【DESCRIPTION】

【Invention Title】

SYSTEM, METHOD AND COMPUTER PROGRAM FOR EXECUTING MONETARY TRANSACTIONS BASED ON SOCIAL INFORMATION

【Technical Field】

Embodiments relates to a system, a method and a computer program for executing monetary transactions based on social information, and more particularly, to a system, a method and a computer program for executing monetary transactions in which a credit line is established based on information obtained by quantifying trust between users, a loan is executed based on the credit line, and payment is made on the basis of an amount of the loan based on the credit line.

【Background Art】

In a conventional credit loan product of financial institutions, credit depends on an asset and liability list or income in the past such as whether a company of a borrower is listed on the stock market, history of transactions with the corresponding financial institution, payment history of property tax and the like. Thus, there is a limitation that it is calculated based on past data. A purpose of credit assessment is to assess future repayment capabilities. However, conventional credit assessment data is based on historical data, thus it is difficult to accurately reflect the future repayment capabilities. Further, in a conventional credit assessment method, borrowers with little past economic activity or requiring a small loan have difficulty passing the credit assessment.

Recently, in accordance with the development of information communication, in particular, with the advent of the Internet, a speed of information exchange and communication has been increased, and a drastic change in business environments has occurred. In the changed environments, credit may be more important in the economic life of an individual than

any existing criterion up to now, and further, there is a possibility that all transactions will be made based on credit. Accordingly, a new assessment criterion appropriate for the changed environments is required.

【Disclosure】

【Technical Problem】

According to an aspect of the present invention, a system, a method and a computer program for executing monetary transactions based on social information, which are capable of compensating and/or replacing conventional credit assessment data based on historical data by quantifying trust between users, accurately assessing repayment capabilities of the user, allowing loan transactions between the users to be made in a peer-to-peer manner, and allowing payment to be made on the basis of an amount of the loan, may be provided.

【Technical Solution】

According to one embodiment, a system for executing monetary transactions includes: a user management unit configured to store social information of a plurality of users; an account management unit configured to receive a request for establishing a pledge right for an asset from one or more uploaders among the plurality of users and provide a deposit to the uploader based on the pledge right established in response to the request for establishing the pledge right; and a loan execution unit configured to establish a credit line by receiving information of a loan condition for the deposit from the one or more uploaders and execute a loan for one or more downloaders corresponding to information of a loan condition of the established credit line.

In one embodiment, the social information includes one or more of an association information between the plurality of users, personal information of each of the plurality of users, information of a project associated with the plurality of users, and information of a group to which the plurality of users belong.

In one embodiment, the information of the loan condition is set based on one or more of the association information, the personal information, the project information, and the group information, and includes one or more of a loan limit amount, an interest rate on a loan, and a repayment condition. For example, the information of the loan condition may include one or more of a loan limit amount, an interest rate on a loan, and a repayment condition set for a user associated with the uploader. Further, the information of the loan condition may include one or more of a loan limit amount, an interest rate on a loan, and a repayment condition set for a keyword or a combination of keywords of the personal information.

The system for executing monetary transactions according to one embodiment further includes a credit evaluation unit configured to determine a social credit score for each of the plurality of users based on the social information. At this time, the information of the loan condition may include one or more of a loan limit amount determined based on the social credit score, and an interest rate on a loan determined based on the social credit score.

In one embodiment, the loan execution unit may be further configured to receive a request for a pending download in which one or more users specify one or more of a loan amount and a desired interest rate, and execute a loan for the one or more users in response to establishment of a credit line targeting the one or more users and satisfying one or more of the loan amount and the desired interest rate.

In one embodiment, the loan execution unit may be further configured to receive a request for payment using a credit line coinciding with the information of the loan condition of the downloader through an external server, execute a loan for the downloader using the credit line coinciding with the information of the loan condition of the downloader in response to the request for payment, and pay the loan amount to a merchant.

In one embodiment, the loan execution unit may be further configured to receive the loan amount repaid from the downloader, and pay the repaid amount to the uploader

corresponding to the credit line used to execute the loan.

A method for executing monetary transactions according to embodiments may be performed using the system for executing monetary transactions according to one embodiment of the above-described embodiments.

According to one embodiment, a method for executing monetary transactions includes: receiving a request for establishing a pledge right for an asset from one or more uploaders among a plurality of users; providing a deposit to the uploader based on the pledge right established in response to the request for establishing the pledge right; establishing a credit line by receiving information of a loan condition for the deposit based on social information of the plurality of users from the one or more uploaders; and executing a loan for one or more downloaders coinciding with the information of the loan condition of the established credit line among the plurality of users.

In one embodiment, the social information includes one or more of an association information between the plurality of users, personal information of each of the plurality of users, information of a project associated with the plurality of users, and information of a group to which the plurality of users are affiliated.

In one embodiment, the information of the loan condition is set based on one or more of the association information, the personal information, the project information, and the group information, and includes one or more of a loan limit amount, an interest rate on a loan, and a repayment condition. For example, the information of the loan condition may include one or more of a loan limit amount, an interest rate on a loan, and a repayment condition set for a user associated with the uploader. Further, the information of the loan condition may include one or more of a loan limit amount, an interest rate on a loan, and a repayment condition set for a keyword or a combination of keywords of the personal information.

In one embodiment, the establishing of the credit line includes determining a social

credit score for each of the plurality of users based on the social information; and determining one or more of a loan limit amount or an interest rate on a loan based on the social credit score.

The method for executing monetary transactions according to one embodiment further includes receiving a request for a pending download in which one or more users specify one or more of a loan amount and a desired interest rate, and executing a loan for the one or more users in response to establishment of a credit line targeting the one or more users and satisfying one or more of the loan amount and the desired interest rate.

In one embodiment, the executing of the loan for the one or more downloaders includes receiving, by the system for executing monetary transactions, a request for payment using a credit line coinciding with loan condition of the downloader through an external server; and executing a loan for the downloader using the credit line coinciding with the loan condition of the downloader in response to the request for payment, and paying the loan amount to a merchant.

The method for executing monetary transactions according to one embodiment further includes receiving the loan amount repaid from the downloader; and paying the repaid amount to the uploader corresponding to the credit line used to execute the loan.

According to another embodiment, a computer program for executing the method for executing monetary transactions described above in combination with hardware is provided, wherein the computer program may be stored in a computer-readable medium.

【Advantageous Effects】

In accordance with the system and method for executing monetary transactions according to an aspect of the present invention, a plurality of unspecified uploaders who provide lendable funds may establish a credit line by setting a loan condition based on social information to allow a plurality of unspecified downloaders satisfying the loan condition of the credit line to make a loan according to the loan condition, and payment may be performed on

the basis of an amount of the loan based on the credit line.

In the system and method for executing monetary transactions, trust between users is quantified based on the social information, thereby compensating and/or replacing the conventional credit assessment data based on historical data and accurately assessing future repayment capabilities of the user. Further, since the loan is made to the plurality of unspecified downloaders in the peer-to-peer manner using the lendable funds provided by the plurality of unspecified uploaders, provision of funds and a loan can be easily and rapidly made between individual users, unlike the conventional loan method based on a loan contract between an individual and an institution.

【Description of Drawings】

FIG. 1 is a block diagram illustrating a schematic configuration of a system for executing monetary transactions according to an embodiment;

FIG. 2 is a flow chart for describing an operation of a method for executing monetary transactions according to an embodiment;

FIG. 3 is an image illustrating a user interface (UI) of the system for executing monetary transactions according to the embodiment;

FIG. 4 is an image illustrating an UI for establishing a credit line for an associated user by using the system for executing monetary transactions according to the embodiment;

FIG. 5 is an image illustrating an UI for establishing a credit line based on a keyword by using the system for executing monetary transactions according to the embodiment;

FIG. 6 is an image illustrating an UI for establishing a credit line based on a project by using the system for executing monetary transactions according to the embodiment;

FIG. 7 is an image illustrating an UI for establishing a credit line based on a group by using the system for executing monetary transactions according to the embodiment;

FIG. 8 is an image illustrating a download UI using the system for executing

monetary transactions according to the embodiment;

FIG. 9 is a concept diagram illustrating a payment process using the system for executing monetary transactions according to the embodiment; and

FIG. 10 is a concept diagram illustrating a payment process using a system for executing monetary transactions according to another embodiment.

【Mode for Invention】

Hereinafter, embodiments of the present invention will be described in detail with reference to the accompanying drawings.

FIG. 1 is a block diagram illustrating a schematic configuration of a system for executing monetary transactions according to an embodiment of the present invention.

Referring to FIG. 1, a system 1 for executing monetary transactions according to the present embodiment includes an account management unit 11, a loan execution unit 12, and a user management unit 13. According to the embodiment, the system 1 for executing monetary transactions further includes a credit evaluation unit 14. Further, according to the embodiment, the system 1 for executing monetary transactions further includes a communication unit 10.

The system 1 for executing monetary transactions according to embodiments may take the form of entirely hardware or partially hardware and partially software. For example, the system 1 for executing monetary transactions and each unit included therein may refer collectively to hardware and its related software for processing data of particular format and content and/or transmitting and receiving it by an electronic communication method. The term "unit", "module", "device", "terminal", "server" or "system" as used herein is intended to refer to a combination of hardware and software that works by the corresponding hardware. For example, the hardware may be a data processing device including a central processing unit (CPU) or other processor. Furthermore, the software that works by the hardware may refer to

a process being executed, an object, an executable, a thread of execution, and a program.

Each part included in the system 1 for executing monetary transactions according to embodiments is not intended to necessarily refer to a physically separated element. In FIG. 1, the communication unit 10, the account management unit 11, the loan execution unit 12, the user management unit 13, and the credit evaluation unit 14 are illustrated as blocks that are separated from each other, but this is merely a functional division of an apparatus included in the system 1 for executing monetary transactions based on operations executed by the corresponding apparatus. Therefore, according to an embodiment, some or all of the communication unit 10, the account management unit 11, the loan execution unit 12, the user management unit 13, and the credit evaluation unit 14 may be integrated in one same apparatus. Alternatively, one or more of the communication unit 10, the account management unit 11, the loan execution unit 12, the user management unit 13, and the credit evaluation unit 14 may by implanted by an apparatus that is physically separated from another part. For example, the communication unit 10, the account management unit 11, the loan execution unit 12, the user management unit 13, and the credit evaluation unit 14 may be components connected so that they can communicate with each other in a distributed computing environment.

The system 1 for executing monetary transactions according to embodiments may be operated while communicating with one or more user terminals 2 and 3. Users using the system 1 for executing monetary transactions may be divided into one or more uploaders performing upload, and one or more downloaders performing download. In FIG. 1, the user terminal 2 indicates a device used by an uploader, and the user terminal 3 indicates a device used by a downloader.

In the present disclosure, the term "upload" refers to an action of offering, by a user, collateral to the system 1 for executing monetary transactions for an asset (e.g., cash, payment in kind, real estate, securities, and the like) owned by the user to establish a pledge right, and the

term "uploader" refers to a user who performs the upload, that is, the user providing collateral for establishing the pledge right. Further, in the present disclosure, the term "download" refers to an action of borrowing cash from the system 1 for executing monetary transactions, and the term "downloader" refers to a user who performs the download, that is, a borrower. In this regard, the uploader and the downloader do not necessarily refer to different users, and for example, one user may simultaneously be the uploader and the downloader.

The user terminals 2 and 3 may be a mobile communication terminal such as a smartphone, a personal computer, a notebook computer, a personal digital assistant (PDA), a tablet PC, a set-top box for an Internet protocol television (IPTV), or any other computing device. The uploader and the downloader may use a loan service based on social information by accessing the system 1 for executing monetary transactions using the user terminals 2 and 3. For example, the system 1 for executing monetary transactions according to an embodiment may be a web server providing a web site with a network address, and the uploader and the downloader may use a loan service by accessing the system 1 for executing monetary transactions through an application (app) and/or a web browser executed on the user terminals 2 and 3. The web site for providing the loan service may be based on hyper text markup language (HTML), extensible markup language (XML), JavaScript object notation (JSON), or other different language, and is not limited to a particular format.

The system 1 for executing monetary transactions according to embodiments establishes a pledge right for the asset of the uploader and provides a predetermined amount of deposit to the uploader based on the established pledge right. The deposit may be cash, or virtual money that may be exchanged for cash at a predetermined rate. The uploader may set a loan condition based on social information for the deposit provided to the uploader to establish a credit line. For example, the uploader may set a loan condition (e.g., interest rate on a loan, a loan limit amount, etc.) for other users associated with the uploader. Further, the

uploader may set a loan condition based on a keyword of personal information on social information of the users regardless of an association with the uploader, or may also set the loan condition based on a specific project.

Further, the system 1 for executing monetary transactions according to embodiments may execute a loan for one or more downloaders using deposits of one or more uploaders in response to a download request from the downloaders. The loan is executed based on the loan condition set by the uploader. For example, if the uploader specifies a loan limit amount for a specific user associated with the uploader, when the specific user borrows money as a downloader, only the loan limit amount specified by the uploader is subtracted from the deposits of the uploader, and a loan is made to the downloader in cash as much as the subtracted amount. Even in a case of the loan condition based on a keyword or a project, the loan may be made in the same manner as described above. If the downloader repays a principal and pays an interest to the system 1 for executing monetary transactions, the paid amount is transferred in cash to a financial institution account of the uploader who provided the deposit for the loan. At this time, the system 1 for executing monetary transactions may deduct a predetermined commission and transfer only the remaining amount to the uploader.

Legal loan contracts through the system for executing monetary transactions according to embodiments are made at a point in time at which one or more downloaders perform download, respectively, and specifically, may include (i) a loan contract between an operator of the system for executing monetary transactions and each downloader who is a debtor, (ii) a transfer agreement contract in which a downloader agrees to transfer of loans by the operator of the system for executing monetary transactions, and (iii) a loan transfer contract in which the operator of the system for executing monetary transactions transfers the loans to one or more uploaders based on the transfer agreement contract. Each contract described above may be made in an electronic commerce method through the system for executing

monetary transactions. However, this is merely an illustrative example, a type of legal contract, contracting parties, contracting systems, and the like may be various as needed for actual implementation, and is not limited thereto.

According to an embodiment, the system 1 for executing monetary transactions includes the communication unit 10. The communication unit 10 provides a function that allows the system 1 for executing monetary transactions to communicate with the user terminals 2 and 3 and/or external servers 4 and 5, such that operations of the user management unit 13, the account management unit 11, the loan execution unit 12, and/or the credit evaluation unit 14 to be described below may be performed. Communication methods via the communication unit 10 include any communication method that allows networking between objects, and are not limited to wired communication, wireless communication, 3G, 4G, or other methods. For example, the communication unit 10 may communicate by at least one communication method selected from the group consisting of Local Area Network (LAN), Metropolitan Area Network (MAN), Global System for Mobile Network (GSM), Enhanced Data GSM Environment (EDGE), High Speed Downlink Packet Access (HSDPA), Wideband Code Division Multiple Access (W-CDMA), Code Division Multiple Access (CDMA), Time Division Multiple Access (TDMA), Bluetooth, Zigbee, Wi-Fi, Voice over Internet Protocol (VoIP), LTE Advanced, IEEE802.16m, WirelessMAN-Advanced, HSPA+, 3GPP Long Term Evolution (LTE), Mobile WiMAX (IEEE 802.16e), UMB (formerly EV-DO Rev. C), Flash-OFDM, iBurst and MBWA (IEEE 802.20) systems, HIPERMAN, Beam-Division Multiple Access (BDMA), World Interoperability for Microwave Access (Wi-MAX) and ultrasonic communication, but is not limited thereto.

The user management unit 13 receives affiliation requests of users for a loan service and manages affiliation information of a plurality of users, and further receives social information for the users. In the present disclosure, the expression "social information" refers

to a series of information related to respective individual users having personal information and an association between such users. According to an embodiment, the user management unit 13 may receive social information from a server 4 providing a separate social networking service (SNS) such as Facebook, Twitter, and the like through an application programming interface (API) of the corresponding service at the time of affiliation of the users. Alternatively, the user management unit 13 may also receive private information of the users and/or information of an association between the users independently from the conventional SNS to establish social information.

Further, the user management unit 13 may receive account information of a financial institution of the users. The user management unit 13 may receive the account information of the financial institution such as a bank, and communicate with a financial institution server 5 to perform verification on the corresponding account at the time of affiliation of the users. The financial institution accounts of the users may be linked with each user at the time of using the system 1 for executing monetary transactions, such that the user becomes an uploader thus to change the cash in the account into deposit for the loan service, or may be utilized for use of paying an interest on an amount lent to the downloader based on the deposit to the uploader.

The account management unit 11 is configured to establish a pledge right for an asset of a user who will be an uploader, and provide a deposit determined based on the established pledge right to the uploader. In the present disclosure, the expression "establishment of a pledge right" includes a case of receiving cash from the uploader, changing the cash into deposit, and performing the payment. For example, if the uploader intends to change some or all of a balance in the uploader's financial institution account linked with the loan service into deposit, the account management unit 11 transfers an amount to be changed into the deposit from the uploader's financial institution account to an account of the system 1 for executing monetary transactions, and provides a deposit as much as the transferred amount or deposit

corresponding to a predetermined percentage of the transferred amount. Alternatively, in this process, a predetermined commission may be deducted from the transferred amount, and only the remaining amount may be changed into deposit. Alternatively, if the uploader intends to have the deposit with collateral such as securities, payment in kind, real estate, and the like of the uploader, the account management unit 11 may perform assessment of value of the collateral and make a pledge right establishment contract through electronic commerce, and provide the deposit corresponding to the established pledge right to the uploader.

According to an embodiment, the deposit provided to the uploader may be established so as to have a value as much as a haircut value corresponding to a predetermined percentage of a fair value for the asset provided by the uploader as collateral. The fair value may be a value assessed by a separate professional such as a loan assessor, an appraiser, or the like, and the haircut value represents a value reduced by applying a predetermined rate to the fair value. A price difference between the fair value and the haircut value is to reduce a risk that an operator of the system 1 for executing monetary transactions will take. For example, the system 1 for executing monetary transactions may also provide a deposit corresponding to only 80% of the fair value of the collateral provided by the uploader. However, this is only an illustrative example, and according to another embodiment, deposit as much as a value of the collateral of the uploader may be provided to the uploader.

The loan execution unit 12 receives a download request from a user who will become a downloader, and executes a loan to the downloader in response to the received download request. Transfer of the loan amount itself is made in such a manner that the transfer is made from an account of the system 1 for executing monetary transactions to a financial institution account of the downloader, but the loan amount is determined based on the deposit of a credit line established by one or more uploaders so that the corresponding downloader may download. Further, a ratio at which the deposit of each uploader is used is determined based

on a loan condition set when each uploader establishes the credit line.

In the present disclosure, the expression "establishment of a credit line" refers to an action of setting, by the uploader, a loan condition so that the downloader may download the deposit of the uploader to provide loan execution rights to the system 1 for executing monetary transactions. For example, the uploader may establish the credit line by specifying a loan limit amount for each of other users who have a relationship of a user associated with the uploader (for example, a friend or follower of SNS). Further, at this time, the uploader may also determine an interest rate on a loan for each associated user. Alternatively, the interest rate on a loan for each associated user may be determined by the system 1 for executing monetary transactions in a lump without needing for each uploader to determine. As another example, the uploader may specify a loan limit amount for a keyword or a combination of keywords of personal information of other users to establish a credit line so as to allow it to be downloaded by a downloader satisfying the corresponding keyword or the combination of keywords. The keyword may also be information associated with private information such as age, residence, a type of business in which a user works, a school from which a user graduated, an institution to which a user belongs, and a social credit score. As another example, the uploader may also establish a credit line for a specific project such as a specific company, a specific type of business, community chest, and the like, rather than an individual.

The loan execution unit 12 may directly pay cash to a financial institution account of the downloader in response to the download request, or pay virtual money as much as requested to download by the downloader to the downloader and allow the downloader to change the virtual money into cash again. In this case, when changing the virtual money into cash, the system 1 for executing monetary transactions may deduct a predetermined commission and pay only the remaining amount in cash.

Further, the loan execution unit 12 may process repayment of a loan amount from the

downloader. A method of repayment of the loan amount may be based on monthly repayment for a predetermined period (e.g., 36 months or 60 months), but it is not limited thereto. Further, it is possible to allow the downloader to perform callable payment if a predetermined period (e.g., 1 week) or more elapses from the loan transaction. The repaid loan amount and the interest on the loan amount are paid to the financial institution account of the uploader again through the account management unit 11.

In the system 1 for executing monetary transactions according to embodiments, the credit line may be likened to data transmission through a transmission protocol in a peer-to-peer (P2P) manner like torrent. When the uploader establishes a credit line by setting a filtering condition for a loan such as an associated user, a keyword, a project, or the like, if there is a download request from a downloader satisfying the corresponding filtering condition, a loan is automatically made by using the deposit of the uploader. The uploader sets a loan condition based on social information, but there is no need for the uploader to know that any user makes a loan for the deposit of the uploader as a downloader, and similarly, there is no need for the downloader to know that the loan amount made by the downloader is based on the deposit of any uploader. Nevertheless, the uploader may obtain an interest on the deposit from a plurality of unspecified downloaders as benefit by establishing a credit line, and the downloader may easily make a loan based on the deposit of a plurality of unspecified uploaders that establish a credit line coinciding with the social information of the downloader. Further, the operator of the system 1 for executing monetary transactions may make a loan to downloaders by using the deposit of the uploaders without a separate own fund, and obtain some of associated money in a process of changing money or paying an interest as a commission.

According to an embodiment, the downloader may immediately make a loan as much as a total amount of the credit line established for the downloader, and when intending to borrow an amount exceeding the total amount, or intending to make a loan by setting a specific

desired interest rate on the download, the downloader may request pending download. Since a contract between the system 1 for executing monetary transactions and the downloader is made at the moment of download, the loan contract does not occur yet in a pending download state. If other user establishes a credit line for the corresponding downloader such that a total amount of the credit line is increased, other user establishes a credit line with an interest rate desired by the corresponding downloader, or the downloader may perform download at a desired interest rate as a credit rating of the downloader is increased in future, an amount of money in a pending download state is automatically downloaded such that the loan is made.

Further, according to an embodiment, in a case in which the uploader establishes a credit line based on a keyword or a combination of keywords of personal information, when the uploader himself or herself also satisfies the keyword or the combination of keywords, the uploader may become a download subject for the deposit of the uploader himself or herself. That is, the uploader has deposit by providing an asset rather than cash as collateral to the system 1 for executing monetary transactions, and may become a downloader for the deposit of the uploader himself or herself to borrow the cash from the system 1 for executing monetary transactions.

According to an embodiment, the system 1 for executing monetary transactions includes the credit evaluation unit 14. The credit evaluation unit 14 of the system 1 for executing monetary transactions assesses credit of each user to determine an interest rate on a loan of a case in which each user becomes a downloader. The credit evaluation unit 14 may determine a social credit rating of each user and an interest rate on a loan for each social credit rating by using conventional quantitative credit assessment data obtained by communicating with the external financial institution server 5, and the like, and qualitative information obtained by quantifying trust between the users through the system 1 for executing monetary transactions together. The interest rate on a loan for each social credit rating may be utilized

as a part of the loan condition when each uploader establishes a credit line.

Credit assessment is performed for the shake of assessing future repayment capabilities, but there is a limitation that it is calculated based on past quantitative data such as current asset and liabilities, income in the past and the like. On the other hand, associated users such as friends may qualitatively assess each other that how much they are reliable and act responsibly, thus by quantifying information of an association between the users (e.g., the number of associated users, the number of credit lines established by an associated user for a corresponding user, a sum of loan limit amounts of the credit lines, and the like), qualitative information for the credit assessment may be obtained. The credit evaluation unit 14 may determine a reasonable interest rate for each user by using the conventional credit assessment data and the qualitative information together.

For example, the credit evaluation unit 14 may determine a social credit score (SCS) by putting the conventional credit assessment data and the assessment based on the social information through the system 1 for executing monetary transactions together. The social credit score may be determined by adding up a value obtained by quantifying credit through social information for each user and the conventional credit assessment data while applying a predetermined weighting thereto. Next, the credit evaluation unit 14 may determine a social credit rating (SCR) by dividing the social credit score into predetermined sections, and determine a social credit curve (SCC) by applying an interest rate on a loan to each social credit rating based on a market situation. For example, the social credit rating and the social credit curve may be determined as shown in Table 1 below, but it is not limited thereto.

[Table 1]

SCS	SCR	SCC
950 to 999	AAA	5.00%
900 to 949	AA+	6.41%
867 to 899	AA0	7.84%
833 to 866	AA-	8.80%

800 to 832	A+	9.78%
767 to 799	A0	10.76%
733 to 766	A-	11.75%
700 to 732	BBB+	12.75%
667 to 699	BBB0	13.76%
633 to 666	BBB-	14.78%
600 to 632	BB+	15.81%
567 to 599	BB0	16.85%
533 to 566	BB-	17.90%
500 to 532	B+	18.96%
450 to 499	B0	20.03%
400 to 449	B-	21.65%
200 to 399	C	23.29%
to 199	D	30.11%

FIG. 2 is a flow chart for describing an operation of a method for executing monetary transactions according to an embodiment of the present invention, FIGS. 3 to 8 are images illustrating user interfaces (UIs) for executing the method for executing monetary transactions using the system for executing monetary transactions, and FIG. 9 is an image illustrating an example of a payment process using the system for executing monetary transactions according to the embodiment of the present invention. Referring to FIGS. 2 to 9, the system and method for executing monetary transactions according to embodiments will be described in more detail.

In FIG. 2, a block 1 illustrates the system 1 for executing monetary transactions, and blocks 2 and 3 illustrate the uploader and the downloader, respectively. As described above with reference to FIG. 1, the uploader and the downloader uses the system 1 for executing monetary transactions by using the user terminals 2 and 3, respectively. However, for the convenience of explanation, in FIG. 2, the uploader and the downloader using their user terminals are illustrated by the blocks 2 and 3, respectively.

Referring to FIG. 2, first, the uploader 2 may request upload to the system 1 for executing monetary transactions (S1). The upload is an act of establishing a pledge right to the system 1 for executing monetary transactions for an asset of the uploader 2, and refer to an

act of changing some or all of a balance of a financial institution account of the uploader 2 associated with the system 1 for executing monetary transactions into deposit to be used for a loan service, or establishing a pledge right to the system 1 for executing monetary transactions for payment in kind, securities, real estate, and the like of the uploader 2 through electronic commerce.

When the upload is requested, the system 1 for executing monetary transactions establishes a pledge right for the asset that is requested to upload and provides a deposit corresponding to the established pledge right to the uploader (S2). In a case of cash, transfer from the financial institution account of the uploader to the account of the system 1 for executing monetary transactions is made, and an amount calculated by applying a predetermined haircut rate and/or a commission to the transferred amount is provided to the uploader as deposit. The deposit is virtual money for a loan service, and providing a deposit to the uploader specifically means that information of an amount of deposit associated with the corresponding uploader is stored in a database of the system 1 for executing monetary transactions.

FIG. 3 is an image illustrating an UI using the system for executing monetary transactions according to the embodiment of the present invention. Referring to an uppermost portion of FIG. 3, the uploader may pay (that is, establishing collateral) a balance of a financial institution account associated with the system for executing monetary transactions in an account of the system for executing monetary transactions, or may withdraw some of an amount of money taken as collateral in the system for executing monetary transactions (that is, releasing collateral) and pay the same into the financial institution account of the uploader again. Further, the user may perform upload by setting an upload amount or select reupload of repaying an amount of money downloaded by the user, and may also perform early repayment (pre-reupload). Furthermore, the user may also perform download by setting a

download amount. A download UI will be described in more detail with reference to FIG. 8.

Further, an upload UI screen may display a balance (Cash) of a financial institution account associated with the system for executing monetary transactions, a balance of deposit ("GoodLuck coin" in an example of FIG. 3) which is virtual money, information of loans (Downloadables) of a corresponding user, a maturity and an interest rate, collateral information, a total amount of asset (Net Asset), information of a total amount to be reuploaded (that is, repaid) by the corresponding user (To Reupload), a maturity and an interest, reuploading amount information indicating an amount of loan to be repaid within 30 days from now, a total amount that may be uploaded now and the like. As an example, the collateral may be divided into securities such as stocks, a bond, deposit, and the like, and automobile collateral (Auto), each of which may be displayed in a form of [currently associated amount/total assessed value]. In the example of FIG. 3, the user may perform upload as much as $7,000 which is a sum of $3,000 of cash, $3,000 of securities, and $1,000 of an automobile. However, a type and a display form of collateral for upload are not limited to those illustrated in FIG. 3.

Furthermore, the upload UI screen may further display a total amount and limit amount of money downloaded by the user from the credit line of associated users (in the example of FIG. 3, "Facebook Friends"), the number of associated users that perform download and the total number of associated users, a total amount and limit amount of money downloaded by the user from the credit line based on the keyword, the number of credit lines based on the keyword from which the user downloads and the total number of credit lines based on the keyword which is established aiming the user, a total amount and limit amount of money downloaded by the user from the credit line based on a project, the number of credit lines based on the project from which the user downloads and the total number of credit lines based on the project corresponding to the user, a total download amount and a limit amount of the user and the like.

However, the above UI described with reference to FIG. 3 is merely an illustrative example, and it will be easily understood by a person skilled in the art that a form displayed on an actual screen may be different from the UI depending on an implementation form of the loan service.

Referring again to FIG. 2, the uploader may establish a credit line for deposit of the uploader (S3). Establishment of a credit line is to allow a downloader to make a loan based on the deposit by setting a predetermined loan condition, and the loan condition is determined based on the social information. For example, a credit line may be established by setting a loan limit amount and/or an interest rate on a loan for associated users of the uploader, by setting a loan limit amount and/or an interest rate on a loan for a keyword or a combination of keywords of personal information of the users, or by setting a loan limit amount and/or an interest rate on a loan for a project such as a specific company, a specific type of business, community chest and the like.

In FIG. 2, requesting upload (S1) and establishing a credit line (S3) are illustrated as separate steps, which are merely an illustrative example, and according to another embodiment, the credit line may also be established by setting a loan condition at the time of requesting upload.

FIG. 4 is an image illustrating an UI for establishing a credit line for an associated user by using the system for executing monetary transactions according to the embodiment of the present invention.

Referring to FIG. 4, the uploader may establish a credit line by setting a predetermined loan limit amount of a total amount of the credit line that can be established by the user (Total Trust Amount) for each associated user ("Taejin" and "Taesung" in FIG. 4). The same loan limit amount (e.g., $50) may be identically applied to all associated users, but loan limit amounts for respective users may also be determined differently from each other.

For example, the uploader may determine a loan limit amount for each associated user by selecting a circle (deviant crease lines indicate the selected circle) as much as the loan limit amount in a circle gauge displayed on the UI screen so that each circle represents a predetermined amount of money. However, this is merely an illustrative example, and an UI for determining, by the uploader, a loan limit amount for an associated user may be different from that described above.

Further, in an example of FIG. 4, an interest rate on a loan is set to a fixed interest rate (6.0 %), but according to another embodiment, the uploader may directly determine the interest rate on a loan for each associated user.

Meanwhile, FIG. 5 is an image illustrating an UI for establishing a credit line based on a keyword by using the system for executing monetary transactions according to the embodiment of the present invention.

Referring to FIG. 5, the uploader may set a loan condition for a predetermined keyword or a combination of keywords corresponding to personal information on social information of users. The personal information may include age, residence, a type of business in which a user works, a school from which a user graduated, an institution to which a user belongs, and a social credit score (SCS) and the like. The uploader may establish a credit line by setting a loan limit amount for each downloader, a total amount of lendable money of the credit line (Credit Line Amount), and/or a repayment condition (e.g., monthly repayment for 36 months or 60 months) while setting one or a plurality (e.g., a combination of residence in Seoul, a master's degree, and working in a listed company) of the personal information as a filtering condition.

According to an embodiment, the uploader may perform setting so that a fixed interest rate (e.g., 6.0 %) is applied to the credit line established based on the keyword. However, according to another embodiment, the uploader may also perform setting so that the

interest rate is applied to the credit line established based on the keyword, based on the above social credit curve (SCC) described with reference to Table 1. For example, the uploader may determine the interest rate on a loan by setting an interest rate value (Spread) (e.g., -2.5 %) to be moved in parallel on the social credit curve (SCC). In this case, it is advantageous that the uploader may have a certain extent of right for the interest rate, and even in a case of downloaders satisfying the keyword or the combination of keywords, different interest rates may be applied depending on a social credit rating of each downloader.

Further, FIG. 6 is an image illustrating an UI for establishing a credit line based on a project by using the system for executing monetary transactions according to the embodiment of the present invention.

In FIG. 6, a figure on the left is an image representing a specific project, for example, a specific company, a specific type of business, community chest and the like. However, this is merely an illustrative example, and the project need not be necessarily represented in a form of logo, and may also be displayed in other different forms as long as the uploader may recognize information on the project. The uploader may establish a corresponding credit line for a project by setting a loan limit amount and an interest rate on a loan for each project to display trust of his or her credit (Trust).

Further, FIG. 7 is an image illustrating an UI for establishing a credit line based on a group by using the system for executing monetary transactions according to the embodiment of the present invention.

Referring to FIG. 7, the uploader may establish a credit line for members of a group by setting a loan condition for the group including one or a plurality of users. The group may be made by automatically selecting users satisfying a specific condition (e.g., a social credit rating (SCS) of 800 or higher) among users of the system for executing monetary transactions, or may be made up of users directly affiliating the group. Further, the group may be an open

type group that every user satisfying the affiliating condition may affiliate, or a closed type group that only a user receiving invitation from a group organizer or other members may affiliate. Further, the loan condition for a group may include a total limit amount of a credit line for the group (Total Credit Limit), a limit amount of a credit line per member (Credit Limit/Person) and an interest rate on a loan, and the like, but it is not limited thereto.

Hereinabove, establishment of a credit line based on each of the associated user, the keyword, the project, and the group has been described with reference to FIGS. 4 to 7. However, this is merely an illustrative example, and a form in which the credit lime is established using the system for executing monetary transactions is not limited thereto. For example, download requests from respective downloaders are separately transferred to a plurality of uploaders, respectively, and each uploader may review a purpose of download, a download request amount, a desired interest rate and/or a repayment condition stated in the download requests of the downloaders, and then determine whether to establish a credit line for each individual download request. Further, even if the uploader approves the download request for the downloader, the uploader may determine whether to establish a credit line to satisfy all conditions stated in the download request, or to establish a credit line by directly specifying a loan limit amount, an interest rate, and/or a repayment condition.

Referring again to FIG. 2, the system 1 for executing monetary transactions may receive a download request from one or more downloaders (S4), and may execute a loan for the downloader using deposits of one or more uploaders in response to the download request (S5). The loan is made according to a loan condition based on the social information set by the uploader. For example, when the uploader sets a loan limit amount for a specific associated user by using the above UI described with reference to FIG. 4, and the specific associated user requests download, a loan is made for the specific associated user within a range of the loan limit amount set by the uploader of deposit of the uploader. However, direct subjects of the

loan are the system 1 for executing monetary transactions and the downloader 3. Specifically, the loan may be executed by transfer from the financial institution account of the system 1 for executing monetary transactions to a financial institution account of the downloader associated with the system 1 for executing monetary transactions. Further, when the loan is executed, subtraction from the deposit of the uploader may be performed as much as an amount of money lent to the downloader (S6).

FIG. 8 is an image illustrating a download UI using the system for executing monetary transactions according to the embodiment of the present invention.

Referring to FIG. 8, the downloader may download, that is, borrow money by setting a purpose (Purpose), a maturity (Maturity), and a download amount (Download Amount). The maturity may be configured so as to be selected by the downloader from predetermined limited choices (e.g., monthly repayment for 36 months or 60 months), but it is not limited thereto. Further, the downloader may also determine to perform download while excluding an amount of money uploaded by associated users (in an example of FIG. 7, "Facebook Friends"). Furthermore, a download UI screen may further display a minimum interest rate (Min rate), a maximum interest rate (Max rate), and an average interest rate (Average rate) for a downloaded amount, a monthly repayment amount (Monthly Upload) and the like.

According to an embodiment, if a desired download amount is larger than a total amount of currently downloadable money, and/or if there is an interest condition desired by the downloader, the downloader may also select pending download (Wait Download) by setting an amount to be downloaded and an acceptable maximum interest rate. Even in this case, the downloader may exclude an amount of money uploaded by the associated user. Thereafter, if the downloader may perform download at an interest rate desired by the downloader as a downloadable amount is increased, a credit line is established with the interest rate desired by the downloader, or a credit rating of the downloader is increased, download of an amount in a

pending download state may be automatically performed.

Referring again to FIG. 2, the downloader 3 reuploads (that is, repays) a principal and pays an interest to the system 1 for executing monetary transactions according to an interest rate and repayment condition set at the time of download (S7). The prepayment may be performed by transfer from the financial institution account of the downloader 3 associated with the system 1 for executing monetary transactions to the account of the system 1 for executing monetary transactions. Next, the system 1 for executing monetary transactions pays the repaid principal and the paid interest from the downloader 3 to the uploader 2 (S8). Similarly, the payment to the uploader 2 may be performed by transfer from the account of the system 1 for executing monetary transactions to the financial institution account of the uploader 2 associated with the system 1 for executing monetary transactions. At this time, the system 1 for executing monetary transactions may also deduct a predetermined commission and transfer only the remaining amount to the financial institution account of the uploader 2.

That is, describing a case of uploading cash as collateral by way of example, operations of the system for executing monetary transactions according to the embodiments described with reference to FIG. 2 and the like may be summarized as shown in Table 2 below.

[Table 2]

Account classification	**Balance of associated account**	**Deposit (Virtual money)**	**Loans (Receivables)**	**Loans (Payables)**	**Net asset**
Uploader pays cash	Uploader increase	-	-	-	Uploader increase
Uploader performs upload	Uploader decrease	Uploader increase	-	-	-
Credit is established	-	-	-	-	-
Downloader performs download	Downloader increase	Uploader decrease	Uploader increase	Downloader increase	-

Interest accrues			Uploader increase	Downloader increase	Uploader increase and downloader decrease
Downloader performs reupload (repayment)	Downloader decrease and uploader increase		Uploader decrease	Downloader decrease	

According to an embodiment, executing a loan for the downloader (S5) and making subtraction from deposit according to the executing (S6) are performed as a part of a payment process for an external server (not illustrated). Similar to that even when a purchaser does not have money in his or her pocket, the purchaser may purchase an article or service using a credit card and pay off the card bills on a payment date later, according to the present embodiment, the downloader may use the system 1 for executing monetary transactions in a manner that the downloader borrows money for an article or service from an accessible credit line and repays the loan amount later.

FIG. 9 is a concept diagram illustrating a payment process using the system for executing monetary transactions according to the embodiment of the present invention.

Referring to FIG. 9, when the downloader 3 purchases an article or service through an external server of a merchant 6 such as an online shopping mall, the downloader 3 may determine to make payment by borrowing money as much as a price of the article or service from the credit line from which the downloader 3 can perform download. This may be understood as similar to that when a consumer using a conventional credit card purchases an article or service from a credit card merchant, the consumer makes payment through a card approval without paying in cash.

In order to implement payment based on the credit line, a communication module for requesting payment through communication with the system 1 for executing monetary

transactions according to the present embodiment is installed in the external service of the merchant 6 in advance. The merchant 6 requests an approval for payment based on the credit line through communication with the system 1 for executing monetary transactions, and if the request is approved, provides the article or service to the downloader 3. As a part of the approval process, the server of the merchant 6 may receive authentication information on the downloader requesting payment and transmit the received information to the system 1 for executing monetary transactions. If the payment based on the credit line is requested, the system 1 for executing monetary transactions may check a lendable amount from the credit line to which the downloader requesting payment is accessible, and if an amount requested to be paid is smaller than the lendable amount, make a loan as much as the requested amount from the credit line.

According to an embodiment, if there are a plurality of credit lines from which the downloader can perform download, the system 1 for executing monetary transactions selects a credit line through which a loan is to be made according to a predetermined rule. For example, the system 1 for executing monetary transactions may preferentially make a loan from a credit line with a low interest rate on a loan, or may preferentially make a loan from a credit line with a lone maturity. Alternatively, if there are a plurality of credit lines having the same loan condition, the system 1 for executing monetary transactions may divide an amount of payment as many as the number of corresponding credit lines, thereby making the same amount of loan from the plurality of credit lines.

After the approval of the payment based on the credit line, the system 1 for executing monetary transactions pays money to the merchant 6 according to a predetermined period or a point in time. For example, the system 1 for executing monetary transactions may pay money to the merchant 6 on a date (T+3d) after a predetermined processing period (e.g., 3 days) elapses from a date (T) of purchase of the article or service. This may be understood as

similar to that a conventional credit card institution pays money to the merchant after 3 days from the credit card approval. However, the point in time, at which the payment from system 1 for executing monetary transactions according to the present embodiment to the external server 6 is made, is not limited thereto. Meanwhile, the system 1 for executing monetary transactions subtracts an amount corresponding to the paid money from deposit of the uploader 2 establishing the credit line used by the downloader.

The downloader 3 repays the amount paid using the credit line to the system 1 for executing monetary transactions on a date (T+1M) after a predetermined grace period (e.g., one month) from the payment date. This may be understood as similar to that a user of the conventional credit card pays off the used amount of the credit card on a payment date for each month. The system 1 for executing monetary transactions deducts the repaid amount from the amount of loan of the downloader 3. Further, the system 1 for executing monetary transactions pays an amount of money corresponding to the repaid amount of the downloader 3 to the financial institution account of the uploader 2.

In the payment process using the credit line, an amount B actually paid by the system 1 for executing monetary transactions to the merchant 6 may be smaller than an amount A paid by the downloader 3 to the merchant 6 using the credit line. This may be understood as similar to that when a consumer performs payment using the credit card in the conventional credit card merchant, the merchant may not receive an original amount paid but receives only an amount after a predetermined merchant commission is deducted from the credit card institution. In this case, an amount corresponding to the price difference between the paid amount A and the paid amount B is diverted to a benefit for one or more of the system 1 for executing monetary transactions, the uploader 2 and the downloader 3, thereby promoting utilization of payment using the system 1 for executing monetary transactions.

For example, a case in which the amount A paid by the downloader 3 to the merchant

6 using the credit line is 1,000,000 won, and the amount B paid by the system 1 for executing monetary transactions to the merchant 6 is 970,000 won will be assumed. In this case, the downloader 3 receives cashback of 10,000 won in reward for utilization of payment using the credit line, and may repay 990,000 won C that is the remaining amount after deduction of the cashback amount from the paid amount A to the system 1 for executing monetary transactions. Further, the uploader 2 may receive 980,000 won D that is an amount obtained by adding up the amount B paid to the merchant 6 and a benefit of 10,000 won in reward for provision of the credit line. A price difference between the repayment amount of 990,000 won C of the downloader 3 and the amount paid to the uploader 2 of 980,000 won D becomes a benefit of the operator of the system 1 for executing monetary transactions. As a result, the benefit of 30,000 won incurred from the merchant 6 by utilizing the payment using the credit line was uniformly distributed to the system 1 for executing monetary transactions, the uploader 2 and the downloader 3. However, the benefit distribution method according to the example as described above is merely an illustrative example, and is not intended to limit the embodiments of the present invention in any aspect. When the credit line is utilized in payment through the system for executing monetary transaction according to the embodiment, an expected earning rate of each of the uploader, the downloader and the operator of the system for executing monetary transactions is complexly determined depending on a payment commission charged for payment through the credit line, whether an interest-free loan is provided at the time of payment through the credit line, a provision period of the interest-free loan, a loss ratio, and the like, and may be appropriately adjusted by the operator of the system for executing monetary transactions, thus is not limited to any particular form.

In the above example described with reference to FIG. 9, the case, in which the payment using the credit line is made by communication between the payment module installed in the server of the merchant 6 and the system 1 for executing monetary transactions,

has been described. However, this is merely an illustrative example for the convenience of explanation, and the process of approving a request for payment using the credit line and performing payment may also be performed by further passing through a server of one or more external payment subjects.

FIG. 10 is a concept diagram illustrating a payment process using a system for executing monetary transactions according to another embodiment of the present invention.

Referring to FIG. 10, a reading device provided by a point of sales (POS) or software as a service (SaaS) operator for payment may be provided in the merchant 6 in which the payment using a credit line is possible. The payment using the credit line may be performed by requesting payment to the reading device by allowing a real card like the conventional credit card to be read by the reading device or by using an electronic device such as a cellular phone. In the present embodiment, a case in which a real card for payment using the credit line is issued by a credit card issuer similar to the conventional credit card will be described by way of example.

When the payment using the credit line is requested, the reading device such as a POS device provided in the server of the merchant 6 or the merchant 6 requests a payment approval to a server of a payment processor 7, and the payment processor 7 may request a payment approval to a server of a card issuer 8 issuing the card for payment using the credit line. The card issuer 8 communicates with the system 1 for executing monetary transactions, and the system 1 for executing monetary transactions checks an amount lendable to the downloader 3 requesting the payment may borrow from the credit line, and if the amount request to be paid is smaller than the lendable amount, may approve the payment. The payment approval history is transferred to the merchant 6 through the card issuer 8 and the payment processor 7 again, such that the merchant 6 may provide a product and/or service to the downloader 3 after confirming the payment approval.

Meanwhile, the system 1 for executing monetary transactions pays an amount requested to be paid to the card issuer 8, and the card issuer 8 pays the paid amount to the payment processor 7 again. Further, the payment processor 7 pays the paid money to a statement acquirer 9, and the statement acquirer 9 may pay the money to the merchant 6 according to a predetermined period or a predetermined point in time. For example, the statement acquirer 8 may pay money to the merchant 6 on a date (T+3d) after a predetermined processing period (e.g., 3 days) elapses from a date (T) of purchase of the article or service.

In the above process, each of the payment processor 7, the card issuer 8, and the statement acquirer 9 may acquire some of the transferred amount as a commission, thereby promoting utilization of the payment using the credit line according to the present embodiment. Further, a point in time at which the payment is made from the system 1 for executing monetary transactions to the card issuer 8, a point in time at which the payment is made from the card issuer 8 to the payment processor 7, and a point in time at which the payment is made from the payment processor 7 to the statement acquirer 9 may be determined according to an agreement between relevant subjects. Furthermore, a point in time at which each subject performs the payment and a rate of commission acquired by each subject may be different from those of other subjects.

Referring to FIG. 10, the subjects relevant to the payment included in the above described embodiment are merely illustrative and the payment processor 7, the card issuer 8 and the statement acquirer 9 need not necessarily separately exist in order to implement the payment using the credit line. For example, in another example, the card issuer 8 and the statement acquirer 9 may be the same institution, and further, the payment processor 7 and the card issuer 8 may be the same institution.

The operation by the method for executing monetary transactions according to the embodiments as described hereinabove may be implemented, at least in part, as a computer

program and recorded in a computer-readable recording medium. The computer-readable recording medium for recording the program for implementing the operation by the method for processing usage information of a corporate card according to the embodiments includes any type of recording device in which computer-readable data is stored. Examples of the computer-readable recording medium include ROM, RAM, CD-ROM, magnetic tape, floppy disks, and optical data storage devices, and the computer-readable recording medium may further be implemented in the form of a carrier wave (e.g., transmission over the internet). Furthermore, the computer-readable recording medium may be distributed over computer systems connected via a network, to store and execute computer-readable codes in a distribution fashion. Additionally, functional programs, codes and code segments for implementing this embodiment will be easily understood by person having ordinary skill in the technical field to which this embodiment belongs.

While the present disclosure has been described hereinabove with reference to the embodiments shown in the drawings, this is for illustration only, and it will be apparent to person having ordinary skill in the art that various modifications and variations in the embodiments may be made thereto. However, it should be understood that such modifications fall within the technical scope of protection of the present disclosure. Therefore, the true technical scope of protection of the present disclosure should be defined by the technical spirit of the appended claims.

【Industrial Applicability】

The present invention relates to a system, a method and a computer program for executing monetary transactions based on social information, and more particularly, to a system, a method and a computer program for executing monetary transactions in which a credit line is established based on information obtained by quantifying trust between users, a loan is executed based on the credit line, and payment is made on the basis of an amount of the

loan based on the credit line.

【CLAIMS】

【Claim 1】

A system for executing monetary transactions comprising:

a user management unit configured to store social information of a plurality of users;

an account management unit configured to receive a request for establishing a pledge right for an asset from one or more uploaders among the plurality of users and provide a deposit to the uploader based on the pledge right established in response to the request for establishing the pledge right; and

a loan execution unit configured to establish a credit line by receiving information of a loan condition for the deposit from the one or more uploaders and execute a loan for one or more downloaders corresponding to information of a loan condition of the established credit line.

【Claim 2】

The system for executing monetary transactions according to claim 1, wherein the social information comprises one or more of an association information between the plurality of users, personal information of each of the plurality of users, information of a project associated with the plurality of users, and information of a group to which the plurality of users belong.

【Claim 3】

The system for executing monetary transactions according to claim 2, wherein the information of the loan condition is be set based on one or more of the association information, the personal information, the project information, and the group information, and comprises one or more of a loan limit amount, an interest rate on a loan, and a repayment condition.

【Claim 4】

The system for executing monetary transactions according to claim 3, wherein the information of the loan condition comprises one or more of a loan limit amount, an interest rate on a loan, and a repayment condition set for a user associated with the uploader.

【Claim 5】

The system for executing monetary transactions according to claim 3, wherein the information of the loan condition comprises one or more of a loan limit amount, an interest rate on a loan, and a repayment condition set for a keyword or a combination of keywords of the personal information.

【Claim 6】

The system for executing monetary transactions according to claim 1, further comprising a credit evaluation unit configured to determine a social credit score for each of the plurality of users based on the social information,

wherein the information of the loan condition comprises one or more of a loan limit amount determined based on the social credit score, and an interest rate on a loan determined based on the social credit score.

【Claim 7】

The system for executing monetary transactions according to claim 1, wherein the loan execution unit is further configured to receive a request for a pending download in which one or more users specify one or more of a loan amount and a desired interest rate, and execute a loan for the one or more users in response to establishment of a credit line targeting the one or

more users and satisfying one or more of the loan amount and the desired interest rate.

【Claim 8】

The system for executing monetary transactions according to claim 1, wherein the loan execution unit is further configured to receive a request for payment using a credit line coinciding with the information of the loan condition of the downloader through an external server, execute a loan for the downloader using the credit line coinciding with the information of the loan condition of the downloader in response to the request for payment, and pay the loan amount to a merchant.

【Claim 9】

The system for executing monetary transactions according to claim 8, wherein the loan execution unit is further configured to receive the loan amount repaid from the downloader, and pay the repaid amount to the uploader corresponding to the credit line used to execute the loan.

【Claim 10】

A method for executing monetary transactions, the method comprising:

receiving, by a system for executing monetary transactions, a request for establishing a pledge right for an asset from one or more uploaders among a plurality of users;

providing, by the system for executing monetary transactions, a deposit to the uploader based on the pledge right established in response to the request for establishing the pledge right;

establishing, by the system for executing monetary transactions, a credit line by receiving information of a loan condition for the deposit based on social information of the

plurality of users from the one or more uploaders; and

executing, by the system for executing monetary transactions, a loan for one or more downloaders coinciding with the information of the loan condition of the established credit line among the plurality of users.

【Claim 11】

The method for executing monetary transactions according to claim 10, wherein the social information comprises one or more of an association information between the plurality of users, personal information of each of the plurality of users, information of a project associated with the plurality of users, and information of a group to which the plurality of users are affiliated.

【Claim 12】

The method for executing monetary transactions according to claim 11, wherein the information of the loan condition is set based on one or more of the association information, the personal information, the project information, and the group information, and comprises one or more of a loan limit amount, an interest rate on a loan, and a repayment condition.

【Claim 13】

The method for executing monetary transactions according to claim 12, wherein the information of the loan condition comprises one or more of a loan limit amount, an interest rate on a loan, and a repayment condition set for a user associated with the uploader.

【Claim 14】

The method for executing monetary transactions according to claim 10, wherein the

information of the loan condition comprises one or more of a loan limit amount, an interest rate on a loan, and a repayment condition set for a keyword or a combination of keywords of the personal information.

【Claim 15】

The method for executing monetary transactions according to claim 10, wherein the establishing of the credit line comprises:

determining a social credit score for each of the plurality of users based on the social information; and

determining one or more of a loan limit amount or an interest rate on a loan based on the social credit score.

【Claim 16】

The method for executing monetary transactions according to claim 10, the method further comprising:

receiving, by the system for executing monetary transactions, a request for a pending download in which one or more users specify one or more of a loan amount and a desired interest rate; and

executing, by the system for executing monetary transactions, a loan for the one or more users in response to establishment of a credit line targeting the one or more users and satisfying one or more of the loan amount and the desired interest rate.

【Claim 17】

The method for executing monetary transactions according to claim 10, wherein the executing of the loan for the one or more downloaders comprises:

receiving, by the system for executing monetary transactions, a request for payment using a credit line coinciding with loan condition of the downloader through an external server; and

executing, by the system for executing monetary transactions, a loan for the downloader using the credit line coinciding with the the loan condition of the downloader in response to the request for payment, and paying, by the system for executing monetary transactions, the loan amount to a merchant.

【Claim 18】

The method for executing monetary transactions according to claim 17, the method further comprising:

receiving, by the system for executing monetary transactions, the loan amount repaid from the downloader; and

paying, by the system for executing monetary transactions, the repaid amount to the uploader corresponding to the credit line used to execute the loan.

【Claim 19】

A computer program stored in a computer-readable medium and for executing, in combination with hardware, steps of:

receiving a request for establishing a pledge right for an asset from one or more uploaders among a plurality of users;

providing a deposit to the uploader based on the pledge right established in response to the request for establishing the pledge right;

establishing a credit line by receiving information of a loan condition for the deposit based on social information of the plurality of users from the one or more uploaders; and

executing a loan for one or more downloaders coinciding with the information of the loan condition of the established credit line among the plurality of users.