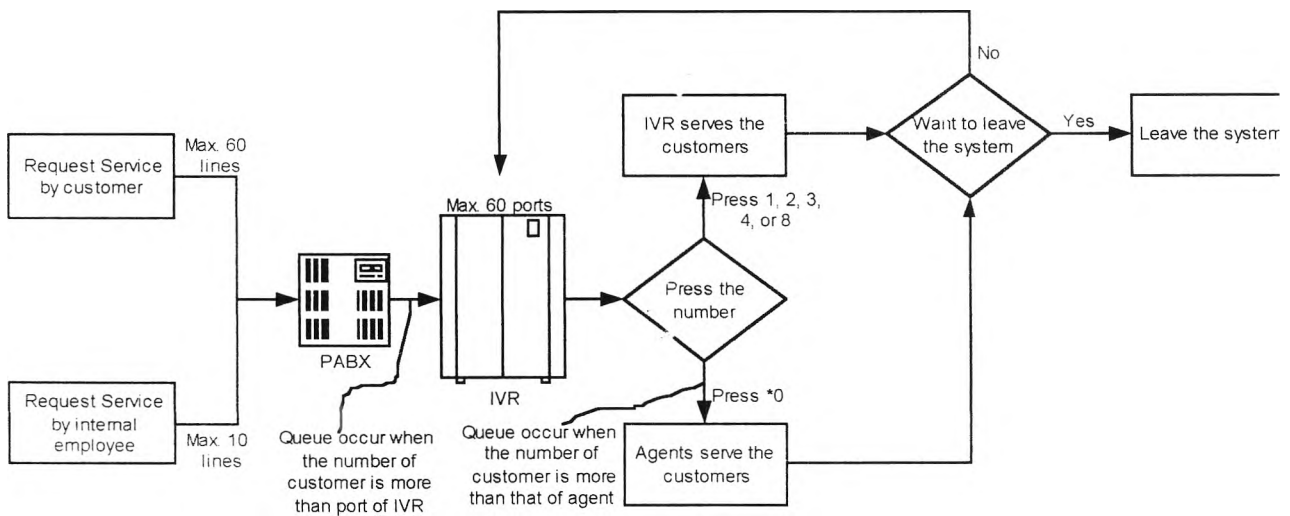The call system flow chart is illustrated in figure 3-1.

Figure 3-1: Call center flow

From this figure, there are 2 queues occur in this system. The queue at the first point occurs if the number of customer (including internal employee) is more than the ports of IVR. However, This maximum number of this queue is equal to 10. Another queue point occurs if the number of customers who want to contact the agents is more than the amount of agent. The number of this queue depends on the number of agents and customers at that time.

Note that there is a mechanism, called Smart Transfer, in this queue point. Smart Transfer will ask the customer who waiting the agent available more than 120 seconds whether that customer will still wants to contact with the agent or wants to be served with IVR. If the customer still wants to contact with the agent, his position will be the last order of the queue.

When the agents receive a call, a port of IVR will be available that means the maximum of the customer in this system is equal to 70 persons. Queue discipline at both points is FCFS.

3.2 IVR Flow Chart

The flow chart of IVR is illustrated in figure 3-2, 3-3, 3-4, and 3-5. From the flow chart, we notice that there are 6 major types of services operated by IVR. The details of them are illustrated as follows:

1. Accounting service and credit card

    1.1 Account Balance

        1.1.1   Current account
        1.1.2   Saving account
        1.1.3   Credit card balance

            1.1.3.1   Credit card limit, current balance, and available credit
            1.1.3.2   Due date, statement balance, and minimum payment

    1.2 Payment of goods and services

        1.2.1   From current account
        1.2.2   From saving account

    1.3 Transfers and credit card payment

        1.3.1   Account to account transfer

            1.3.1.1   From saving account to current account
            1.3.1.2   From current account to saving account

        1.3.2   Credit card payment

            1.3.2.1   From current account
            1.3.2.2   From saving account

    1.4 Bank Statement

        1.4.1   Bank Statement

            1.4.1.1   From current account
            1.4.1.2   From saving account
            1.4.1.3   From credit card balance

        1.4.2   Returned Checks

            1.4.2.1   From current account
            1.4.2.2   From saving account

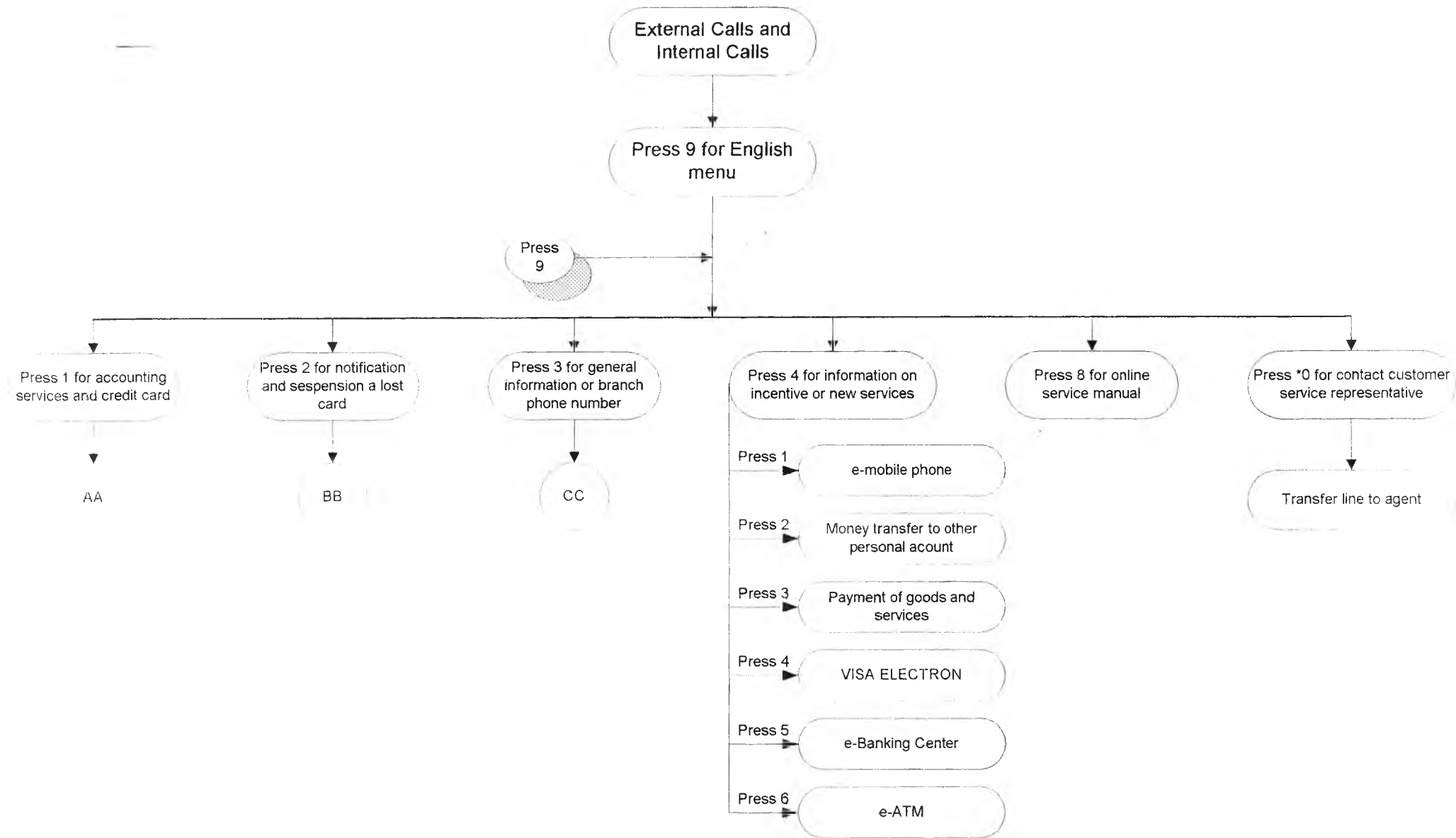   1.5 Change PIN code
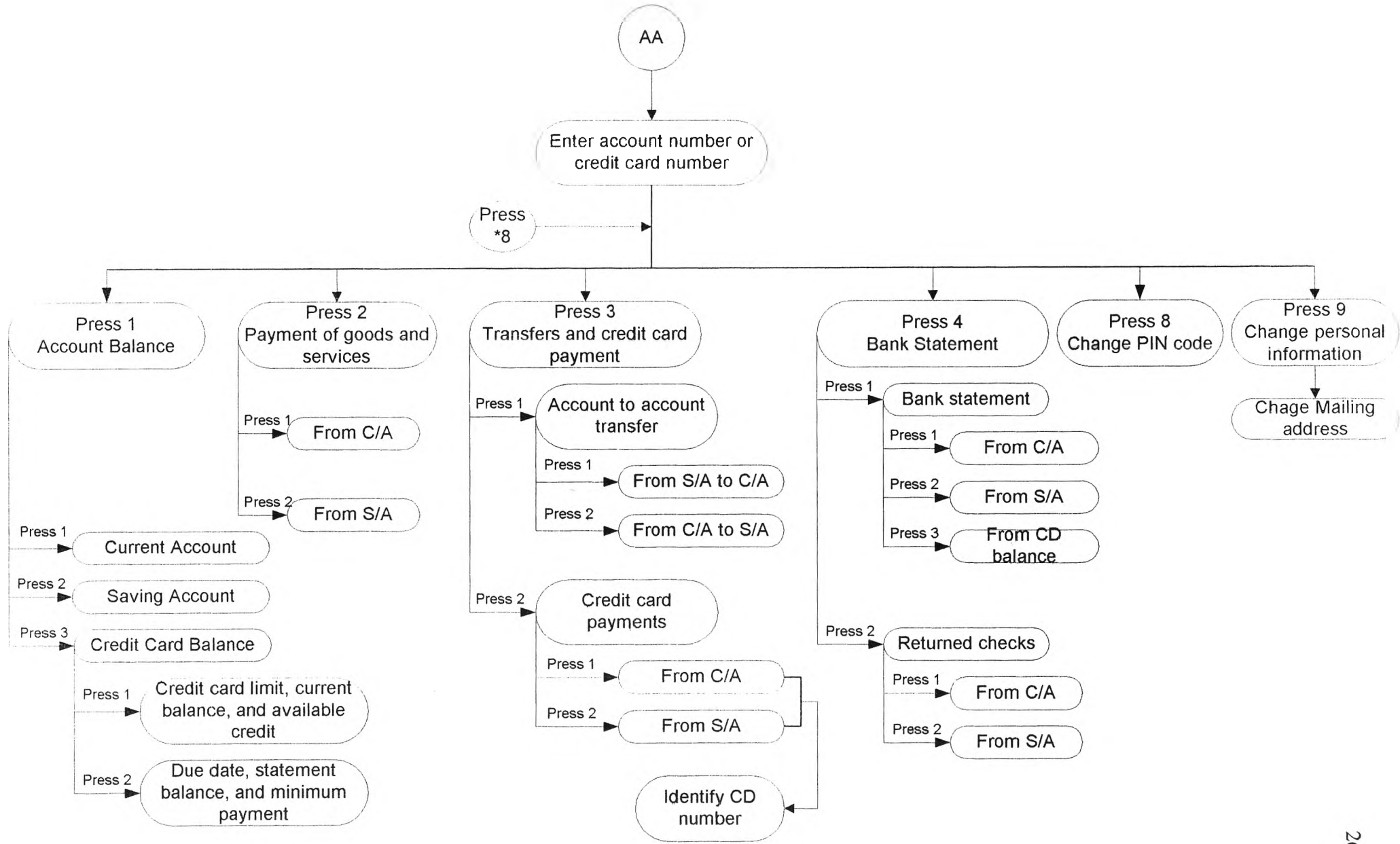   1.6 Change personal information

Figure 3-1: IVR Flow (initial menu)
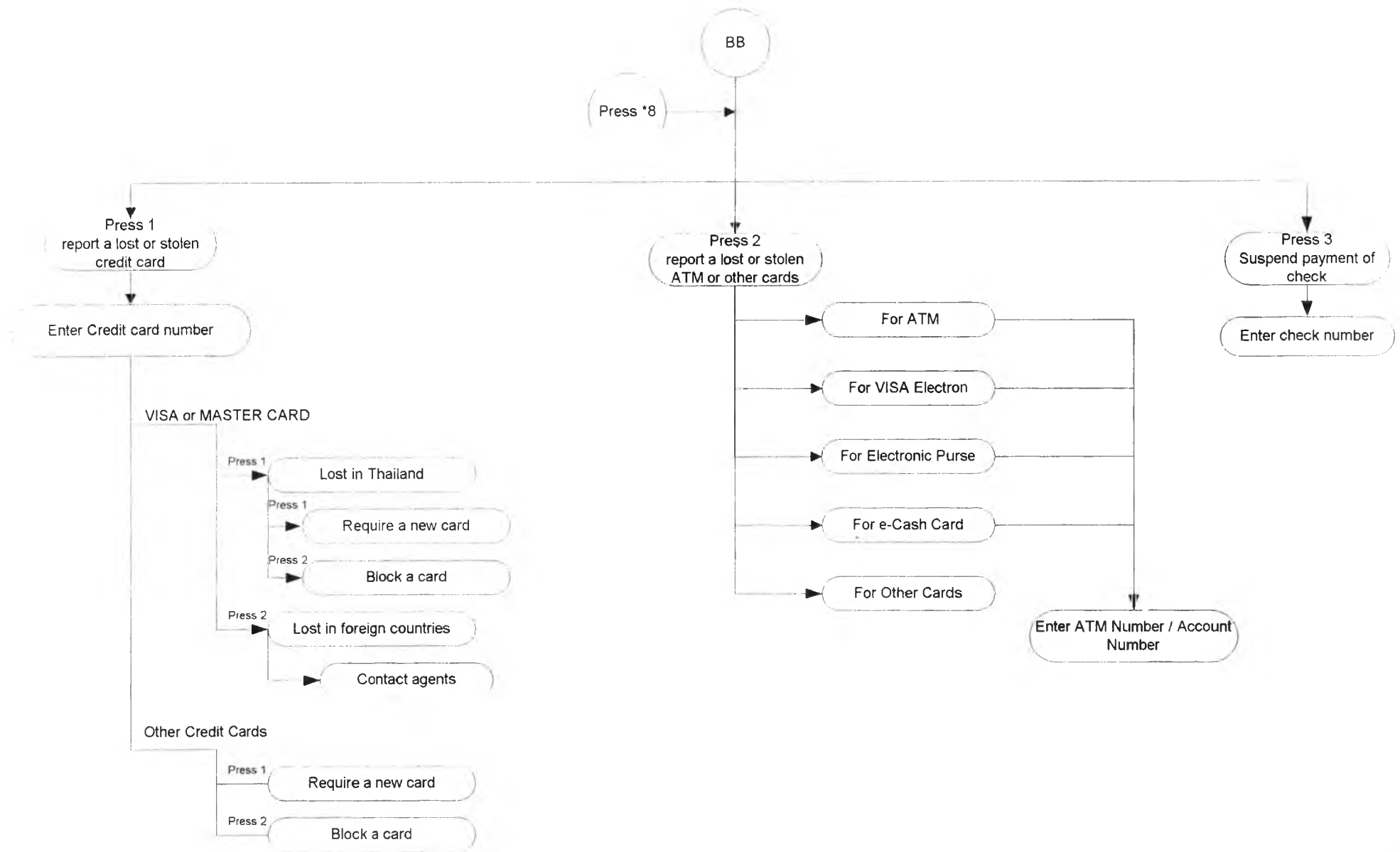
Figure 3-2: IVR Flow (After Press 1)

Figure 3-3: IVR Flow (After Press 2)

Figure 3-4: IVR Flow (After Press 3)

2.   Notification and suspension a lost card

    2.1 Report a lost or stolen credit card

        2.1.1   VISA or MASTER Card

            2.1.1.1 Lost in Thailand

                2.1.1.1.1 Require a new card
                2.1.1.1.2 Block a card

            2.1.1.2 Lost in foreign country

        2.1.2   Other credit cards

            2.1.2.1   Require a new card
            2.1.2.2   Block a card

    2.2 Report a lost or stolen ATM or other cards

        2.2.1   ATM
        2.2.2   VISA Electron
        2.2.3   Electronic purse
        2.2.4   e-Cash Card
        2.2.5   Other Cards

    2.3 Suspend payment of check

3.   General information and branch phone number

    3.1 Exchange Rate and Forward Rate

        3.1.1   Information through FAX
        3.1.2   Information through phone

    3.2 Interest Rate

        3.2.1   Deposit Rate
        3.2.2   Interest Rate on Credit Card
        3.2.3   Interest Rate on Loans with Deposit Guarantee
        3.2.4   Minimum Loan Rates (MLR)
        3.2.5   Interbank at Call Rate
        3.2.6   LIBOR or SIBOR Rate
        3.2.7   RP Rate

    3.3 Bank Services

        3.3.1   Credit Card

            3.3.1.1   Change Mailing Address

3.3 Agent Flow Chart

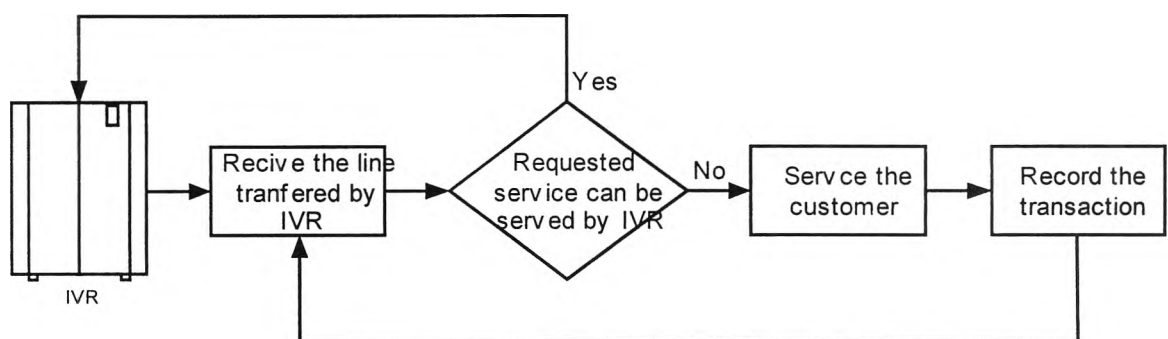The flow chart of the agent is illustrated in figure 3-5.

Figure 3-5: Agent flow chart

The agent will receive the call transferred by IVR. First, they will determine that whether the requested services can serve by IVR. If that service can be served by IVR, the agents will transfer that call to the IVR again. The agent will serve that

customer when the type of requested services is the same as the 15 services, listed below:

The agent responds for 15 types of services consist of:

1. Accounting service and credit card
2. Notification and suspension a lost card
3. Other Credit Card information
4. Electronic Banking
5. E-Service
6. Bank Products (in case enable to finish the call by himself)
7. Bank Products (in case transfer call to others)
8. General Information
9. Call transfer
10. Request/Suggest/Acclaim
11. System Error
12. Work following
13. Special Project
14. Transfer call to IVR
15. System Evaluation