

### UC1 Withdraw Cash

Provides the capability for a customer to withdraw an amount of cash from the cash machine.

#### Basic flow of events

The use case begins when the Bank Customer inserts their card into the cash machine's card reader.

System:	Detects that a card has been inserted. Ensures that the cash machine is in a ready state to provide its services (e.g. it isn't 'out of order'). <b>(A1)</b> Attempts to read the information from the card to ensure that it is a valid bank card from a supported Bank / Lender and also to obtain the customer PIN number which is encoded within the card data. <b>(A2)</b> Verifies the card has not been reported as lost, stolen, or in fraudulent use. <b>(A3)</b> Requests the customer to enter their 4 digit PIN.
Customer:	Enters their PIN <b>(A4, A5)</b>
System:	Verifies the PIN entered is correct. <b>(A6)</b> Determines whether the customer is using a bank card which belongs to the same bank that owns the cash machine – they are. Displays the full range of options available to customers of that bank, these are: withdraw cash, view balance, print a statement. <b>(A7)</b>
Customer:	Selects the option to withdraw cash <b>(A8, A9, A10, etc.. there are other alternatives to be identified in subsequent stages below but this example stops here)</b>
System	Displays up to 7 commonly requested denominations of cash and an option to specify an alternative custom amount. The denominations are: £10, £20, £30, £40, £50, £100, £200.
Customer:	Selects a common denomination amount, e.g. £30
System:	Initiates a link to the central bank computer. Requests verification from the central bank computer that the customer is authorised to withdraw the selected amount from their account.
Central Bank Computer System:	Confirms that the customer may withdraw the amount requested.
System:	Instructs the cash machine's cash dispenser unit to prepare the amount of cash requested and provide it to the customer.
Customer:	Removes the cash dispensed.
System:	Detects removal of the cash. Sends notification to the central bank computer that the customer has received their cash, therefore the amount withdrawn must be removed from their bank account.
Central Bank Computer System:	Confirms balance of customer account adjusted to reflect amount withdrawn.
System:	Instructs the cash machine's card reader to return the customer's card.
Customer:	Removes their card.
System:	Detects removal of the card. Resets in preparation for the next customer.

#### Alternative flows.

See over page.

**A1 – Cash Machine is Out of Service**

The cash machine is not in a ready state to provide services, e.g. it may be out of order, or some of its hardware may be unresponsive.

System:	Informs the customer that the cash machine is out of service and instructs the card reader mechanism to return their bank card, if applicable.
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**A2 – Card Read Failure**

The system cannot read the card inserted. The card may have been inserted incorrectly and/or may be from an unsupported Bank.

System:	Informs the customer that their card has not been recognised and instructs the card reader to return their card.
Customer:	Removes their card.
System:	Resets and prepares for next customer.

**A3 – Lost or Stolen Card**

The card inserted by the customer is detected as being lost or stolen.

System:	Informs the customer that their card is being held for security purposes and that they must contact their bank to retrieve it.
System:	Instructs the card reader mechanism to retain the card.
System:	Resets and prepares for next customer.

**A4 – PIN Entry Time Exceeded**

The customer has failed to enter a pin within an acceptable time period (60 seconds).

System:	Informs the customer that a PIN has not been provided within the accepted time and instructs the card reader mechanism to return their card.
Customer:	Removes their card.
System:	Resets and prepares for next customer.

**A5 – Customer Cancels PIN**

The customer decides to cancel their transaction – they may have forgotten their PIN.

System:	Instructs the card reader to return the customer's card and displays a message informing the customer to remove their card
Customer:	Removes their card.
System:	Resets and prepares for next customer.

**A6 – Incorrect PIN entered****A7 – Display Limited Options for Affiliate Bank****A8 – Customer Selects 'Check Balance'****A9 – Customer Selects 'View Statement'****A10 – Customer Selects 'Deposit Funds'**

**A11, A12, A13,.. – Etc. Other alternatives to be identified and documented as above.**