TRANSACTION SYSTEM AND METHOD USING MOBILE DEVICE

BACKGROUND OF THE INVENTION

The present invention relates to a technology for performing predetermined processing while cooperating with a plurality of information processing devices. In particular, the present invention relates to a technology for proposing an optimum visit destination branch in accordance with conditions that transactions are previously input in a mobile device as the information processing device and cooperating with a business terminal that executes the transactions with the mobile device after visiting a branch, and thereby efficiently realizing remaining transactions after visiting the branch.

At present, when various services are provided, by cooperating with a plurality of information processing devices that perform transactions, information processing with regard to the transactions is performed. For example, a transaction method in which a transaction time can be shortened in the transaction that deals with a transaction object and an automatic transaction device that performs the transaction method are disclosed in JP-B-4076954. An outline thereof is characterized in that in a transaction method for using an automatic transaction device that communicates with a host computer and performs predetermined transactions that deal with transaction objects, transaction information necessary for the transactions with respect to the automatic transaction device is transmitted to the host computer by using a portable communication terminal. Further, transaction authentication information corresponding to the transaction information generated, stored, and transmitted by the host computer is received and the transaction authentication information transmitted by the portable communication terminal is received by using the automatic transaction device. Further, on the basis of response information corresponding to the transaction authentication information received from the host computer by transmitting the received transaction authentication information to the host computer, the transaction method for performing the transactions is provided. Further, processing necessary for the transactions with respect to the automatic transaction device is previously performed by using the portable communication terminal and information (transaction authentication information) relating to antecedent processing that is previously performed is transmitted from the portable communication terminal to the automatic transaction device. As a result, information necessary for the transactions is not required to be freshly input to the automatic transaction device, and the transaction time can be shortened as much as the above time.

Further, a branch guiding device that permits a customer to receive an optimum branch guide even when the customer is a remote location, etc. is disclosed in JP-A-2002-236769. An outline thereof is characterized in that a transaction possible branch retrieving unit retrieves a branch that is located at a place near a present position and that deals with a transaction request at present time from branch information that is stored in a branch information storage means on the basis of present position information originated from a terminal unit such as a portable telephone and on the basis of transaction request information. Further, a route retrieving unit retrieves a route from the present position to the branch which is retrieved by the transaction possible branch retrieving unit by using map information that is stored in a map information storage means. Then, branch information and map information that indicates the route to the branch are transmitted to the terminal unit being an origination source.

SUMMARY OF THE INVENTION

In JP-B-4076954, transactions are previously input by using a mobile device before visiting a branch, and the mobile device is caused to cooperate with an automatic transaction device at the time of visiting the branch. Thereby, a transaction time after visiting the branch can be shortened. At this time, items to be previously input to the mobile device and a screen flow to be displayed on the automatic transaction device after visiting the branch are fixed. In the case of a simple transaction such as deposits and withdrawals or transfer of cash, all necessary input items can be previously input.

However, when transactions of plural input items such as purchase of an investment trust or a fixed-term deposit are performed, an input may be performed in a range in which a customer can input items before visiting the branch and transaction contents may be desired to be determined with regard to not-yet items while giving an advice from a bank staff after visiting the branch. In JP-B-4076954, as described above, an input cannot be performed in a range in which a customer desires to input items (an item that can be input or an item that is desired to be input by the customer).

Further, in the customers, one customer desires an input of a password (for example, an input of a four-digit number) as an authenticating means, or another customer desires a biometric information authentication (for example, a finger vein authentication). Further, in the customers, one customer desires a "friendly method" in which a guidance method (how to proceed the transaction screen) of a transaction screen is displayed to be understood by beginners, or another customer desires a "simple method" (for example, an abbreviation of a display of the confirmation screen) in which minimum necessary data is displayed and the

transaction time is shortened. In JP-B- 4076954, as described above, items to be previously input to the mobile device and a screen flow to be displayed on the automatic transaction device after visiting the branch are fixed. Therefore, transactions cannot be performed by using a transaction scheme according to a desire of the customer.

On the other hand, in JP-A-2002-236769, an optimum branch (a branch near a present location, a branch that can deal with desired transactions, and a branch in which congestion is relieved) can be guided on the basis of transaction category and positional information of the mobile device.

However, depending on conditions that transactions are previously input or a desire of the transaction scheme through the customer, it cannot be understood whether which branch is optimal for the customer. For example, the customer who determines an investment trust product desired to be purchased in a stage that items are previously input may perform various procedures after visiting the branch, and therefore a support of a bank staff is unnecessary. On the other hand, after visiting the branch, it is necessary for a bank staff having a product knowledge to deal with the customer who does not yet determine an investment trust product desired to be purchased. Further, when the remaining transactions (comparison of products or simulation) are desired to be operated while a large-scale screen display is viewed after visiting the branch, it is not understood whether in which branch, a terminal having an available large-scale screen display is installed.

In the present invention, there is a problem that efficiency is realized in transactions in which information processing devices (including mobile devices) are used.

To solve the above-described problem, in the present invention, when transactions are previously input by using the mobile device, an optimum branch is specified in accordance with conditions of customers (desired transaction scheme and previously input conditions of this time) including conditions (contents) of the previous input. As a result, the customer can be guided to the optimum branch. In addition, the "optimum branch" of the present application is a branch on which a plurality of factors (conditions of inputs) indicating customer conditions are reflected. Further, among branches that satisfy at least a part of the above factors, the optimum branch is a branch that is most adapted to the plurality of factors.

Further, one embodiment of the present invention includes cooperating with the server side by using information input by the mobile device and also specifying the "optimum branch".

The specific contents will be described below. The mobile device that previously performs a part of predetermined transactions, the business terminal that performs

processing of the remaining transactions, and the server are supposed to be connected via a communication network. The mobile device holds personalized information in which a transaction scheme desired by a user who previously inputs transactions by using the mobile device is stored, input template information in which input items necessary for previously inputting transaction contents are defined in each transaction category, transaction input information in which previously input contents through the user are held with respect to the input template information, and account information that can be used by the user. Further, even if the mobile device itself does not hold each of the above information, access to the information may be performed.

Here, the server holds branch information in which transactions that can be dealt with in each branch or positional information of each branch are held, branch terminal/device information in which information about terminals that are installed in branches of each bank and devices that are equipped on the terminals is collected, transaction operation/device correspondence information in which information about devices necessary for individual operations (referred to as a transaction operation) is collected in one transaction process of each bank, information about skills of bank staffs in each bank, and information about terminal use conditions of each branch in each bank and dealing conditions of each bank staff.

A selection input in the mobile device is received with regard to a transaction category desired by the user before visiting the branch, an input of the transaction contents is received in a range in which the user can input items or in a range in which the user desires to input items, and the transaction contents are held as the transaction input information. When the previous input of the transaction contents through the mobile device from the user is finished, the above information is acquired from the server. Further, on the basis of contents that transaction contents are previously input (transaction input information), a desired transaction scheme (personalized information), and the above information (branch information) acquired from the server, the optimum visit destination branch for the user is calculated. Specifically, a branch in which a terminal/device necessary for a transaction process for performing the remaining transactions of the user after visiting the branch is installed is extracted as candidates of the visit destination branch. Further, on the basis of information about use conditions of the terminal/device in the branch, customer service conditions of the bank staff having skills that can deal with the user, and a movement distance up to the visit destination branch, the candidates of the visit destination branch are narrowed. Thereby, an optimum visit destination branch can be proposed to the user in accordance with conditions of the user (desired transaction scheme or previously input conditions of that time). Therefore, from among the proposed candidates of

the visit destination branch, the user determines the visit destination branch and visits the branch.

In accordance with an input/instruction of the user, after visiting the branch, after visiting the branch, the transaction input information and the personalized information that are held in the mobile device are transmitted to the business terminal that is installed in the branch. On the basis of the received transaction input information and the personalized information, the business terminal constructs the transaction process for performing processing of the remaining transactions. Specifically, with reference to the personalized information, with respect to the normal transaction process, a process unnecessary for the user is excluded from the transaction process. Further, with reference to the transaction input information, a process in which items are previously input by the user is excluded from the transaction process. As a result, in accordance with previously input conditions and desired transaction scheme, the user may input only the remaining items necessary for completing the transactions.

An input from the user, namely, an input of the input items of the remaining transactions is received in accordance with the constructed transaction process in the business terminal. When an input is completed, the business terminal permits a system that executes transactions to cooperate with transaction information and permits transaction execution to be completed.

According to the present invention, an advantageous effect of realizing efficiency of the transaction process in which items are previously input is exerted.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 illustrates a functional configuration example of a transaction system using mobile device according to an embodiment of the present invention;

FIG. 2 illustrates an example of input template information according to the embodiment of the present invention;

FIG. 3 illustrates an example of personalized information according to the embodiment of the present invention;

FIG. 4 illustrates an example of transaction input information according to the embodiment of the present invention;

FIG. 5 illustrates an example of account information according to the embodiment of the present invention;

FIG. 6 illustrates an example of branch information according to the embodiment of the present invention;

FIG. 7 illustrates an example of branch terminal/device information according to

the embodiment of the present invention;

FIG. 8 illustrates an example of transaction operation/device correspondence information according to the embodiment of the present invention;

FIG. 9 illustrates the entire process flow for executing transactions according to the embodiment of the present invention;

FIG. 10 illustrates a process flow for calculating an optimum visit destination branch according to the embodiment of the present invention; and

FIG. 11 illustrates an idea of constructing a transaction process after visiting a branch according to the embodiment of the present invention.

DESCRIPTION OF THE EMBODIMENTS

Hereinafter, an embodiment of the present invention will be described with reference to the accompanying drawings. In the present embodiment, when a product of an investment trust or a fixed-term deposit is purchased in a bank office, a customer previously inputs items by using a mobile device in a range in which the customer can input the items. On the basis of input conditions at that time or a transaction scheme desired by the customer, an optimum visit destination branch is proposed to the customer. The mobile device is permitted to cooperate with a business terminal after visiting a branch, and thereby an example of a transaction system using mobile device that inputs or operates remaining transactions and a transaction method using mobile device therefor is used (namely, transactions of a financial sector will be described as an example). Note, however, that a technical idea of the present invention is not limited to the above example. That is, the technical idea is applicable also to any transaction other than the financial sector, and further is applicable also to counsel services other than the transactions.

Here, the "customer" of the present invention shows a user (end user) who receives banking services. The "mobile device" shows a portable PC (Personal Computer), a tablet terminal, a smartphone, and a cellular phone, and may be a computer (information processing device) that can execute programs for transacting financial products. The "business terminal" shows a PC or a dedicated device that is installed in a branch and executes transactions, and may be a computer (information processing device) that can execute programs for transacting financial products. The "transaction" shows various services provided in bank offices or internet banking, such as purchase of the investment trusts, opening of an account, counsel of inheritance, transfer, and deposits and withdrawals. That is, the transaction is considered to be composed of a series of transaction processes such as preparation of an

application form, confirmation of application contents, and payment of cash.

In the present embodiment, a use scene as described below is supposed. In the case of simple transactions such as deposits and withdrawals, or transfer of cash, all necessary input items can be previously input. However, in the case of transactions in which plural input items are required such as purchase of the investment trust or a fixed-term deposit, items may be input in the range in which the customer can input the items before visiting the branch; further, with regard to not-yet input items, the customer may desire to determine transaction contents while giving advice from a bank staff after visiting the branch. Further, in the customers, one customer desires an input of a password (for example, an input of a four-digit number) as an authentication scheme, or another customer desires a biometric information authentication (for example, a finger vein authentication). Further, in the customers, one customer desires a "friendly method" in which a guidance method of a transaction screen (how to proceed the transaction screen) is displayed to be understood by beginners, or another customer desires a "simple method" (for example, an omission of a display of the confirmation screen) in which minimum necessary data is displayed and the transaction time is shortened. That is, a range in which the customer desires to previously input items (or a range in which the customer can input items) or a desired transaction scheme is supposed to be different in each customer.

A customer who determines a product of the investment trust desired to be purchased in a stage in which the items are previously input may perform various procedures after visiting the branch, and therefore a support of the bank staff is unnecessary. However, a customer who does not yet determine a product of the investment trust desired to be purchased requires a response of the bank staff having a product knowledge after visiting the branch. Further, when the remaining transactions (product comparison or simulation) are desired to be operated while viewing a large-scale screen display after visiting the branch, it is necessary for the customer to visit the branch in which the large-scale screen display is installed. That is, for the purpose of responding to services requested by the customers, the customers should be guided to the branch in which necessary bank staffs are present and necessary devices are provided. Here, the "device" is a device necessary for transacting financial products, such as a large-scale screen display equipped on the business terminal, a biometric authentication device, an ATM (automatic teller machine), and a passbook printer.

From the above, when the customer performs a previous input by using the mobile device, an optimum visit destination branch is required to be proposed to the customer in accordance with previously input conditions, or conditions whether the branch is a branch that has a desired transaction scheme and necessary bank staff skills and terminal/device.

FIG. 1 illustrates a functional configuration example of the transaction system using mobile device according to the present embodiment. A plurality of mobile devices 1, a plurality of servers 2, and a plurality of business terminals 3 are connected via a communication network 4. At this time, the communication network 4 between the mobile devices 1 and the servers 2 may be a radio communication network (a local radio network or a portable phone network) or a wired communication network. In the same manner, between the mobile devices 1 and the business terminals 3, the radio communication network may be used or the wired communication network may be used. Further, the mobile devices 1 and the business terminals 3 may be connected by using a local radio communication technology (for example, NFC (Near Field Communication) or infrared data communication).

The mobile device 1 has five functions, the server 2 has two functions, and the business terminal 3 has five functions. Their functions operate by programs for controlling hardware and software of each device. That is, each function is executed by operations of an operation unit being a hardware resource of the mobile device in accordance with the programs being software.

A first function of the mobile device 1 is a screen display function 11 for displaying information on a display device of the mobile device 1. The display device is, for example, a liquid crystal display that is built in the mobile device 1. By the screen display function 11, contents supplied to the mobile device 1 by customers or information received from the servers 2 or the business terminals 3 are displayed. A second function of the mobile device 1 is a prior input function 12 by which the customer previously inputs transaction contents. The "previous input" of the transaction contents means, for example, that a part of the transaction process is completed before visiting the branch, such as only a part of an application form is prepared before visiting the branch. At this time, previously input information is managed by an information management function 13 as described subsequently. A third function of the mobile device 1 is the information management function 13 for managing information dealt with in the mobile device 1. By the information management function 13, input template information 131, personalized information 132, transaction input information 133, and account information 134 are managed. The above information is held in a memory of the mobile device 1 or in an external memory device.

When the mobile device 1 is missing, a variety of information is supposed to be safely managed so as to prevent each piece of the above information from flowing out to the outside and being illegally used. For example, by using an SD (Secure Digital) card (a memory card) with a security function having an encryption function or a tamper resistant module, each

piece of the information can be safely managed. A fourth function of the mobile device 1 is an optimum branch calculation function 14 for calculating an optimum visit destination branch according to previously-input contents and a desired transaction scheme by using each of the information that is input by the prior input function 12 and is managed by the information (info) management function 13. Specific processing contents of the optimum branch calculation function 14 will be described subsequently with reference to FIG. 10. A fifth function of the mobile device 1 is a transceiver function 15 for transmitting and receiving the information between the mobile device 1 and the server 2, or between the mobile device 1 and the business terminal 3. Subsequently, the mobile devices 1 and the servers 2 are supposed to be connected via the portable phone network, and the mobile devices 1 and the business terminals 3 are supposed to be connected by using the local radio technology.

A first function of the server 2 is a transceiver function 21 for transmitting and receiving each of the information between the mobile devices 1 and the servers 2. A second function of the server 2 is an information management function 22 for managing information dealt with in the server 2. Branch information 221, branch terminal/device information 222, and transaction operation/device correspondence information 223 are managed by the information management function 22. Each of the above information is held in a memory of the server 2 or in the external memory device. Each of the above functions is executed by operations of the operation unit being a hardware resource of the server 2 in accordance with the programs being software.

A first function of the business terminal 3 is a transceiver function 31 for transmitting and receiving each of the information between the mobile devices 1 and the business terminals 3. A second function of the business terminal 3 is a transaction process construction function 32 for constructing the remaining transaction process to be performed after visiting the branch in accordance with the previously-input contents received from the mobile device 1. Specific processing contents of the transaction process construction function 32 will be described subsequently with reference to FIG. 11. A third function of the business terminal 3 is a screen display function 33 for displaying information on the display device connected to the business terminal 3. Examples of the display device include a liquid crystal display panel that is built in the business terminal 3, a large-scale screen display, and a liquid crystal projector connected to the outside. Contents input by the customers in an input function 34 described subsequently, or information received from the mobile device 1 are displayed. A fourth function of the business terminal 3 is the input function 34 for inputting the remaining transaction contents by the customers after visiting the branch in accordance with the transaction

process prepared by the transaction process construction function 32. A fifth function of the business terminal 3 is a system cooperation function 35 for delivering information about the transaction contents input by the customer to an existing business system. To the existing business system, another program started in the business terminal 3 may be delivered, or another program started in the outside system connected via the communication network may be delivered.

FIG. 2 illustrates an example of the input template information 131 according to an embodiment of the present invention. The input template information 131 is defined in each transaction category, and is obtained by defining necessary input items at the time of previously inputting the transaction contents. In the transaction category, for example, types of the transactions are shown such as purchase of the investment trust and opening of the account. The input template information 131 is used at the time when the customer previously inputs transaction contents in the prior input function 12.

In the example of FIG. 2, for example, when the investment trust is purchased, input items necessary for previously inputting the transaction contents are shown. The "transaction category" of a first row of a column 1311 shows that the input template information relates to the purchase of the investment trust (hereinafter, simply referred to as "the purchase of the investment trust). Further, a "product name", a "purchase price", and an "account number" of a second row or later are input items necessary for previously inputting the purchase of the investment trust.

In addition, the input template information 131 is defined to be able to be mutually used between banks without relying on the transaction bank. When the input item is insufficient depending on the transaction bank, a shortfall is made up by using the business terminal after visiting the branch. Alternatively, the input template information 131 may be defined for each transaction bank.

FIG. 3 illustrates an example of the personalized information 132 according to the embodiment of the present invention. The personalized information 132 is obtained by defining the transaction scheme desired by the customer in the transactions. The personalized information 132 is used at the time when the customer previously inputs the transaction contents in the prior input function 12.

In the example of FIG. 3, for example, when either "password input" (for example, an input of a four-digit number) or "biometrics authentication" (for example, a finger vein authentication) can be selected as an authentication scheme 1321, it is shown that the "biometrics authentication" is desired. In the same manner, when either the "friendly method"

(a method for displaying a supplementary explanation toward a customer who is inexperienced in the transactions, and incrementally displaying a confirmation screen) or the simple method (a method for displaying only minimum necessary confirmation screens toward a customer who is experienced in the transactions so as to shorten the transaction time) can be selected as a guidance method 1322, it is shown that the "simple method" is desired. Further, when an optimum visit destination branch is proposed under conditions that the transactions are previously input, a priority order 1323 indicates that which of a "moving distance", a "branch congestion degree", and "skills of the bank staff" is proposed preferentially. In this example, the priority order of the "branch congestion degree", the "skills of the bank staff", and the "moving distance" is shown. The personalized information 132 illustrated in FIG. 3 is an example, and not limited to the above example.

Please assume that the personalized information 132 is supposed to be previously defined, and stored in the mobile device 1.

FIG. 4 illustrates an example of the transaction input information 133 according to the embodiment of the present invention. In the transaction input information 133, the previously input contents of the transactions are held with respect to the selected input template information 131. By using the prior input function 12, the customer inputs the transaction contents in number order or in a lump through transaction programs stored in the mobile device 1. Through the transaction process that product of the investment trust desired to be purchased is selected on a first screen of the transaction program, a purchase price is input on a second screen thereof, and a transfer source account of a fund for purchase is selected on a third screen thereof, for example, the transaction contents are input in number order. Or, a plurality of tabs are displayed on one screen like a "product selection tab", a "amount input tab", and an "account input tab", and the transaction contents are input while the tabs are switched. At this time, items input through the transaction program are sequentially held in the transaction input information 133.

Among the customers, one customer "determines product and a price of the investment trust desired to be purchased and desires to visit the branch and pay its charge by cash only with regard to a payment of the fund for purchase", and also another customer "determines a price of the investment trust desired to be purchased and, and desires to determine the product while taking counsel with a bank staff after visiting the branch since the product is hard to select". That is, a transaction content range in which the customer can previously input items is different depending on conditions of the customer at that time. Accordingly, in the transaction input information 133, the customer does not necessarily input all the input items (for

example, the product name, the purchase price, and the account number) defined in the input template information 131, and may input items within the range that the customer can input or the customer desires to input under the conditions at that time.

In the example of FIG. 4, for example, it is shown that a transaction category 1331 in which a previous input is performed at present is the "purchase of the investment trust" and a product name 1332 is not yet input. At this time, the items that have not been input are described as "-". On the other hand, it is shown that the purchase price 1333 is already input to be "500,000 yen" and account information 1334 is already selected to be "savings #1". Further, the account information will be described subsequently with reference to FIG. 5. Further, in the example of FIG. 3, since the "biometrics authentication" is desired as the authentication scheme 1321 of the personalized information 132, it is unnecessary to input the password. Accordingly, a password 1335 of FIG. 4 is not used as the input item, and therefore is described as "not required". As described above, the transaction input information 133 is composed of items that are already input, items that have not been input yet, and items that are not required to be input.

FIG. 5 illustrates an example of the account information 134 according to the embodiment of the present invention. The account information 134 can hold plural pieces of account information and each row indicates a piece of account information. An account name 1341 of each row indicates a name for uniquely discriminating each account, a bank 1342 indicates a bank name of the account, a branch 1343 indicates a branch name of the account, an account number 1344 indicates an account number of the account, a category 1345 indicates types of the account (for example, ordinary savings account and current account), and a nominal person name 1346 indicates a name of a nominal person who has the account. In addition to the above items, information such as a bank code and a branch code may be used and the account information 134 is not limited to this example. In addition, the bank code corresponding to the bank name and the branch code corresponding to the branch name are determined by using values. Therefore, with reference to the bank codes and the branch codes, the bank name can be associated with the bank code and the branch name can be associated with the branch code. In a program for actually executing the transactions, the bank codes and the branch codes are used for processing.

In the example of FIG. 5, for example, two pieces of account information are stored. First account information indicates that the account is discriminated by an account name of the "savings #1", the ordinary savings account of an account number 1234567 is present in Totsuka branch of OO bank, and the nominal person name is Taro Yamada.

The account name 1341 can be used as selection contents of the account

information 1334 of the transaction input information 133. In the example of FIG. 4, for example, the "savings #1" is selected as the account information 1334, and specific account information of the "savings #1" indicates account information of the first row of FIG. 5.

FIG. 6 illustrates an example of the branch information 221 according to the embodiment of the present invention. The branch information 221 is a list in which information about branches of the bank is collected, and each row thereof indicates information about one branch. A branch 2211 of each row indicates a name of the branch, business hours 2212 indicate business hours of the branch, handling transaction 2213 indicates the transaction category handled in the branch, and a branch position 2214 indicates position information of the branch (here, referred to latitude/longitude information). In addition to the above items, information such as business hours, an address, and the presence (P) or absence (A) of a teller window of a TV set may be used and the branch information 221 is not limited to this example.

In the example of FIG. 6, for example, plural pieces of branch information are stored. First branch information indicates that the business hours of Totsuka branch are from 9: 00 to 15: 00, the purchase of the investment trust and foreign currency repatriation/currency exchange are handled, and latitude and longitude of the branch are 35.40506 and 139.53915.

The branch information 221 is held in the server 1 for each bank, and can be used in the mobile device 1 through a transmission request from the transaction program for mounting the prior input function 12 in the mobile device 1.

FIG. 7 illustrates an example of the branch terminal/device information 222 according to the embodiment of the present invention. The branch terminal/device information 222 is a list in which information about business terminals that are installed in the branch of each bank and information about devices that are equipped in the business terminals are collected, and each row thereof indicates information about one business terminal. Here, the business terminal means a counsel system terminal (simply referred also to as a counsel terminal) that promotes transactions bi-directionally between the customer and the bank staff, and a settlement system terminal (simply referred also to as a settlement terminal) that centrally performs settlement processing such as deposits and withdrawals, and transfer. Further, the device means a general-purpose device such as a large-scale screen display and a touch panel, and a finance special device that is specialized for a finance system business for usage, such as an ATM and a passbook printer.

The branch terminal/device information 222 is used at the time of calculating the optimum visit destination branch under conditions that the customer previously inputs items. Further, processing time may increase in a method for sequentially searching all the business

terminals of all the branches of the bank. To cope with the above, a search range is narrowed down on the basis of information about present locations and the transaction categories of the customers, and thereby speeding up of the search time is realized. Specifically, an area is grouped on the basis of positional information (latitude and longitude) or segment of cities, towns and villages of each branch. For example, Totsuka branch and Higashi Totsuka branch that are present in the same ward are set to the same area group, and Yokohama branch that is present in another ward is set to another area group. In the same manner, since a terminal used due to transaction contents is determined, the transactions are grouped on the basis of the transaction category. For example, counsel system transactions are set to one transaction group, and settlement system transactions are set to another transaction group. From the above, when one (or plural and adjacent) area group and one transaction group are determined on the basis of the previously-input contents, only the branch that satisfies the both may be extracted as candidates of the visit destination branch. Therefore, the processing time necessary for searching/narrowing can be shortened.

At this time, an area group 2221 of each row of the branch terminal/device information 222 indicates names for discriminating the above-described area groups, a transaction group 2222 indicates names for discriminating the above-described transaction groups, a branch 2223 indicates names of the branches, a terminal 2224 indicates names of the business terminals installed in the branch, and a device 2225 indicates a list of devices equipped in the terminals.

In the example of FIG. 7, for example, information about a plurality of terminals of the branch is stored, and information about a first terminal of the branch indicates that "a biometric authentication device and a bidirectional display are equipped as a device in the counsel terminal #1 that is installed in Totsuka branch, and the area group belongs to R1 and the transaction group belongs to T1.

Further, the branch terminal/device information 222 is held in the server 2 for each bank, and can be used in the mobile device 1 through a transmission request from the transaction program for mounting the prior input function 12 in the mobile device 1.

FIG. 8 illustrates an example of the transaction operation/device correspondence information 223 according to the embodiment of the present invention. The transaction operation/device correspondence information 223 is a list in which correspondence relationships with devices necessary for individual operations (referred to as a transaction operation) in one transaction process in each bank are collected. A plurality of devices may be used with respect to one transaction operation.

In the example of FIG. 8, for example, the correspondence relationships between a plurality of transaction operations and necessary devices are stored. A first correspondence relationship indicates that "when the biometrics authentication is necessary as the transaction operation 2231 in a certain transaction process, the biometric authentication device is required as a necessary device 2232".

The transaction operation/device correspondence information 223 is held in the server 2 for each bank, and can be used in the mobile device 1 through a transmission request from the transaction program for mounting the prior input function 12 in the mobile device 1.

As information managed by the information management function 22 of the server 2, any information except the branch information 221, the branch terminal/device information 222, and the transaction operation/device correspondence information 223 may be used.

As a first example, information about skills of the bank staff in each bank is considered to be held. Specifically, information in which a branch as a place of work and a transaction skill that can deal with customers are listed in each bank staff of the bank is held. For example, information such as "Mr. A of a bank staff who works in Totsuka branch has skills according to the entire counsel system business", and "Mr. B of a bank staff who works in Yokohama branch has skills according to purchase of the investment trust and loan product purchase in a counsel system business" is held.

Further, as a second example, information about use conditions of the terminal of each branch or corresponding conditions of each bank staff in each bank is considered to be held. Specifically, information in which a vacancy situation (how many terminals are used for transactions and how many terminals are not used at present) of the business terminal in each branch and a customer service situation (which bank staff has a customer and which bank staff waits for a customer at present) in each skill of the bank staff are listed is held. For example, information such as "at present, the counsel terminal #1 and the counsel terminal #2 of Totsuka branch are not used, and the counsel terminal #3 thereof is used", and "at present, Mr. X of the bank staff and Mr. Y of the bank staff of Yokohama branch have customers and Mr. Z of the bank staff thereof waits for customers" is held. Further, not only current situations but also future anticipated situations can be held at the same time. The ticket issuing information based on a number ticket issuer in the branch and the visit reservation information based on an online visit reservation of Internet are acquired to thereby anticipate future situations.

FIG. 9 illustrates the entire process flow for executing the transactions according to the embodiment of the present invention. The process flow of FIG. 9 is composed of a

process in which the customer previously inputs the transaction contents by using the mobile device 1 before visiting the branch and a process in which the customer transmits the input contents of the mobile device 1 to the business terminal 3 and completes operations of the remaining transactions after visiting the branch. The process before visiting the branch will be described subsequently at steps 161 to 165 of the mobile device 1 and at step 231 of the server 2. The process after visiting the branch will be described subsequently at steps 166 to 168 of the mobile device 1 and at steps 361 to 365 of the business terminal 3. Further, the prior input function 12 of the mobile device 1 is used at steps 161 to 164, the optimum branch calculation function 14 is used at step 165, and the transceiver function 15 is used at step 164 and steps 166 to 168. The transceiver function 21 of the server 2 is used at step 231. The transceiver function 31 of the business terminal 3 is used at steps 361, 362, and 365, the transaction process construction function 32 is used at step 363, the input function 34 is used at step 364, and the system cooperation function 35 is used at step 365. Details of each step will be described subsequently.

At step 161, the customer starts up a transaction program stored in the mobile device 1 and selects the transaction category for performing a previous input. For example, when the transaction program is started up, a menu screen (selectable transaction list such as a transfer, purchase of the investment trust, and opening of the account) for the transactions is displayed, and the transactions desired by the customer are selected from among the menus. Suppose herein that the purchase of the investment trust is selected.

At step 162, the information about the input template according to the transaction category selected at step 161 is acquired from the input template information 131. With reference to the personalized information 132, the input item that is not required to be input is excluded from among the input templates. For example, the input template information 131 as illustrated in FIG. 2 according to the purchase of the investment trust is acquired and the authentication scheme 1321 of the personalized information 132 as illustrated in FIG. 3 is referenced. As a result, an input to an entry field of the password in the input template information 131 is determined to be not required and a sign of "not required" is given to the entry field of the password 1335 as illustrated in FIG. 4.

At step 163, the customer previously inputs the transaction contents in the transaction program in a range in which the customer can input items or the customer desires to input items and holds the input contents in the transaction input information 133. The transaction program provides the transaction process (input screen) for inputting the transaction contents and the customer inputs the transaction contents in accordance with the transaction

process (input screen). When an item that cannot be previously input or an item that is not desired to be input is present, the customer skips an input item. At this time, in a process of skipping the input item, a button for skipping the input item is provided on the transaction program, thereby mounting the prior input function 12 by using a general technology. Suppose, for example, that in the case of purchasing the investment trust, since desiring to take counsel with the bank staff with regard to a purchase product after visiting the branch, the customer does not previously input the purchase product, and since the purchase price is determined at 500,000 yen, the customer previously inputs the price. At this time, the sign of "-" is given to the product name 1332 of the transaction input information 133 as illustrated in FIG. 4, and the price is input at "500,000 yen" in the purchase price 1333. Further, when a paying account of the purchase of the investment trust is determined, the customer selects the account name 1341 of the account information 134 and inputs the name of the paying account in the account information 1334 of the transaction input information 133 with reference to the account information 134.

At step 164, in accordance with the previously-input contents up to step 163, the customer requires the server 2 to transmit information necessary for calculating the optimum visit destination branch and receives a variety of information from the server 2. At this time, at step 163, when the bank to be used is determined, the customer requires the server of the bank to transmit the information. On the other hand, when the bank to be used is not determined, the customer requires the servers of all the banks held in the account information 134 to transmit the information with reference to the account information 134. Further, at subsequent step 165, the customer collects the variety of information received from the servers of all the banks and calculates the optimum visit destination branch.

At step 231 of the server 2, the server 2 receives the requirement of an information transmission from the mobile device 1 and acquires a variety of information (branch information 221, branch terminal/device information 222, transaction operation/device correspondence information 223, information about skills of the bank staff, and information about terminal use conditions of each branch and correspondence conditions of each bank staff) managed in the server 2 to thereby transmit the variety of information to the mobile device 1.

At step 165, the mobile device 1 calculates the optimum visit destination branch for the customer on the basis of the previously-input contents input at step 163 and the variety of information received from the server at step 164. A specific process flow will be described with reference to FIG. 10.

FIG. 10 illustrates a process flow for calculating the optimum visit destination

branch according to the embodiment of the present invention. In the process, four process blocks are performed in order: (A) requirements (a terminal/device necessary for remaining transactions) necessary for the remaining transaction process of the customer are narrowed "requirement narrowing process block" 171 (steps 1651 and 1652 as described subsequently), (B) a search object group of the visit destination branch in order to speed up the processing time for calculating candidates of the visit destination branch is narrowed "search object narrowing process block" 172 (steps 1653 and 1654 as described subsequently), (C) specific visit destination branches are further narrowed down in the order desired by the customer "visit destination branch narrowing process block" 173 (steps 1655 to 1658 as described subsequently), and (D) the narrowed candidates of the visit destination branch are proposed to the customer "visit destination branch proposing process block" 174 (steps 1659 as described subsequently).

At step 1651, the transaction input information 133 input at step 163 is acquired. For example, the transaction input information 133 as illustrated in FIG. 4 is acquired.

At step 1652, the input items that are not yet input are extracted with reference to the transaction input information 133 acquired at step 1651. In the case of the example of FIG. 4, for example, it is understood that the product names to which the signs of "-" are given are not yet input, the biometrics authentication and the simulation are not yet performed, and the articles are not yet confirmed. Further, with reference to the transaction operation/device correspondence information 223 acquired from the server 2, the terminal/device necessary for performing the not-yet input and not-yet operated items are extracted. With reference to the transaction operation/device correspondence information 223 as illustrated in FIG. 8, for example, the bidirectional display is extracted as a device necessary for transaction operations (here, the product is selected) at the time of determining the product name 1332. In the same manner, since the biometrics authentication is not yet performed, the biometric authentication device is extracted as a device necessary for the biometrics authentication.

At step 1653, with reference to the branch terminal/device information 222 of the bank, a search object group (here, an area group and a transaction group) is specified. With regard to the area group, by using a GPS (Global Positioning System) provided in the mobile device 1, current positional information (latitude and longitude) is acquired and the area group (or, a plurality of adjacent area groups may be specified in addition to the present location) corresponding to the present location is specified. With regard to the transaction group, on the basis of a set of the devices extracted at step 1652, the transaction group using the above devices is specified. With respect to the association between a set of the devices and the transaction group, a correspondence table is held to thereby mount the prior input function 12. In the

example of FIG. 7, for example, the area group is specified as R1, and the transaction group is specified as T1.

At step 1654, with reference to the branch terminal/device information 222, branches relevant to the area group and the transaction group specified at step 1653 are extracted, and thereby the candidates of the visit destination branch are narrowed down. At this time, the branches relevant to the area group and the transaction group are specified, and thereby the subsequent processing time for narrowing the branches can be shortened. In the example of FIG. 7, for example, a row (records such as a first row, a second row, and a fourth row) in which the area group is R1 and the transaction group is T1 is extracted, and thereby the candidates of the visit destination branch are narrowed to Totsuka branch and Higashi Totsuka branch.

At step 1655, a priority order for determining the visit destination branch is determined with reference to the priority order 1323 of the personalized information 132. In the example of FIG. 3, for example, a first priority item is a congestion degree of the branch, a second priority item is skills of the bank staff that can deal with the customers, and a third priority item is a movement distance up to the visit destination branch. Therefore, in subsequent steps, the first priority item (congestion degree of the branch) is performed at first step 1656, the second priority item (skills of the bank staff) is performed at the next step 1657, and the third priority item (movement distance) is performed at final step 1658. When ordering of the priority order 1323 is different, an execution sequence from step 1656 to step 1658 is also changed in accordance with the priority order 1323. Further, the priority order 1323 of the personalized information 132 is not necessarily limited to three items illustrated in FIG. 3, and further may be set to two items or four items or more. Further, also in contents, the priority order 1323 may be set to items other than the movement distance, the congestion degree of the branch, and skills of the bank staff. In this case, also at steps subsequent to step 1656, a process is performed while associated with each item of the priority item 1323.

At step 1656, with reference to "information about the terminal use conditions of each branch and the correspondence conditions of each bank staff in each bank" acquired from the server 2 at step 164, branches that are not congested are narrowed from the candidates of the visit destination branch narrowed at step 1654. That is, when all of a plurality of terminals that are installed in the branch are used for the transactions of another customer, the branch is determined to be congested and is excluded from the candidates of the visit destination branch. Alternatively, when all the terminals are not used but the terminals are used more than the number of the terminals (or a terminal rate) previously determined separately, the branch may be excluded from the candidates of the visit destination branch. Further, in addition to whether the

terminals are used or not, it may be determined whether the number of the terminals that cannot be used for failure is a certain number or more (including all the terminals).

At step 1657, with reference to "information about skills of the bank staff in each bank" acquired from the server 2 at step 164, the branches in which a bank staff having skills appropriate for services of the remaining transactions of the customers is present and the bank staff waits for customers (having no customers) are narrowed from the candidates of the visit destination branch narrowed at step 1656. That is, the branch in which the bank staff having appropriate skills cannot receive customers is excluded from the candidates of the visit destination branch. Skills required by the transactions are stored in each transaction, and the skill of this transaction is compared with the skills of the bank staff recorded in each bank staff for determination.

At step 1658, with reference to the branch information 221 acquired from the server 2 at step 164, the branches nearer to the present location of the customer are narrowed down to a certain number or less previously determined from the candidates of the visit destination branch narrowed at step 1657. The present location of the customer can be acquired by using the GPS of the mobile device 1, and a branch position can be acquired from the branch position 2214 of the branch information 221. Therefore, the movement distance can be calculated by using information about latitude and longitude. Alternatively, as third-party service of the outside, a movement route between two spots in which road information is considered is displayed and service for calculating the movement distance is provided, and therefore the above service may be used.

At step 1659, the candidates of the visit destination branch narrowed at step 1658 are proposed to the customer. An upper limit in the number of the candidates of the visit destination branch to be proposed to the customer may be previously set, and proposed to the customer. Suppose that the number of the candidates of the visit destination branch is lower than the upper limit that is proposed to the customers during the narrowing process at step 1654 and steps 1656 to 1658. In this case, the narrowing process is set up to the step and the remaining narrowing steps are not performed. The process of FIG. 10 is ended. That is, the process is performed up to a process immediately before the number of the candidates of the visit destination branch is equal to zero.

Returning to FIG. 9, each step will be described. By ending the process of step 165, the optimum visit destination branch is proposed to the customer in accordance with the previously-input contents and the transaction scheme desired by the customer. Therefore, the customer determines the visit destination branch and visits the branch in accordance with the

optimum visit destination branch. Subsequent steps are steps after the customer visits the branch.

At step 166 of the mobile device 1, the customer performs connection processing of the communication for performing transceiver of information between the mobile device 1 and the business terminal 3 in order to execute the remaining transactions in the branch.

At step 361 of the business terminal 3, in accordance with the connection request of the communication from the mobile device 1, the connection processing is performed and connection of the communication path is established. For example, through the local radio communication, paring processing between terminals is performed between the mobile device 1 and the business terminal 3 so as to transmit and receive information mutually between terminals. In addition, the business terminal 3 is a terminal that includes a device necessary for executing the remaining transactions by the customer.

At step 167 of the mobile device 1, the customer receives the connection processing of step 166 and transmits the transaction input information 133 and the personalized information 132 stored in the mobile terminal 1 to the business terminal 3.

At step 362 of the business terminal 3, the transaction input information 133 and the personalized information 132 are received from the mobile device 1 and they are held in the business terminal 3.

At step 363 of the business terminal 3, with reference to the transaction input information 133 and the personalized information 132 received at step 362, the transaction process for performing processing of the remaining transactions is constructed. A construction of the transaction process will be described subsequently with reference to FIG. 11.

FIG. 11 illustrates an idea of constructing the transaction process after visiting the branch according to the embodiment of the present invention. (a) A normal transaction process 3631 shows the transaction process at the time of inputting all items in the case where a previous input is not performed. (b) With reference to the personalized information 132 received at step 362, a transaction process 3632 on which the personalized information is reflected is obtained by excluding an unnecessary process in an input or an operation with respect to the customer from the transaction process of the above (a). For example, since the customer desires the biometrics authentication as the authentication scheme 1321, it is unnecessary to explicitly display a screen for selecting an authentication scheme with respect to the customer. Accordingly, processes of the "determination of the authentication scheme" and the "input of the password" can be excluded from the transaction process of the above (a). Further, since the customer desires the simple method as the guidance method 1322, it is unnecessary to explicitly display the

confirmation screen in the transaction process. Accordingly, a process of the "confirmation" can be excluded from the transaction process of the above (a). Further, (c) with reference to the transaction input information 133 received at step 362, the transaction process 3633 on which a previously-input/ previously-operated item is reflected is obtained by excluding a process in which an input is previously performed with respect to the customer from the transaction process of the above (b). For example, since the customer previously inputs the purchase price 1333, a process of the "amount input" can be excluded from the transaction process. By constructing the transaction process as described above, the customer can input the remaining items in accordance with conditions that an input is previously performed or the desired transaction scheme.

At this time, in accordance with the transaction process constructed as illustrated in the above (c), a screen for inputting the remaining items is displayed to the customer. On the other hand, a program for executing the normal transaction process as illustrated in the above (a) is operated in a system of the business terminal 3. For example, the transaction program is caused to automatically substitute previously-input data without displaying the "amount input" screen to the customer, and also caused to automatically determine a transition destination without displaying the "authentication scheme determination" screen to the customer. That is, the transaction program that is actually operated performs processing as illustrated in the above (a). However, since the program is caused to automatically perform substitution processing of input contents with respect to the previously-input items, it is suggested that only a screen of processing as illustrated in the above (c) is displayed to the customer.

At step 364 of the business terminal 3, in accordance with the transaction process constructed at step 363, the customer inputs the remaining items in which an input is not yet completed and performs the remaining operations. In the example of FIG. 4, for example, the customer selects a product of the investment trust desired to be purchased while taking counsel with the bank staff by using the bidirectional display and performs the biometrics authentication to recognize the purchase product.

At step 365 of the business terminal 3, on the basis of transaction information in which an input is completed at step 364, the transaction program is caused to complete a transaction execution while cooperating with a system (for example, Core Banking System) that executes the transactions. The system that executes the transactions may be a system in the business terminal 3, or a system connected to the outside via the communication network. When the transactions are completed, the business terminal 3 transmits a transaction completion notice to the mobile device 1.

At step 168 of the mobile device 1, the transaction completion notice is received from the business terminal 3 and the transaction input information 133 is deleted. Through the above-described steps, a series of transactions can be completed on the whole.

Hereinafter, the descriptions will be complemented in items (1) to (5).

(1) In the descriptions of FIGS. 1 and 9, the customer previously inputs the transactions by using the mobile device 1. On the other hand, the mobile device 1 is not used, but an installation type terminal (for example, a desktop system PC (Personal Computer)) or a portable type terminal (for example, a notebook-type PC) may be used. Specifically, the processing at steps 161 to 165 that is performed in the mobile device 1 is performed by the installation type terminal or the portable type terminal. Further, the transaction input information 133 and the personalized information 132 acquired up to step 164 are transferred to the mobile device 1, and the mobile device 1 and the business terminal 3 are communicated with each other in the visit destination branch, and thereby the remaining processing at step 166 or later is performed. When the above processing is completed, the transaction input information 133 and the personalized information 132 that are held in the mobile device 1, the installation type terminal, or the portable type terminal are deleted.

(2) In the descriptions of FIGS. 1 and 9, the transaction program in which the transaction contents are previously input is stored in the mobile device 1 of the customer. On the other hand, the transaction program is not arranged in the mobile device 1 but an entity of the transaction program may be arranged in the server 2 as a Web application. At this time, the input template information 131, the personalized information 132, the transaction input information 133, and the account information 134 can be locally stored in the mobile device 1 by using a function of a local storage of Cookie or HTML 5. Alternatively, the above information may be stored in the server 2, and the mobile device 1 and the business terminal 3 may be connected to each other in the visit destination branch at step 361. Then, the business terminal 3 may acquire the above information from the server 2 at step 362. Note, in this case, that the bank desired to be transacted is previously determined and previously-input contents are transmitted to the server 2 of the bank by using the transaction program in the server 2 of the bank. On the other hand, in FIG. 9, even if the bank desired to be transacted is not previously determined, items can be previously input.

(3) When the optimum visit destination branch is calculated, the area group and the transaction group are set to the branch terminal/device information 222 at step 1653, and thereby the search object group is narrowed down. Further, in addition to the area group and the transaction group, the branches may be grouped on the basis of a size of the branch (a large-

scale branch, a medium-scale branch, and a small-scale branch), and a manned branch or an unmanned branch.

(4) When the optimum visit destination branch is calculated, at step 1656, congestion conditions of the branch are determined with reference to online booking conditions or ticket conditions in a number ticket issuer as the congestion conditions of the branch. Depending on the customer, it is considered that the customer does not visit the branch immediately, but desires to appoint a time period and then visit the branch. To cope with the above, the time period to visit the branch may be appointed at the time when the transaction contents are previously input. In this case, on the basis of reservation information or current congestion conditions, the congestion conditions of the branch in the time period are guessed.

(5) When the optimum visit destination branch is calculated, at step 1658, the branch nearer to the present location of the customer is described to be made a priority. Further, for example, not the present location of the customer but information about a business trip of the customer is selected from a map, and the branch nearer to the business trip may be made a priority by using the positional information. Alternatively, the branch nearer to the movement route on the way from the present location to the business trip may be made a priority.

According to the present embodiment as described above, a user knows the visit destination branch in accordance with the previously-input conditions or the desired transaction scheme. Therefore, services appropriate for his or her conditions can be received, and reduction in a waiting time in the branch or understandability of the services is improved. Further, a service provider (for example, the bank) can lead the user who requires a support through the bank staff or the user who requires a specific terminal/device to an appropriate branch. Therefore, the bank staff can support only the user who requires the support. Further, a task load over the bank staffs of the branch or operational conditions of the terminal/device can be made appropriate on the whole.

CLAIMS:

1. A transaction system using mobile device, comprising:

a mobile device (1) that previously performs predetermined transactions;

a business terminal (3) that performs processing of the remaining transactions; and

a server (2), wherein

the mobile device

acquires personalized information including a transaction scheme required by a user who previously inputs the transactions to the mobile device,

acquires, from the server, congestion information in which use conditions of the business terminals of each branch and customer service conditions of bank staffs who can deal with the transactions are collected, and

calculates an optimum visit destination branch in which remaining transactions that are not previously input are processed on a basis of the personalized information, the congestion information, and transaction input information that is previously input arbitrarily by the user,

the business terminal

receives the personalized information and the transaction input information from the mobile device in the visit destination branch, and completes processing of the remaining transactions, and

the mobile device, the business terminal, and the server are connected via a communication network (4).

2. The transaction system using mobile device according to claim 1, wherein

in a calculation of the optimum visit destination branch in which the remaining transactions are processed, the mobile device (1) extracts a transaction input item that has not been input in a previous input of the transactions, and narrows the business terminals (3) necessary for inputting or operating the transaction input items that have not been input, on a basis of transaction operation/device correspondence information in which the transaction input items received from the server (2) are associated with necessary business terminals or business devices.

3. The transaction system using mobile device according to claim 2, wherein

in the calculation of the optimum visit destination branch in which the remaining transactions are processed, with respect to the narrowed business terminals (3), the mobile device (1) sets a branch in which the business terminals are installed and in which the business

terminals can be used in a desired time period to visit the branch of the user, as candidates of the visit destination branch.

4. The transaction system using mobile device according to claim 3, wherein

in the calculation of the optimum visit destination branch in which the remaining transactions are processed, the mobile device (1) narrows a range of calculating for the visit destination branch from a branch list, on a basis of an area group classified according to positional information of each branch and a transaction group classified according to types of transactions that can be dealt with in each branch.

5. The transaction system using mobile device according to claim 3 or 4, wherein

in the calculation for the optimum visit destination branch in which the remaining transactions are processed, on a basis of information about a bank staff that works for each branch, customer service skills that can be dealt with by the bank staff, and skills of the bank staff including a customer service plan in each time period, which are collected from the server (2),

the mobile device (1) narrows, as candidates of the visit destination branch, a branch for which a bank staff having customer service skills necessary for processing the remaining transactions works, and in which the bank staff can meet a user in a desired time period of the user.

6. The transaction system using mobile device according to any one of claims 3 to 5, wherein

in the calculation of the optimum visit destination branch in which the remaining transactions are processed, the mobile device (1) makes a priority a branch near a present location of the user, a branch near a movement destination of the user, or a branch near a movement route from the present location to the movement destination, and narrows the branch as candidates of the visit destination branch.

7. The transaction system using mobile device according to any one of claims 3 to 6, wherein

in the calculation of the optimum visit destination branch in which the remaining transactions are processed, the mobile device (1) holds an item indicating a priority for narrowing the visit destination branches into the personalized information, gives a priority order to the items in accordance with a desire of the user, and narrows candidates of the visit destination branch according to the priority order.

8. The transaction system using mobile device according to any one of claims 3 to 7, wherein

the mobile device (1) does not depend on a specific bank, holds a transaction input template that can be commonly used among banks, and previously inputs transaction contents by using the transaction input template.

9. The transaction system using mobile device according to any one of claims 1 to 8, wherein

on a basis of the personalized information and the transaction input information received from the mobile device (1), the business terminal (3) excludes from the transaction process the transaction scheme that is not desired by the user and already-input items, and thereby constructs the transaction process so that the user inputs only the remaining transaction input items.

10. A transaction system using mobile device, comprising:

an installation type terminal or a portable type terminal that previously performs a predetermined transaction;

a mobile device (1) that holds transaction input information that is previously input from the installation type terminal or the portable type terminal;

a business terminal (3) that performs processing of the remaining transactions; and

a server (2), wherein

the installation type terminal or the portable type terminal

acquires personalized information including a transaction scheme required by a user that previously inputs the transactions with respect to the installation type terminal or the portable type terminal,

acquires, from the server, congestion information in which use conditions of the business terminals of each branch and customer service conditions of bank staffs who can deal with transactions are collected, and

calculates an optimum visit destination branch in which remaining transactions that are not previously input are processed on a basis of the personalized information, the congestion information, and transaction input information that is previously input arbitrarily by the user,

the mobile device

receives and holds the transaction input information from the installation type terminal or the portable type terminal,

the business terminal

receives the personalized information and the transaction input information from

the mobile device in the visit destination branch,

and completes processing of the remaining transactions, and

the installation type terminal or the portable type terminal, the mobile device, the business terminal, and the server are connected via a communication network (4).

11. A transaction method using mobile device for use in a transaction system using mobile device including a mobile device (1) that previously performs predetermined transactions, a business terminal (3) that performs processing of the remaining transactions, and a server (2), comprising:

causing the mobile device to acquire personalized information including a transaction scheme required by a user who previously inputs the transaction to the mobile device, acquire, from the server, congestion information in which use conditions of the business terminals of each branch and customer service conditions of bank staffs who can deal with transactions are collected, and calculate an optimum visit destination branch in which remaining transactions that are not previously input are processed on a basis of the personalized information, and the congestion information, and transaction input information that is previously input arbitrarily by the user; and

causing the business terminal to receive the personalized information and the transaction input information from the mobile device in the visit destination branch, and complete processing of the remaining transactions, wherein

the mobile device, the business terminal, and the server are connected via a communication network (4).