


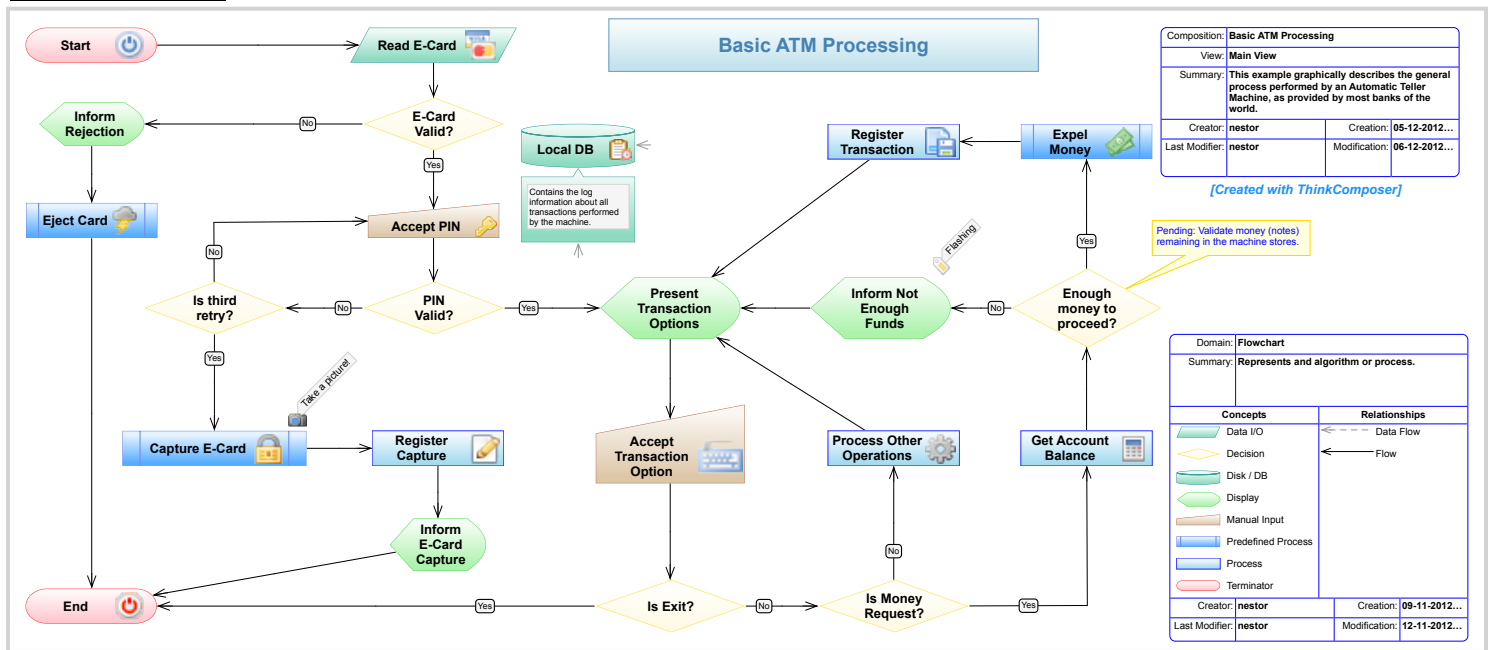
# **Basic ATM Processing**

## **Flowchart**

# Flowchart: Basic ATM Processing

<b>Name/Title</b> Basic ATM Processing						<b>Pictogram</b> 
<b>Tech-Name</b> Basic_ATM_Processing						
<b>Summary</b> This example graphically describes the general process performed by an Automatic Teller Machine, as provided by most banks of the world.						
<b>Domain</b> Flowchart					<b>Global ID</b> c6e6c233-ec4b-4076-bf73-c0021535bd84	
<b>Route</b> Basic ATM Processing						
<b>Version Number</b>	<b>Version Sequence</b>	<b>Creation</b>	<b>Creator</b>	<b>Last Modification</b>	<b>Last Modifier</b>	
0.0.00	129	05-12-2012 23:47:11	nestor	06-12-2012 4:34:14	nestor	




## View: Main View











## Complements

Kind	Content
Text	Basic ATM Processing
Text	[Created with ThinkComposer]

## List of composing Concepts

Name/Title	Summary	Pict.	Concept Definition
Accept PIN	Requests and read the user typed Personal Identification Number (his secret password).		Manual Input
Accept Transaction Option	Reads the keyboard input associated to a transaction option.		Manual Input
Capture E-Card	The insertion slot pulls in the E-Card into the Captured-Cards-Box.		Predefined Process
E-Card Valid?	Validates that the inserted E-Card has information correctly formatted. The algorithm used is the standard ECRD-V03-2007.		Decision

Name/Title	Summary	Pict.	Concept Definition
Eject Card	Pushes out the E-Card from the insertion slot.		Predefined Process
End	The ATM machine and its integrated computer is turned OFF.		Terminator
Enough money to proceed?	The user account has a quantity of money greater or equal than the requested?		Decision
Expel Money	Expels the requested amount of money.		Predefined Process
Get Account Balance	Contact the Bank's central system to know whether the user Account has enough money to proceed.		Process
Inform E-Card Capture	Displays "Your E-Card has been captured. Go to your bank to get a new one."		Display
Inform Not Enough Funds	Displays "Your account has not enough funds to proceed".		Display
Inform Rejection	Displays "The inserted E-Card is invalid".		Display
Is Exit?	The user wants to end the session?		Decision
Is Money Request?	The user wants some cash?		Decision
Is third retry?	Validates a possible third try to enter the PIN, which implies a security risk.		Decision
Local DB	Contains the log information about all transactions performed by the machine.		Disk / DB
PIN Valid?	The PIN matches the one informed by the Bank's central system?		Decision
Present Transaction Options	Displays the available transaction options. This is variable depending on the type of Card and user Account.		Display
Process Other Operations	Execute the process associated with the selected transaction option.		Process
Read E-Card	Upon its insertion in the machine slot, an E-Card magnetic band is read.		Data I/O
Register Capture	The captured E-Card is registered locally and informed to the Bank's central system.		Process
Register Transaction	Saves the information about the transaction just performed and informs the Bank's central system.		Process
Start	The ATM machine and its integrated computer is turned ON. Communication is started with the Bank's central system.		Terminator


### List of composing Relationships

Name/Title	Summary	Pict.	Relationship Definition
Data Flow (Idea 24)			Data Flow
Data Flow (Idea 25)			Data Flow
Flow (Idea 26)			Flow
Flow (Idea 27)			Flow
Flow (Idea 28)			Flow
Flow (Idea 29)			Flow
Flow (Idea 30)			Flow
Flow (Idea 31)			Flow
Flow (Idea 32)			Flow
Flow (Idea 33)			Flow
Flow (Idea 34)			Flow
Flow (Idea 35)			Flow
Flow (Idea 36)			Flow
Flow (Idea 37)			Flow
Flow (Idea 38)			Flow
Flow (Idea 39)			Flow
Flow (Idea 40)			Flow
Flow (Idea 41)			Flow

Name/Title	Summary	Pict.	Relationship Definition
Flow (Idea 42)			Flow
Flow (Idea 43)			Flow
Flow (Idea 44)			Flow
Flow (Idea 45)			Flow
Flow (Idea 46)			Flow
Flow (Idea 47)			Flow
Flow (Idea 48)			Flow
Flow (Idea 49)			Flow
Flow (Idea 50)			Flow
Flow (Idea 51)			Flow
Flow (Idea 52)			Flow

**Content of the composing Concepts**

**Manual Input: Accept PIN**

<b>Name/Title</b> Accept PIN	
<b>Tech-Name</b> Accept_PIN	
<b>Summary</b> Requests and read the user typed Personal Identification Number (his secret password).	
<b>Concept Definition</b> Manual Input	<b>Global ID</b> 1e71bb04-f4fa-459a-9084-775c243ef5ff
<b>Route</b> \\Basic ATM Processing\\Accept PIN	

**Related From...**

Origin Idea	Origin Link Desc.	Origin Link Role	Origin Link Var.	By Relationship	Target Link Desc.	Target Link Role	Target Link Var.
E-Card Valid? [Decision]	Yes	Origin	Link	Flow (Idea 28) [Flow]		Target	Link
Is third retry? [Decision]	No	Origin	Link	Flow (Idea 31) [Flow]		Target	Link

**Related To...**

Target Idea	Target Link Desc.	Target Link Role	Target Link Var.	By Relationship	Origin Link Desc.	Origin Link Role	Origin Link Var.
PIN Valid? [Decision]		Target	Link	Flow (Idea 29) [Flow]		Origin	Link

**Manual Input: Accept Transaction Option**

<b>Name/Title</b> Accept Transaction Option	
<b>Tech-Name</b> Accept_Transaction_Option	
<b>Summary</b> Reads the keyboard input associated to a transaction option.	
<b>Concept Definition</b> Manual Input	<b>Global ID</b> 50886499-dd15-4744-a2b0-7b2086c85cfd
<b>Route</b> \\Basic ATM Processing\\Accept Transaction Option	


**Related From...**

Origin Idea	Origin Link Desc.	Origin Link Role	Origin Link Var.	By Relationship	Target Link Desc.	Target Link Role	Target Link Var.
Present Transaction Options [Display]		Origin	Link	Flow (Idea 40) [Flow]		Target	Link


**Related To...**

Target Idea	Target Link Desc.	Target Link Role	Target Link Var.	By Relationship	Origin Link Desc.	Origin Link Role	Origin Link Var.
Is Exit? [Decision]		Target	Link	Flow (Idea 41) [Flow]		Origin	Link

**Predefined Process: Capture E-Card**

<b>Name/Title</b> Capture E-Card	
<b>Tech-Name</b> Capture_E-Card	
<b>Summary</b> The insertion slot pulls in the E-Card into the Captured-Cards-Box.	
<b>Concept Definition</b> Predefined Process	
<b>Global ID</b> bc0cbca0-aceb-46ec-a7c4-45cfe1862f70	
<b>Route</b> \\Basic ATM Processing\Capture E-Card	

**Markers**

Definitor	Pict.	Name/Title	Summary
Red		Take a picture!	


**Related From...**

Origin Idea	Origin Link Desc.	Origin Link Role	Origin Link Var.	By Relationship	Target Link Desc.	Target Link Role	Target Link Var.
Is third retry? [Decision]	Yes	Origin	Link	Flow (Idea 32) [Flow]		Target	Link

**Related To...**

Target Idea	Target Link Desc.	Target Link Role	Target Link Var.	By Relationship	Origin Link Desc.	Origin Link Role	Origin Link Var.
Register Capture [Process]		Target	Link	Flow (Idea 33) [Flow]		Origin	Link

**Decision: E-Card Valid?**

<b>Name/Title</b> E-Card Valid?	
<b>Tech-Name</b> E-Card_Valid_	
<b>Summary</b> Validates that the inserted E-Card has information correctly formatted. The algorithm used is the standard ECRD-V03-2007.	
<b>Concept Definition</b> Decision	
<b>Global ID</b> 40cde2aa-aa3c-4802-a6d3-7f126ec797d9	
<b>Route</b> \\Basic ATM Processing\E-Card Valid?	

**Related From...**

Origin Idea	Origin Link Desc.	Origin Link Role	Origin Link Var.	By Relationship	Target Link Desc.	Target Link Role	Target Link Var.
Read E-Card [Data I/O]		Origin	Link	Flow (Idea 27) [Flow]		Target	Link

**Related To...**

Target Idea	Target Link Desc.	Target Link Role	Target Link Var.	By Relationship	Origin Link Desc.	Origin Link Role	Origin Link Var.
Accept PIN [Manual Input]		Target	Link	Flow (Idea 28) [Flow]	Yes	Origin	Link

Target Idea	Target Link Desc.	Target Link Role	Target Link Var.	By Relationship	Origin Link Desc.	Origin Link Role	Origin Link Var.
Inform Rejection [Display]		Target	Link	Flow (Idea 36) [Flow]	No	Origin	Link

### Predefined Process: Eject Card

Name/Title	Pictogram
Eject Card	
<b>Tech-Name</b> Eject_Card	
<b>Summary</b> Pushes out the E-Card from the insertion slot.	
<b>Concept Definition</b> Predefined Process	
<b>Global ID</b> 933c9c55-81c5-497f-b797-e8c3b4086ff8	
<b>Route</b> \Basic ATM Processing\Eject Card	

### Related From...

Origin Idea	Origin Link Desc.	Origin Link Role	Origin Link Var.	By Relationship	Target Link Desc.	Target Link Role	Target Link Var.
Inform Rejection [Display]		Origin	Link	Flow (Idea 37) [Flow]		Target	Link

### Related To...

Target Idea	Target Link Desc.	Target Link Role	Target Link Var.	By Relationship	Origin Link Desc.	Origin Link Role	Origin Link Var.
End [Terminator]		Target	Link	Flow (Idea 38) [Flow]		Origin	Link

### Terminator: End

Name/Title	Pictogram
End	
<b>Tech-Name</b> End	
<b>Summary</b> The ATM machine and its integrated computer is turned OFF.	
<b>Concept Definition</b> Terminator	
<b>Global ID</b> 9a7851b4-eaeb-40fb-b314-fdc4c5992675	
<b>Route</b> \Basic ATM Processing\End	

### Related From...

Origin Idea	Origin Link Desc.	Origin Link Role	Origin Link Var.	By Relationship	Target Link Desc.	Target Link Role	Target Link Var.
Inform E-Card Capture [Display]		Origin	Link	Flow (Idea 35) [Flow]		Target	Link
Eject Card [Predefined Process]		Origin	Link	Flow (Idea 38) [Flow]		Target	Link
Is Exit? [Decision]	Yes	Origin	Link	Flow (Idea 42) [Flow]		Target	Link

### Decision: Enough money to proceed?

Name/Title	Pictogram
Enough money to proceed?	
<b>Tech-Name</b> Enough_money_to_proceed_	
<b>Summary</b> The user account has a quantity of money greater or equal than the requested?	
<b>Concept Definition</b> Decision	
<b>Global ID</b> b6644dbd-9d29-497f-ae7b-b196a2d0c731	
<b>Route</b> \Basic ATM Processing\Enough money to proceed?	

**Related From...**

Origin Idea	Origin Link Desc.	Origin Link Role	Origin Link Var.	By Relationship	Target Link Desc.	Target Link Role	Target Link Var.
Get Account Balance [Process]		Origin	Link	Flow (Idea 47) [Flow]		Target	Link

**Related To...**

Target Idea	Target Link Desc.	Target Link Role	Target Link Var.	By Relationship	Origin Link Desc.	Origin Link Role	Origin Link Var.
Inform Not Enough Funds [Display]		Target	Link	Flow (Idea 48) [Flow]	No	Origin	Link
Expel Money [Predefined Process]		Target	Link	Flow (Idea 50) [Flow]	Yes	Origin	Link

**Complements**

Kind	Content
Callout	Pending: Validate money (notes) remaining in the machine stores.

**Predefined Process: Expel Money**

Name/Title	Pictogram
Expel Money	
Tech-Name	
Expel_Money	
Summary	
Expels the requested amount of money.	
Concept Definition	Global ID
Predefined Process	fc2a5c3b-a716-4acb-9047-fb8e5b5af66d
Route	
\Basic ATM Processing\Expel Money	


**Related From...**

Origin Idea	Origin Link Desc.	Origin Link Role	Origin Link Var.	By Relationship	Target Link Desc.	Target Link Role	Target Link Var.
Enough money to proceed? [Decision]	Yes	Origin	Link	Flow (Idea 50) [Flow]		Target	Link

**Related To...**

Target Idea	Target Link Desc.	Target Link Role	Target Link Var.	By Relationship	Origin Link Desc.	Origin Link Role	Origin Link Var.
Register Transaction [Process]		Target	Link	Flow (Idea 51) [Flow]		Origin	Link

**Process: Get Account Balance**

Name/Title	Pictogram
Get Account Balance	
Tech-Name	
Get_Account_Balance	
Summary	
Contact the Bank's central system to know whether the user Account has enough money to proceed.	
Concept Definition	Global ID
Process	e790582e-a2cd-4ecf-b1e8-681a9a16cb27
Route	
\Basic ATM Processing\Get Account Balance	

**Related From...**

Origin Idea	Origin Link Desc.	Origin Link Role	Origin Link Var.	By Relationship	Target Link Desc.	Target Link Role	Target Link Var.
Is Money Request? [Decision]	Yes	Origin	Link	Flow (Idea 46) [Flow]		Target	Link

**Related To...**

Target Idea	Target Link Desc.	Target Link Role	Target Link Var.	By Relationship	Origin Link Desc.	Origin Link Role	Origin Link Var.
Enough money to proceed? [Decision]		Target	Link	Flow (Idea 47) [Flow]		Origin	Link

**Display: Inform E-Card Capture**

<b>Name/Title</b> Inform E-Card Capture						<b>Pictogram</b>	
<b>Tech-Name</b> Inform_E-Card_Capture							
<b>Summary</b> Displays "Your E-Card has been captured. Go to your bank to get a new one."							
<b>Concept Definition</b> Display					<b>Global ID</b> 13455813-430f-49b7-9ba5-9ca827024d06		
<b>Route</b> \\Basic ATM Processing\\Inform E-Card Capture							

**Related From...**

Origin Idea	Origin Link Desc.	Origin Link Role	Origin Link Var.	By Relationship	Target Link Desc.	Target Link Role	Target Link Var.
Register Capture [Process]		Origin	Link	Flow (Idea 34) [Flow]		Target	Link


**Related To...**

Target Idea	Target Link Desc.	Target Link Role	Target Link Var.	By Relationship	Origin Link Desc.	Origin Link Role	Origin Link Var.
End [Terminator]		Target	Link	Flow (Idea 35) [Flow]		Origin	Link

**Display: Inform Not Enough Funds**

<b>Name/Title</b> Inform Not Enough Funds						<b>Pictogram</b>	
<b>Tech-Name</b> Inform_Not_Enough_Funds							
<b>Summary</b> Displays "Your account has not enough funds to proceed".							
<b>Concept Definition</b> Display					<b>Global ID</b> 7669f0da-391a-4f3c-ae50-71595f9b4a43		
<b>Route</b> \\Basic ATM Processing\\Inform Not Enough Funds							

**Markers**

Definitor	Pict.	Name/Title	Summary
Yellow		Flashing	

**Related From...**

Origin Idea	Origin Link Desc.	Origin Link Role	Origin Link Var.	By Relationship	Target Link Desc.	Target Link Role	Target Link Var.
Enough money to proceed? [Decision]	No	Origin	Link	Flow (Idea 48) [Flow]		Target	Link

**Related To...**

Target Idea	Target Link Desc.	Target Link Role	Target Link Var.	By Relationship	Origin Link Desc.	Origin Link Role	Origin Link Var.
Present Transaction Options [Display]		Target	Link	Flow (Idea 49) [Flow]		Origin	Link



**Display: Inform Rejection**

<b>Name/Title</b>		<b>Pictogram</b>
Inform Rejection		
<b>Tech-Name</b>		
Inform_Rejection		
<b>Summary</b>		
Displays "The inserted E-Card is invalid".		
<b>Concept Definition</b>	<b>Global ID</b>	
Display	ca727b66-68a7-49e2-a9f9-a7ab0a03a0e2	
<b>Route</b>		
\\Basic ATM Processing\\Inform Rejection		

**Related From...**

Origin Idea	Origin Link Desc.	Origin Link Role	Origin Link Var.	By Relationship	Target Link Desc.	Target Link Role	Target Link Var.
E-Card Valid? [Decision]	No	Origin	Link	Flow (Idea 36) [Flow]		Target	Link

**Related To...**

Target Idea	Target Link Desc.	Target Link Role	Target Link Var.	By Relationship	Origin Link Desc.	Origin Link Role	Origin Link Var.
Eject Card [Predefined Process]		Target	Link	Flow (Idea 37) [Flow]		Origin	Link

**Decision: Is Exit?**

<b>Name/Title</b>		<b>Pictogram</b>
Is Exit?		
<b>Tech-Name</b>		
Is_Exit_		
<b>Summary</b>		
The user wants to end the session?		
<b>Concept Definition</b>	<b>Global ID</b>	
Decision	da8a6516-4e62-4924-9868-4ad186c8959d	
<b>Route</b>		
\\Basic ATM Processing\\Is Exit?		

**Related From...**

Origin Idea	Origin Link Desc.	Origin Link Role	Origin Link Var.	By Relationship	Target Link Desc.	Target Link Role	Target Link Var.
Accept Transaction Option [Manual Input]		Origin	Link	Flow (Idea 41) [Flow]		Target	Link

**Related To...**

Target Idea	Target Link Desc.	Target Link Role	Target Link Var.	By Relationship	Origin Link Desc.	Origin Link Role	Origin Link Var.
End [Terminator]		Target	Link	Flow (Idea 42) [Flow]	Yes	Origin	Link
Is Money Request? [Decision]		Target	Link	Flow (Idea 43) [Flow]	No	Origin	Link

**Decision: Is Money Request?**

<b>Name/Title</b>		<b>Pictogram</b>
Is Money Request?		
<b>Tech-Name</b>		
Is_Money_Request_		
<b>Summary</b>		
The user wants some cash?		
<b>Concept Definition</b>	<b>Global ID</b>	
Decision	3b8343e8-4002-425c-bad7-71a1f2f09720	

**Route**  
 \Basic ATM Processing\Is Money Request?

**Related From...**

Origin Idea	Origin Link Desc.	Origin Link Role	Origin Link Var.	By Relationship	Target Link Desc.	Target Link Role	Target Link Var.
Is Exit? [Decision]	No	Origin	Link	Flow (Idea 43) [Flow]		Target	Link

**Related To...**

Target Idea	Target Link Desc.	Target Link Role	Target Link Var.	By Relationship	Origin Link Desc.	Origin Link Role	Origin Link Var.
Process Other Operations [Process]		Target	Link	Flow (Idea 44) [Flow]	No	Origin	Link
Get Account Balance [Process]		Target	Link	Flow (Idea 46) [Flow]	Yes	Origin	Link

**Decision: Is third retry?**

<b>Name/Title</b> Is third retry?	<b>Pictogram</b> 
<b>Tech-Name</b> Is_third_retry_	
<b>Summary</b> Validates a possible third try to enter the PIN, which implies a security risk.	
<b>Concept Definition</b> Decision	
<b>Route</b> \Basic ATM Processing\Is third retry?	<b>Global ID</b> db6ff592-c421-4556-9e96-cc328e9664be

**Related From...**

Origin Idea	Origin Link Desc.	Origin Link Role	Origin Link Var.	By Relationship	Target Link Desc.	Target Link Role	Target Link Var.
PIN Valid? [Decision]	No	Origin	Link	Flow (Idea 30) [Flow]		Target	Link

**Related To...**

Target Idea	Target Link Desc.	Target Link Role	Target Link Var.	By Relationship	Origin Link Desc.	Origin Link Role	Origin Link Var.
Accept PIN [Manual Input]		Target	Link	Flow (Idea 31) [Flow]	No	Origin	Link
Capture E-Card [Predefined Process]		Target	Link	Flow (Idea 32) [Flow]	Yes	Origin	Link

**Disk / DB: Local DB**

<b>Name/Title</b> Local DB	<b>Pictogram</b> 
<b>Tech-Name</b> Local_DB	
<b>Summary</b> Contains the log information about all transactions performed by the machine.	
<b>Concept Definition</b> Disk / DB	
<b>Route</b> \Basic ATM Processing\Local DB	<b>Global ID</b> eff3ef59-f5d9-41de-9aa5-a166617f0dfc

**Related From...**

Origin Idea	Origin Link Desc.	Origin Link Role	Origin Link Var.	By Relationship	Target Link Desc.	Target Link Role	Target Link Var.
Register Capture [Process]		Origin	Link	Data Flow (Idea 24) [Data Flow]		Target	Link
Register Transaction [Process]		Origin	Link	Data Flow (Idea 25) [Data Flow]		Target	Link

**Decision: PIN Valid?**

<b>Name/Title</b>	<b>Pictogram</b>
PIN Valid?	
<b>Tech-Name</b>	
PIN_Valid_	
<b>Summary</b>	
The PIN matches the one informed by the Bank's central system?	
<b>Concept Definition</b>	<b>Global ID</b>
Decision	a265f929-681a-4990-a3d5-a23667ccbe9c
<b>Route</b>	
\Basic ATM Processing\PIN Valid?	

**Related From...**

Origin Idea	Origin Link Desc.	Origin Link Role	Origin Link Var.	By Relationship	Target Link Desc.	Target Link Role	Target Link Var.
Accept PIN [Manual Input]		Origin	Link	Flow (Idea 29) [Flow]		Target	Link

**Related To...**

Target Idea	Target Link Desc.	Target Link Role	Target Link Var.	By Relationship	Origin Link Desc.	Origin Link Role	Origin Link Var.
Is third retry? [Decision]		Target	Link	Flow (Idea 30) [Flow]	No	Origin	Link
Present Transaction Options [Display]		Target	Link	Flow (Idea 39) [Flow]	Yes	Origin	Link

**Display: Present Transaction Options**

<b>Name/Title</b>	<b>Pictogram</b>
Present Transaction Options	
<b>Tech-Name</b>	
Present_Transaction_Options	
<b>Summary</b>	
Displays the available transaction options. This is variable depending on the type of Card and user Account.	
<b>Concept Definition</b>	<b>Global ID</b>
Display	96c3239a-2a2f-4565-b1f3-dceae1931c33
<b>Route</b>	
\Basic ATM Processing\Present Transaction Options	


**Related From...**

Origin Idea	Origin Link Desc.	Origin Link Role	Origin Link Var.	By Relationship	Target Link Desc.	Target Link Role	Target Link Var.
PIN Valid? [Decision]	Yes	Origin	Link	Flow (Idea 39) [Flow]		Target	Link
Process Other Operations [Process]		Origin	Link	Flow (Idea 45) [Flow]		Target	Link
Inform Not Enough Funds [Display]		Origin	Link	Flow (Idea 49) [Flow]		Target	Link
Register Transaction [Process]		Origin	Link	Flow (Idea 52) [Flow]		Target	Link

**Related To...**

Target Idea	Target Link Desc.	Target Link Role	Target Link Var.	By Relationship	Origin Link Desc.	Origin Link Role	Origin Link Var.
Accept Transaction Option [Manual Input]		Target	Link	Flow (Idea 40) [Flow]		Origin	Link

## Process: Process Other Operations

<b>Name/Title</b>	<b>Pictogram</b>
Process Other Operations	
<b>Tech-Name</b>	
Process_Other_Operations	
<b>Summary</b>	
Execute the process associated with the selected transaction option.	
<b>Concept Definition</b>	<b>Global ID</b>
Process	6c078567-1d71-4099-979c-96cfa5e86d64
<b>Route</b>	
\Basic ATM Processing\Process Other Operations	


### Related From...

Origin Idea	Origin Link Desc.	Origin Link Role	Origin Link Var.	By Relationship	Target Link Desc.	Target Link Role	Target Link Var.
Is Money Request? [Decision]	No	Origin	Link	Flow (Idea 44) [Flow]		Target	Link

### Related To...

Target Idea	Target Link Desc.	Target Link Role	Target Link Var.	By Relationship	Origin Link Desc.	Origin Link Role	Origin Link Var.
Present Transaction Options [Display]		Target	Link	Flow (Idea 45) [Flow]		Origin	Link

## Data I/O: Read E-Card

<b>Name/Title</b>	<b>Pictogram</b>
Read E-Card	
<b>Tech-Name</b>	
Read_E-Card	
<b>Summary</b>	
Upon its insertion in the machine slot, an E-Card magnetic band is read.	
<b>Concept Definition</b>	<b>Global ID</b>
Data I/O	0013eb94-a20b-4bc3-ab60-e82690d01335
<b>Route</b>	
\Basic ATM Processing\Read E-Card	


### Related From...

Origin Idea	Origin Link Desc.	Origin Link Role	Origin Link Var.	By Relationship	Target Link Desc.	Target Link Role	Target Link Var.
Start [Terminator]		Origin	Link	Flow (Idea 26) [Flow]		Target	Link

### Related To...

Target Idea	Target Link Desc.	Target Link Role	Target Link Var.	By Relationship	Origin Link Desc.	Origin Link Role	Origin Link Var.
E-Card Valid? [Decision]		Target	Link	Flow (Idea 27) [Flow]		Origin	Link

## Process: Register Capture

<b>Name/Title</b>	<b>Pictogram</b>
Register Capture	
<b>Tech-Name</b>	
Register_Capture	
<b>Summary</b>	
The captured E-Card is registered locally and informed to the Bank's central system.	
<b>Concept Definition</b>	<b>Global ID</b>
Process	610ea3d0-7a12-44a5-b5aa-60832f3cdb53
<b>Route</b>	
\Basic ATM Processing\Register Capture	


**Related From...**

Origin Idea	Origin Link Desc.	Origin Link Role	Origin Link Var.	By Relationship	Target Link Desc.	Target Link Role	Target Link Var.
Capture E-Card [Predefined Process]		Origin	Link	Flow (Idea 33) [Flow]		Target	Link

**Related To...**

Target Idea	Target Link Desc.	Target Link Role	Target Link Var.	By Relationship	Origin Link Desc.	Origin Link Role	Origin Link Var.
Local DB [Disk / DB]		Target	Link	Data Flow (Idea 24) [Data Flow]		Origin	Link
Inform E-Card Capture [Display]		Target	Link	Flow (Idea 34) [Flow]		Origin	Link

**Process: Register Transaction**

<b>Name/Title</b> Register Transaction	
<b>Tech-Name</b> Register_Transaction	
<b>Summary</b> Saves the information about the transaction just performed and informs the Bank's central system.	
<b>Concept Definition</b> Process	
<b>Route</b> \\Basic ATM Processing\Register Transaction	<b>Global ID</b> 1c3ae266-5246-410a-8c9e-d570dc579157

**Related From...**

Origin Idea	Origin Link Desc.	Origin Link Role	Origin Link Var.	By Relationship	Target Link Desc.	Target Link Role	Target Link Var.
Expel Money [Predefined Process]		Origin	Link	Flow (Idea 51) [Flow]		Target	Link

**Related To...**

Target Idea	Target Link Desc.	Target Link Role	Target Link Var.	By Relationship	Origin Link Desc.	Origin Link Role	Origin Link Var.
Local DB [Disk / DB]		Target	Link	Data Flow (Idea 25) [Data Flow]		Origin	Link
Present Transaction Options [Display]		Target	Link	Flow (Idea 52) [Flow]		Origin	Link

**Terminator: Start**

<b>Name/Title</b> Start	
<b>Tech-Name</b> Start	
<b>Summary</b> The ATM machine and its integrated computer is turned ON. Communication is started with the Bank's central system.	
<b>Concept Definition</b> Terminator	
<b>Route</b> \\Basic ATM Processing\Start	<b>Global ID</b> c1162ab0-f3e9-410c-8c61-a0d021b85754

**Related To...**

Target Idea	Target Link Desc.	Target Link Role	Target Link Var.	By Relationship	Origin Link Desc.	Origin Link Role	Origin Link Var.
Read E-Card [Data I/O]		Target	Link	Flow (Idea 26) [Flow]		Origin	Link

**Content of the composing Relationships**

**Data Flow: Data Flow (Idea 24)**

<b>Name/Title</b>		<b>Pictogram</b>
Data Flow (Idea 24)		
<b>Tech-Name</b>		
Data_Flow_(Idea_24)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Data Flow		01fd5c57-9997-4f80-ac7a-8eab9df22129
<b>Route</b>	\Basic ATM Processing\Data Flow (Idea 24)	

**Links**

Idea	Type	Role	Variant	Descriptor
Register Capture [Process]	Origin	Origin	Link	
Local DB [Disk / DB]	Target	Target	Link	

**Data Flow: Data Flow (Idea 25)**

<b>Name/Title</b>		<b>Pictogram</b>
Data Flow (Idea 25)		
<b>Tech-Name</b>		
Data_Flow_(Idea_25)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Data Flow		d37c256d-f64e-4132-8e20-fea0f7944ea9
<b>Route</b>	\Basic ATM Processing\Data Flow (Idea 25)	

**Links**

Idea	Type	Role	Variant	Descriptor
Register Transaction [Process]	Origin	Origin	Link	
Local DB [Disk / DB]	Target	Target	Link	

**Flow: Flow (Idea 26)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 26)		
<b>Tech-Name</b>		
Flow_(Idea_26)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		876c85f0-89a0-4e6d-ad7d-07a9b3695d61
<b>Route</b>	\Basic ATM Processing\Flow (Idea 26)	

**Links**

Idea	Type	Role	Variant	Descriptor
Start [Terminator]	Origin	Origin	Link	
Read E-Card [Data I/O]	Target	Target	Link	

**Flow: Flow (Idea 27)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 27)		
<b>Tech-Name</b>		
Flow_(Idea_27)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		99c0ac72-83ae-48a4-b59d-5d1c1fbd1f44
<b>Route</b>		
\Basic ATM Processing\Flow (Idea 27)		

**Links**

Idea	Type	Role	Variant	Descriptor
Read E-Card [Data I/O]	Origin	Origin	Link	
E-Card Valid? [Decision]	Target	Target	Link	

**Flow: Flow (Idea 28)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 28)		
<b>Tech-Name</b>		
Flow_(Idea_28)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		6816e316-5d3f-44b2-aeb8-5d2e4ca7eaf5
<b>Route</b>		
\Basic ATM Processing\Flow (Idea 28)		

**Links**

Idea	Type	Role	Variant	Descriptor
E-Card Valid? [Decision]	Origin	Origin	Link	Yes
Accept PIN [Manual Input]	Target	Target	Link	

**Flow: Flow (Idea 29)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 29)		
<b>Tech-Name</b>		
Flow_(Idea_29)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		e6d9efa6-1703-4255-85a7-d38852588e7e
<b>Route</b>		
\Basic ATM Processing\Flow (Idea 29)		

**Links**

Idea	Type	Role	Variant	Descriptor
Accept PIN [Manual Input]	Origin	Origin	Link	
PIN Valid? [Decision]	Target	Target	Link	

**Flow: Flow (Idea 30)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 30)		
<b>Tech-Name</b>		
Flow_(Idea_30)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		0b21a2ac-3302-43e9-b22b-2fe2bc1cfca3
<b>Route</b>		
\Basic ATM Processing\Flow (Idea 30)		

**Links**

Idea	Type	Role	Variant	Descriptor
PIN Valid? [Decision]	Origin	Origin	Link	No
Is third retry? [Decision]	Target	Target	Link	

**Flow: Flow (Idea 31)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 31)		
<b>Tech-Name</b>		
Flow_(Idea_31)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		64dca8e8-7ba7-449e-a93b-767ab2895ec4
<b>Route</b>		
\Basic ATM Processing\Flow (Idea 31)		

**Links**

Idea	Type	Role	Variant	Descriptor
Is third retry? [Decision]	Origin	Origin	Link	No
Accept PIN [Manual Input]	Target	Target	Link	

**Flow: Flow (Idea 32)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 32)		
<b>Tech-Name</b>		
Flow_(Idea_32)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		b333861b-35fb-42fc-be86-33c9dc332d0a
<b>Route</b>		
\Basic ATM Processing\Flow (Idea 32)		

**Links**

Idea	Type	Role	Variant	Descriptor
Is third retry? [Decision]	Origin	Origin	Link	Yes
Capture E-Card [Predefined Process]	Target	Target	Link	



**Flow: Flow (Idea 33)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 33)		
<b>Tech-Name</b>		
Flow_(Idea_33)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		a70ac728-abc9-4e52-9b98-7bc84b7e7833
<b>Route</b>		
\Basic ATM Processing\Flow (Idea 33)		

**Links**

Idea	Type	Role	Variant	Descriptor
Capture E-Card [Predefined Process]	Origin	Origin	Link	
Register Capture [Process]	Target	Target	Link	

**Flow: Flow (Idea 34)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 34)		
<b>Tech-Name</b>		
Flow_(Idea_34)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		55562da0-506e-4ce4-bf9b-b2cc29867526
<b>Route</b>		
\Basic ATM Processing\Flow (Idea 34)		

**Links**

Idea	Type	Role	Variant	Descriptor
Register Capture [Process]	Origin	Origin	Link	
Inform E-Card Capture [Display]	Target	Target	Link	

**Flow: Flow (Idea 35)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 35)		
<b>Tech-Name</b>		
Flow_(Idea_35)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		7fcfdc2f-d606-488f-9261-f86c90bff923
<b>Route</b>		
\Basic ATM Processing\Flow (Idea 35)		

**Links**

Idea	Type	Role	Variant	Descriptor
Inform E-Card Capture [Display]	Origin	Origin	Link	
End [Terminator]	Target	Target	Link	

**Flow: Flow (Idea 36)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 36)		
<b>Tech-Name</b>		
Flow_(Idea_36)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		fe337289-1783-4adf-85f5-acc4b717c88
<b>Route</b>		
\Basic ATM Processing\Flow (Idea 36)		

**Links**

Idea	Type	Role	Variant	Descriptor
E-Card Valid? [Decision]	Origin	Origin	Link	No
Inform Rejection [Display]	Target	Target	Link	

**Flow: Flow (Idea 37)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 37)		
<b>Tech-Name</b>		
Flow_(Idea_37)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		8a89a0f5-2511-4d6d-b8a5-9a0957073671
<b>Route</b>		
\Basic ATM Processing\Flow (Idea 37)		

**Links**

Idea	Type	Role	Variant	Descriptor
Inform Rejection [Display]	Origin	Origin	Link	
Eject Card [Predefined Process]	Target	Target	Link	

**Flow: Flow (Idea 38)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 38)		
<b>Tech-Name</b>		
Flow_(Idea_38)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		3ab54c1c-e032-412c-815a-88e2b8900bf2
<b>Route</b>		
\Basic ATM Processing\Flow (Idea 38)		

**Links**

Idea	Type	Role	Variant	Descriptor
Eject Card [Predefined Process]	Origin	Origin	Link	
End [Terminator]	Target	Target	Link	

**Flow: Flow (Idea 39)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 39)		
<b>Tech-Name</b>		
Flow_(Idea_39)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		abd51c5b-ddf8-47ae-94a9-5f06333d8e67
<b>Route</b>		
\\Basic ATM Processing\\Flow (Idea 39)		

**Links**

Idea	Type	Role	Variant	Descriptor
PIN Valid? [Decision]	Origin	Origin	Link	Yes
Present Transaction Options [Display]	Target	Target	Link	

**Flow: Flow (Idea 40)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 40)		
<b>Tech-Name</b>		
Flow_(Idea_40)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		eb91f9ae-ce00-4a90-b180-533ea4189736
<b>Route</b>		
\\Basic ATM Processing\\Flow (Idea 40)		

**Links**

Idea	Type	Role	Variant	Descriptor
Present Transaction Options [Display]	Origin	Origin	Link	
Accept Transaction Option [Manual Input]	Target	Target	Link	

**Flow: Flow (Idea 41)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 41)		
<b>Tech-Name</b>		
Flow_(Idea_41)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		b833f611-7497-4fc8-8cd9-63ea06a29eb8
<b>Route</b>		
\\Basic ATM Processing\\Flow (Idea 41)		

**Links**

Idea	Type	Role	Variant	Descriptor
Accept Transaction Option [Manual Input]	Origin	Origin	Link	
Is Exit? [Decision]	Target	Target	Link	

**Flow: Flow (Idea 42)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 42)		
<b>Tech-Name</b>		
Flow_(Idea_42)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		b3acd393-be37-438b-aa9e-e105158bafd7
<b>Route</b>		
\Basic ATM Processing\Flow (Idea 42)		

**Links**

Idea	Type	Role	Variant	Descriptor
Is Exit? [Decision]	Origin	Origin	Link	Yes
End [Terminator]	Target	Target	Link	

**Flow: Flow (Idea 43)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 43)		
<b>Tech-Name</b>		
Flow_(Idea_43)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		79ab46da-68a7-4d81-8153-250e66b02142
<b>Route</b>		
\Basic ATM Processing\Flow (Idea 43)		

**Links**

Idea	Type	Role	Variant	Descriptor
Is Exit? [Decision]	Origin	Origin	Link	No
Is Money Request? [Decision]	Target	Target	Link	

**Flow: Flow (Idea 44)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 44)		
<b>Tech-Name</b>		
Flow_(Idea_44)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		ddd4f509-0af4-46e2-afb5-6a3a54903e5c
<b>Route</b>		
\Basic ATM Processing\Flow (Idea 44)		

**Links**

Idea	Type	Role	Variant	Descriptor
Is Money Request? [Decision]	Origin	Origin	Link	No
Process Other Operations [Process]	Target	Target	Link	

**Flow: Flow (Idea 45)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 45)		
<b>Tech-Name</b>		
Flow_(Idea_45)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		e8bc7556-5792-42e0-a052-3bb8418a5d52
<b>Route</b>		
\Basic ATM Processing\Flow (Idea 45)		

**Links**

Idea	Type	Role	Variant	Descriptor
Process Other Operations [Process]	Origin	Origin	Link	
Present Transaction Options [Display]	Target	Target	Link	

**Flow: Flow (Idea 46)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 46)		
<b>Tech-Name</b>		
Flow_(Idea_46)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		df351571-bad8-4aac-a5cf-c21da990fd6c
<b>Route</b>		
\Basic ATM Processing\Flow (Idea 46)		

**Links**

Idea	Type	Role	Variant	Descriptor
Is Money Request? [Decision]	Origin	Origin	Link	Yes
Get Account Balance [Process]	Target	Target	Link	

**Flow: Flow (Idea 47)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 47)		
<b>Tech-Name</b>		
Flow_(Idea_47)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		66ef4a24-2cff-47ab-8dfe-58e11a3e4db5
<b>Route</b>		
\Basic ATM Processing\Flow (Idea 47)		

**Links**

Idea	Type	Role	Variant	Descriptor
Get Account Balance [Process]	Origin	Origin	Link	
Enough money to proceed? [Decision]	Target	Target	Link	

**Flow: Flow (Idea 48)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 48)		
<b>Tech-Name</b>		
Flow_(Idea_48)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		a5a0ba14-af6d-4f7d-a3a3-e66a07f29bea
<b>Route</b>		
\Basic ATM Processing\Flow (Idea 48)		

**Links**

Idea	Type	Role	Variant	Descriptor
Enough money to proceed? [Decision]	Origin	Origin	Link	No
Inform Not Enough Funds [Display]	Target	Target	Link	

**Flow: Flow (Idea 49)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 49)		
<b>Tech-Name</b>		
Flow_(Idea_49)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		a6bfdeae-02ec-42a2-aa2a-a19e88548dd0
<b>Route</b>		
\Basic ATM Processing\Flow (Idea 49)		

**Links**

Idea	Type	Role	Variant	Descriptor
Inform Not Enough Funds [Display]	Origin	Origin	Link	
Present Transaction Options [Display]	Target	Target	Link	

**Flow: Flow (Idea 50)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 50)		
<b>Tech-Name</b>		
Flow_(Idea_50)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		9d3f84d0-2fba-4e39-a76e-9cd78b28c9c1
<b>Route</b>		
\Basic ATM Processing\Flow (Idea 50)		

**Links**

Idea	Type	Role	Variant	Descriptor
Enough money to proceed? [Decision]	Origin	Origin	Link	Yes
Expel Money [Predefined Process]	Target	Target	Link	

**Flow: Flow (Idea 51)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 51)		
<b>Tech-Name</b>		
Flow_(Idea_51)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		9262d6e9-de3b-4bc8-9851-ee44c6c62ff1
<b>Route</b>		
\Basic ATM Processing\Flow (Idea 51)		

**Links**

Idea	Type	Role	Variant	Descriptor
Expel Money [Predefined Process]	Origin	Origin	Link	
Register Transaction [Process]	Target	Target	Link	

**Flow: Flow (Idea 52)**

<b>Name/Title</b>		<b>Pictogram</b>
Flow (Idea 52)		
<b>Tech-Name</b>		
Flow_(Idea_52)		
<b>Summary</b>		
<b>Relationship Definition</b>		<b>Global ID</b>
Flow		1c566dcf-e23d-4a9b-adb9-103ad7f557de
<b>Route</b>		
\Basic ATM Processing\Flow (Idea 52)		

**Links**

Idea	Type	Role	Variant	Descriptor
Register Transaction [Process]	Origin	Origin	Link	
Present Transaction Options [Display]	Target	Target	Link	

**Domain: Flowchart****Concept Definitions**

Name/Title	Summary	Pict.
Process		
Predefined Process		
Alternate Process		
Delay		
Preparation		
Manual Operation		
Terminator		
Decision		
Connector		
Off-Page Connector		
Merge		
Extract		
OR		
AND		
Data I/O		
Document		
Multi-Document		
Display		
Manual Input		
Card		
Punched Tape		
Stored Data		
Disk / DB		
Direct Access Storage		
Internal Storage		
Sequential Access Storage		
Collate		
Sort		

**Relationship Definitions**

Name/Title	Summary	Pict.
Flow		
Data Flow		