Integrated E-Money Solution

Launch own-brand prepaid e-money services easily and quickly

Increase sales and the number of repeat visits per customer with own-brand closed-loop prepaid e-money.

Closed-loop prepaid e-money services can increase sales per customer and the number of repeat visitors. NEC's Integrated E-Money Solution comprehensively provides the three primary components required to implement a prepaid e-money system, thus reducing the implementation cost and period.

NEC's Integrated E-Money Solution can also be used to build an open-loop e-money service.

Key benefits of closed-loop prepaid e-money

Reduce queues at the cash register	Customers can pay more quickly, reducing queues at the cash register.
Increase sales per customer	Sales per customer can be increased because payment is easy, making customers buy more.
Enable original promotions	Purchase histories can be analyzed, allowing you to create more effective promotions. Value-added services such as loyalty points or e-money charging bonuses can also be incorporated.

Easy registration for customers	Customers do not have to have bank accounts or credit card accounts. The service can be used immediately by every customer.
Increase the number of repeat visitors	Closed-loop prepaid e-money can only be used at your store. Customers will therefore repeatedly visit your store to use their remaining credit.

Suitable businesses

Supermarkets, shopping malls, amusement parks, stadiums, cinema complexes, stores and canteens in companies, universities and hospitals

Integrated E-Money Solution

Three primary components

E-money servers
Manage prepaid e-money user accounts, transactions and balances. Handle clearing and settlement. Provided as a cloud service.[*1]

Cloud server

E-money payment terminals
Read and/or write information from e-money media.

NFC reader/writer
Magnetic stripe reader

Barcode reader

E-money media
Hold customer's information (ID and/or balance value). NFC cards and phones are highly secure and convenient to use.

NFC card   Magnetic card

Barcode   NFC smartphone[*2]

*1 E-money servers can be installed in the customer's on-premise data center.

*2 NFC-supporting smartphones require an application to be used for e-money payments.

Functionality

Functionality for e-money issuers
- Manage customer and merchant profile information
- View transaction histories of all customers and merchants
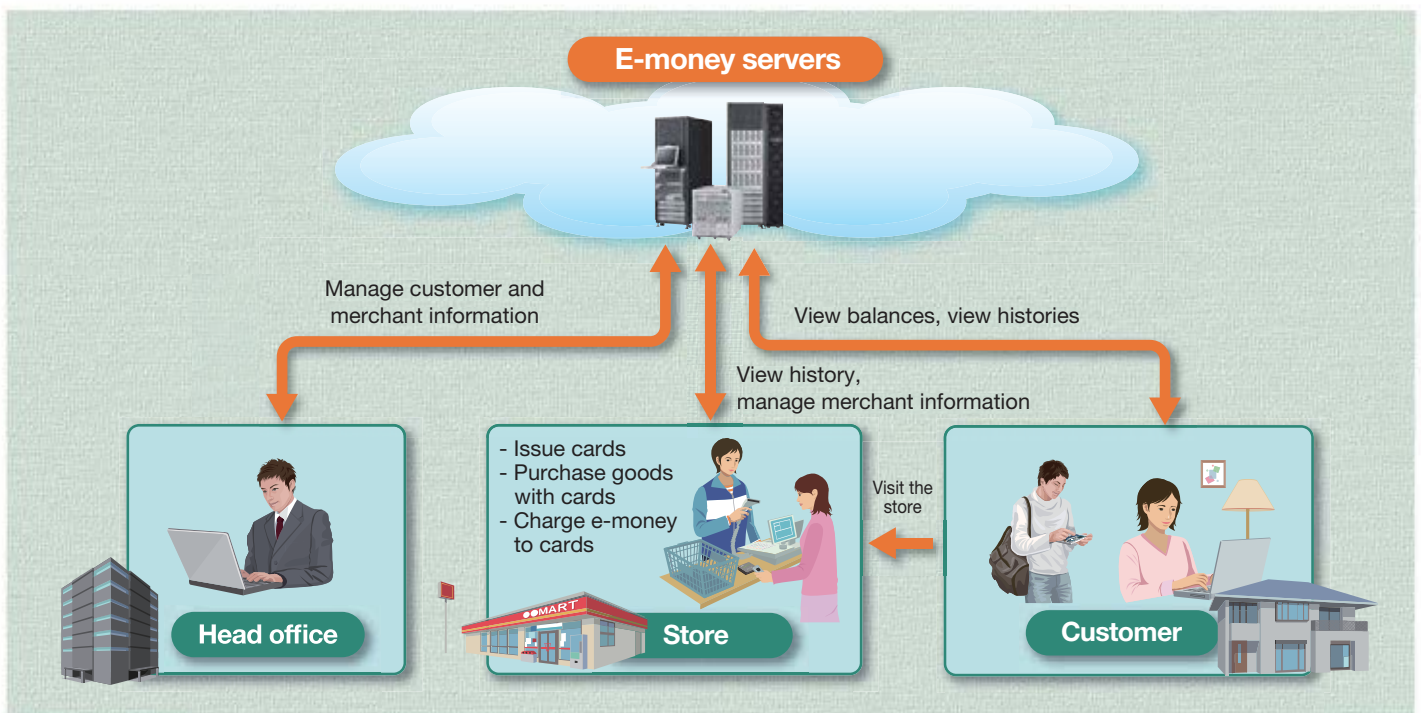- Settle transaction fees with merchants

Functionality for merchants
- Apply for e-money services
- Manage merchant profile information
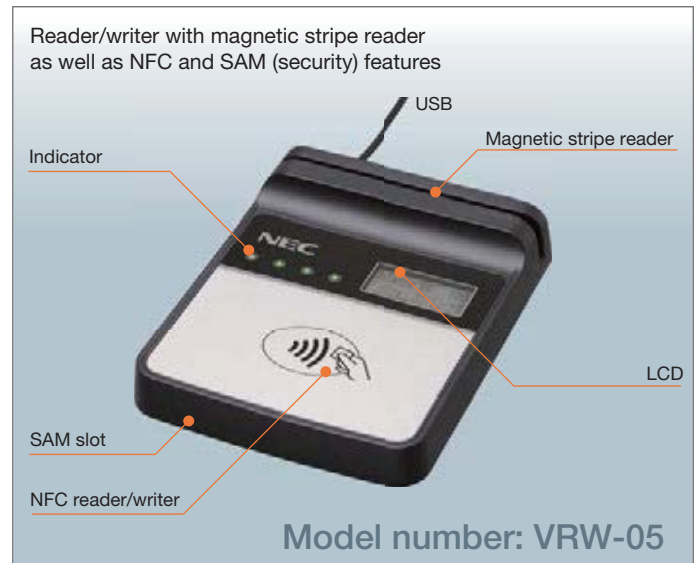- View transaction histories

Functionality for customers
- Purchase goods and charge e-money at merchant stores
- View transaction history and balance via website or SMS
- Manage customer profile information via website

Usage scene

E-money servers

Manage customer and merchant information

View balances, view histories

View history, manage merchant information

Visit the store

- Issue cards
- Purchase goods with cards
- Charge e-money to cards

Head office

Store

Customer

Payment terminals

Reader/writer connected via USB. It can read/write information from payment media and is controlled by a host computer that can be either an Android tablet or smartphone, or a Windows PC.

Reader/writer with NFC and SAM (security) features

USB

Indicator

NEC

NFC reader/writer

Model number: VRW-01

Reader/writer with magnetic stripe reader as well as NFC and SAM (security) features

USB

Magnetic stripe reader

Indicator

NEC

LCD

SAM slot

NFC reader/writer

Model number: VRW-05

● Specifications

Versatile Terminals for Integrated E-money Solution (NFC supporting model)

Model number		VRW-01	VRW-05
NFC support		✓	✓
Supported standards		FeliCa / ISO 14443 Type A (MIFARE) / Type B	FeliCa / ISO 14443 Type A (MIFARE) / Type B
Reading functionality	Magnetic stripe	-	✓
	Contactless cards	✓	✓
Display (LCD)	Type	-	Monochrome
	Screen size	-	16 characters (letters and numbers) x 2 lines
Interface		USB	USB
EMV compliance		-	EMV Contactless Level 1 ver. 2.2
Security	SAM slots	-	4
	Built-in SAM	✓	✓
Dimensions		117 mm (W) x 15 mm (H) x 131 mm (L)	112 mm (W) x 27 mm (H) x 139 mm (L)
Weight		Approx. 150 g	Approx. 175 g
Power supply		USB	USB

Cloud servers

● Specifications

Operating environment (PC)	Recommended web browser	Google Chrome, Mozilla Firefox
Service conditions	Number of members (issued cards)	50,000,000
	Number of stores	100,000
	Number of installable readers/writers	1,000,000
	Number of transactions	100 per second