

DESCRIPTION

Title of Invention

ADVERTISING DEVICE

Technical Field

[0001]

The present invention relates to a technology for mutual customer referral.

Background Art

[0002]

The mutual customer referral means guiding customers to each other between group companies or tenants. As the market is saturated and it is difficult to acquire new customers, the mutual customer referral has been an important means for corporate marketing strategies.

[0003]

Under such a background, technical proposals related to the mutual customer referral have been made, for example, Patent Literature 1 proposes a technology that encourages shopping around in accordance with more specific preferences and interests of store visitors and provides a new evaluation axis of advertising effects in a complex commercial facility.

Citation List

Patent Literature

[0004]

Patent Literature 1: JP 2019-149098 A

Summary of Invention

Technical Problem

[0005]

However, in the above-described conventional technology, when the mutual customer referral is made between stores, there is a problem that a means for efficiently and effectively making the mutual customer referral is not presented.

Therefore, in view of the above problems, an object of the present invention is to provide an advertising device that makes efficient and effective mutual customer referral between stores.

Solution to Problem

[0006]

An advertising device according to one aspect of the present disclosure includes: a first notification acquisition unit configured to acquire, from a first application provided by a first business operator, a

notification of detection of occurrence of a first event in a first store operated by the first business operator; a coupon storage unit configured to store coupons available at a second store operated by a second business operator and coupon feature information indicating features of the coupons in association with each other; a coupon selection unit configured to select one of the coupons from the coupon storage unit based on a selection rule for selecting the coupon including the coupon feature information related to the first event; a coupon notification unit configured to notify the first application of the one coupon; a second notification acquisition unit configured to acquire, from the first application, a notification of detection of occurrence of a second event related to the one coupon in the second store; and an analysis unit configured to perform analysis for modifying the selection rule based on the notification of detection of occurrence of the second event, in which the analysis unit performs analysis for modifying the selection rule so as to increase a frequency of occurrence of the second event after occurrence of the first event, and modifies the selection rule based on a result of the analysis.

Advantageous Effects of Invention

[0007]

The disclosed advertising device makes efficient and effective mutual customer referral between stores.

Brief Description of Drawings

[0008]

Fig. 1 is a diagram illustrating an outline of an advertising device according to the present embodiment.

Fig. 2 is a functional block diagram of the advertising device according to the present embodiment.

Fig. 3 is a diagram illustrating an example of a coupon storage unit according to the present embodiment.

Fig. 4 is a diagram illustrating a hardware configuration example of the advertising device according to the present embodiment.

Fig. 5 is a flowchart illustrating a flow of a processing example by the advertising device according to the present embodiment.

Description of Embodiments

[0009]

An embodiment of the present invention will be described with reference to the drawings.

(Operation principle of advertising device according to present embodiment)

[0010]

An operation principle of an advertising device (hereinafter, simply referred to as "the present device") 100 according to the present embodiment will be described with reference to Figs. 1 to 3. Fig. 1 is a diagram illustrating a connection relationship between the present device 100 and another device, Fig. 2 is a functional block diagram of the present device 100, and Fig. 3 is a diagram illustrating an example of a coupon storage unit 110.

[0011]

The present device 100 is connected to a user terminal 350 and an information processing device managed by a first business operator 210, or a second business operator 260 via a communication network 380. The communication network 380 may be a wired communication network or a wireless communication network.

[0012]

In some cases, a first application 220 provided by the first business operator 210 and a second application 270 provided by the second business operator 260 may be installed in the user terminal 350. Further, an advertisement application 370 may be configured to be installed in the user terminal 350.

[0013]

In some cases, the first application 220 and the second application 270 may be installed in the information

processing device managed by the first business operator 210 or the second business operator 260. The first application 220 and the second application 270 may be a sales promotion application (software) or an application (software) for operating an electronic commerce (EC) site (a virtual store). Further, the first application 220 and the second application 270 may be an application (software) for operating a real store operated by the first business operator 210 or the second business operator 260, for example, a point of sales (POS) system.

[0014]

As illustrated in Fig. 2, the present device 100 includes the coupon storage unit 110, a first notification acquisition unit 120, a coupon selection unit 130, a coupon notification unit 140, a second notification acquisition unit 150, and an analysis unit 160.

[0015]

The coupon storage unit 110 stores (identification information of) a coupon 310 usable in a second store 280 operated by the second business operator 260 and coupon feature information 320 indicating a feature of the coupon 310 in association with each other. The second business operator 260 is an operator of the store 280 where the coupon 310 can be used, and the store 280 may be the real store or the virtual store such as the EC site. The coupon

feature information 320 is, for example, information such as a business type of the second store 280, a location of the second store 280, when mutual customer referral is made, a business type of a first store 230 that is compatible from the viewpoint of using the coupon 310, and a priority or priority order of coupon issuance.

[0016]

As illustrated in Fig. 3, the coupon storage unit 110 stores, for example, the second store 280: (identification information of) the coupon 310 of a store B, and as the coupon feature information 320, the business type of the store B: restaurant business, the location of the store B: Shinjuku-ku, Tokyo, the business type of the first store 230 that is compatible: daily necessities retail, the priority or priority order of coupon issuance: 1 (rank), and the like in association with each other.

[0017]

In addition, as illustrated in Fig. 3, the coupon storage unit 110 stores, for example, the second store 280: (identification information of) the coupon 310 of a virtual store B, and as the coupon feature information 320, the business type of the virtual store B: clothing retail, the location of the virtual store B: virtual store, the business type of the first store 230 that is compatible:

electrical appliances retail, the priority or priority order of coupon issuance: 3, and the like in association with each other.

[0018]

The first notification acquisition unit 120 acquires a notification (first notification) 250 of detection of occurrence of a first event 240 in the first store 230 operated by the first business operator 210 from the first application 220 provided by the first business operator 210. The first application 220 is, for example, the sales promotion application installed in the user terminal 350, a WEB application for operating the EC site (virtual store), a POS system for operating the real store, or the like. The first store 230 may be the real store or the virtual store (such as the EC site).

[0019]

The first event 240 is, for example, a concept such as payment for purchase of a product or service, visit or access to the first store 230, or contact including an inquiry to the first store 230. The occurrence of the first event 240 in the first store 230 is detected by the first application 220, and the first application 220 notifies the present device 100 of the detection.

[0020]

The coupon selection unit 130 selects one coupon 310

from the coupon storage unit 110 based on a selection rule 330 for selecting the coupon 310 including the coupon feature information 320 related to the first event 240. The selection rule 330 may be, for example, a rule for selecting the coupon 310 of the second store 280 having an address (a distance) close to the first store 230 in which the first event 240 has occurred.

[0021]

As illustrated in Fig. 3, for example, when the location of the first store 230 in which the first event 240 has occurred is "Setagaya-ku, Tokyo", the coupon selection unit 130 selects the coupon 310 of the second store 280: store C having a location close to the first store 230 in "Setagaya-ku, Tokyo".

[0022]

Further, the selection rule 330 may be, for example, a rule for selecting the coupon 310 of the second store 280 having a business type compatible with the business type of the first store 230 in which the first event 240 has occurred. Here, the term "compatible" means a relationship in which after the first event 240 occurs in the first store 230, the coupon 310 is used or a user action related to the coupon 310 occurs in the second store 280 with a high probability. The user action related to the coupon 310 is an action such as payment for purchase of a product

or service, visit or access to the second store 280, or contact including an inquiry to the second store 280.

[0023]

As illustrated in Figs. 1 and 3, for example, when there is the selection rule 330 that the business type of the first store 230 in which the first event 240 has occurred is "daily necessities retail" and "daily necessities retail" and "restaurant business" are compatible with each other, the coupon selection unit 130 selects the coupon 310 of the second store 280: the store B having a business type of "restaurant business".

[0024]

Further, the selection rule 330 may be, for example, a rule for selecting the coupon 310 of the second store 280 when the first event 240 occurs in the business type of the first store 230 that is compatible with the coupon 310 of the second store 280.

[0025]

As illustrated in Figs. 1 and 3, for example, when the business type of the first store 230 in which the first event 240 has occurred is "electrical appliances retail", the coupon selection unit 130 selects the coupon 310 of the second store 280: the virtual store B (the EC site) that is considered to be compatible with "electrical appliances retail".

[0026]

In addition, the selection rule 330 may be a rule that the coupon 310 is selected according to a selection priority order of the coupon 310 determined for some reason such as an amount of contribution (investment) by the store 280.

[0027]

As illustrated in Fig. 3, the coupon selection unit 130 selects, for example, the coupon 310 of the second store 280: the store B having a priority of "1 (rank)". The coupon selection unit 130 may be configured to select, for example, the coupon 310 of a plurality of the second stores 280: the stores B and C and virtual stores B and C having priorities "1 (rank)" to "4 (rank)".

[0028]

Note that the coupon selection unit 130 may be configured to select one coupon 310 from the coupon storage unit 110 by combining a plurality of the selection rules 330 having different viewpoints as described above.

[0029]

The coupon notification unit 140 notifies the first application 220 of the coupon 310 selected by the coupon selection unit 130. The coupon notification unit 140 may be configured to notify, instead of the first application 220, the second application 270 provided by the second

business operator 260 of the coupon 310 selected by the coupon selection unit 130.

[0030]

The coupon notification unit 140 may be configured to notify, instead of the first application 220, the advertisement application 370 capable of receiving an advertisement, the advertisement application 370 being installed on a user terminal identified by user terminal identification information (so-called advertisement identifier (ID)) 360 which is information for specifying the user terminal 350, when an advertisement is notified by specifying the user terminal 350 and an application installed on the user terminal 350, of the coupon 310 selected by the coupon selection unit 130.

[0031]

The coupon notification unit 140 may be configured to notify, instead of the first application 220, the user terminal 350 of the coupon 310 or link information to the coupon 310 using a short message service. The coupon notification unit 140 may be configured to notify the coupon 310 or the link information to the coupon 310 as a paper receipt via a POS register or the like instead of the first application 220.

[0032]

The second notification acquisition unit 150

acquires a notification (second notification) 300 of detection of occurrence of a second event 290 related to the coupon 310 notified by the coupon notification unit 140 in the second store 280 from the first application 220. The second event 290 is, for example, a concept such as payment for purchase of a product or service using the coupon 310, visit or access to the second store 280, or contact including an inquiry to the second store 280.

[0033]

The second notification acquisition unit 150 may be configured to acquire the second notification 300 from the second application 290 instead of the first application 220.

[0034]

The occurrence of the second event 290 in the second store 280 is detected by the first application 220 or the second application 290, and the first application 220 or the second application that detected it notifies the present device 100 of the detection.

[0035]

The analysis unit 160 performs analysis for modifying the selection rule 330 based on the second notification 300. For example, the analysis unit 160 performs analysis for modifying the selection rule 330 so as to increase a frequency of occurrence of the second

event 290 after the occurrence of the first event 240.

[0036]

That is, the analysis unit 160 performs feedback to the coupon selection unit 130 so that an effective coupon 310 can be efficiently selected, and contributes to realization of efficient and effective mutual customer referral between stores.

[0037]

In addition, the analysis unit 160 performs an analysis for refining and improving evaluation of compatibility between the first event 240 and the second event 290 in the selection rule 330.

The analysis unit 160 modifies the selection rule 330 based on a result of the above analysis.

The present device 100 makes efficient and effective mutual customer referral between stores based on the above-described operation principle.

(Hardware configuration of advertising device according to the present embodiment)

[0038]

A hardware configuration example of the present device 100 will be described with reference to Fig. 4. Fig. 4 is a diagram illustrating an example of a hardware configuration of the present device 100. As illustrated in Fig. 4, the present device 100 includes a central

processing unit (CPU) 510, a read-only memory (ROM) 520, a random access memory (RAM) 530, an auxiliary storage device 540, a communication I/F 550, an input device 560, a display device 570, and a storage medium I/F 580.

[0039]

The CPU 510 is a device that executes a program stored in the ROM 520, and performs arithmetic processing on data developed (loaded) on the RAM 530 according to an instruction of the program to control an entire device 100. The ROM 520 stores programs and data executed by the CPU 510. When the CPU 510 executes the program stored in the ROM 520, the program and data to be executed are developed (loaded) on the RAM 530, and the RAM 530 temporarily stores calculation data during calculation.

[0040]

The auxiliary storage device 540 is a device that stores an operating system (OS) that is basic software, an application program according to the present embodiment, and the like together with related data. The auxiliary storage device 540 includes the coupon storage unit 110, and is, for example, a hard disk drive (HDD) or a flash memory.

[0041]

The communication I/F 550 is an interface that is connected to a communication network 360 such as a wired or

wireless local area network (LAN) or the Internet and exchanges data with another device 350 that provides a communication function.

[0042]

The input device 560 is a device such as a keyboard for inputting data to the present device 100. The display device (output device) 570 is a device including a liquid crystal display (LCD) or the like, and functions as a user interface when a user uses functions of the present device 100 or performs various settings. The storage medium I/F 580 is an interface for transmitting and receiving data to and from a storage medium 590 such as a CD-ROM, a DVD-ROM, or a USB memory.

[0043]

Each of the units of the present device 100 may be configured to be realized by the CPU 510 executing a program corresponding to each unit stored in the ROM 520 or the auxiliary storage device 540. In addition, each unit included in the present device 100 may be configured so that processing related to each unit is realized as hardware. In addition, a program according to the present invention may be configured to be read from an external server device via the communication I/F 550, or the program according to the present invention may be configured to be read from the storage medium 590 via the storage medium I/F

580 to cause the present device 100 to execute the program.

(Processing example by advertising device according to present embodiment)

A flow of a processing example by the present device 100 will be described with reference to Fig. 5. Fig. 5 is a flowchart illustrating a flow of an example of processing by the present device 100.

[0044]

In S10, the first notification acquisition unit 120 acquires the first notification 250 from the first application 220 provided by the first business operator 210. The occurrence of the first event 240 in the first store 230 is detected by the first application 220, and the first application 220 notifies the present device 100 of the detection.

[0045]

In S20, the coupon selection unit 130 selects the coupon 310 from the coupon storage unit 110 based on the selection rule 330 for selecting the coupon 310 including the coupon feature information 320 related to the first event 240.

[0046]

The selection rule 330 may be, for example, a rule for selecting the coupon 310 of the second store 280 having an address (a distance) close to the first store 230 in

which the first event 240 has occurred.

[0047]

As illustrated in Fig. 3, for example, when the location of the first store 230 in which the first event 240 has occurred is "Setagaya-ku, Tokyo", the coupon selection unit 130 selects the coupon 310 of the second store 280: store C having a location close to the first store 230 in "Setagaya-ku, Tokyo".

[0048]

Further, the selection rule 330 may be, for example, a rule for selecting the coupon 310 of the second store 280 having a business type compatible with the business type of the first store 230 in which the first event 240 has occurred. Here, the term "compatible" means a relationship in which after the first event 240 occurs in the first store 230, the coupon 310 is used or a user action related to the coupon 310 occurs in the second store 280 with a high probability. The user action related to the coupon 310 is the action such as payment for purchase of a product or service in the second store 280, the visit or access to the second store 280, or the contact including an inquiry to the second store 280.

[0049]

As illustrated in Figs. 1 and 3, for example, when there is the selection rule 330 that the business type of

the first store 230 in which the first event 240 has occurred is "daily necessities retail" and "daily necessities retail" and "restaurant business" are compatible with each other, the coupon selection unit 130 selects the coupon 310 of the second store 280: the store B having a business type of "restaurant business".

[0050]

Further, the selection rule 330 may be, for example, a rule for selecting the coupon 310 of the second store 280 when the first event 240 occurs in the business type of the first store 230 that is compatible with the coupon 310 of the second store 280.

[0051]

As illustrated in Figs. 1 and 3, for example, when the business type of the first store 230 in which the first event 240 has occurred is "electrical appliances retail", the coupon selection unit 130 selects the coupon 310 of the second store 280: the virtual store B (the EC site) that is considered to be compatible with "electrical appliances retail".

[0052]

In addition, the selection rule 330 may be a rule that the coupon 310 is selected according to a selection priority order of the coupon 310 determined for some reason such as an amount of contribution (investment) by the store

280.

[0053]

As illustrated in Fig. 3, the coupon selection unit 130 selects, for example, the coupon 310 of the second store 280: the store B having a priority of "1 (rank)". The coupon selection unit 130 may be configured to select, for example, the coupon 310 of the plurality of second stores 280: the stores B and C and virtual stores B and C having priorities "1 (rank)" to "4 (rank)".

[0054]

In S30, the coupon notification unit 140 notifies the first application 220 of the coupon 310 selected in S20. The coupon notification unit 140 may be configured to notify, instead of the first application 220, the second application 270 of the coupon 310 selected in S20.

[0055]

The coupon notification unit 140 may be configured to notify, instead of the first application 220, the advertisement application 370 installed in the user terminal identified by the user terminal identification information (advertisement ID) 360 of the coupon 310 selected in S20.

[0056]

The coupon notification unit 140 may be configured to notify, instead of the first application 220, the user

terminal 350 of the coupon 310 or link information to the coupon 310 using a short message service. The coupon notification unit 140 may be configured to notify the coupon 310 or the link information to the coupon 310 as a paper receipt via a POS register or the like instead of the first application 220.

[0057]

In S40, the second notification acquisition unit 150 acquires the second notification 300 from the first application 220. The second event 290 is, for example, a concept such as payment for purchase of a product or service using the coupon 310 notified in S30, visit or access to the second store 280, or contact including an inquiry to the second store 280.

[0058]

The second notification acquisition unit 150 may be configured to acquire the second notification 300 from the second application 290 instead of the first application 220.

[0059]

The occurrence of the second event 290 in the second store 280 is detected by the first application 220 or the second application 290, and the first application 220 or the second application that detected it notifies the present device 100 of the detection.

[0060]

In S50, the analysis unit 160 performs analysis for modifying the selection rule 330 based on the second notification 300 acquired in S40. For example, the analysis unit 160 performs analysis for modifying the selection rule 330 so as to increase a frequency of occurrence of the second event 290 after the occurrence of the first event 240.

[0061]

That is, the analysis unit 160 performs feedback to the coupon selection unit 130 so that the effective coupon 310 can be efficiently selected, and contributes to realization of efficient and effective mutual customer referral between stores.

[0062]

In S60, the analysis unit 160 modifies the selection rule 330 of the coupon selection unit 130 and/or the coupon feature information 320 of the coupon storage unit 110 based on the result of the analysis performed in S50.

By performing the above processing, the present device 100 makes efficient and effective mutual customer referral between stores.

[0063]

Although the embodiments of the present invention have been described in detail above, the present invention

is not limited to the specific embodiments, and various modifications and changes can be made within the scope of the gist of the present invention described in the claims.

Reference Signs List

[0064]

- 100 advertising device
- 110 coupon storage unit
- 120 first notification acquisition unit
- 130 coupon selection unit
- 140 coupon notification unit
- 150 second notification acquisition unit
- 160 analysis unit
- 210 first business operator
- 220 first application
- 230 first store
- 240 first event
- 250 first notification: notification of detection of
occurrence of first event
- 260 second business operator
- 270 second application
- 280 second store
- 290 second event
- 300 second notification: notification of detection of
occurrence of second event

310 coupon
320 coupon feature information
330 selection rule
340 user
350 user terminal
360 user terminal identification information
370 advertisement application
380 communication network
510 CPU
520 ROM
530 RAM
540 auxiliary storage device
550 communication interface
560 input device
570 output device
580 storage medium interface
590 storage medium

CLAIMS

[Claim 1]

An advertising device comprising:

a first notification acquisition unit configured to acquire, from a first application provided by a first business operator, a notification of detection of occurrence of a first event in a first store operated by the first business operator;

a coupon storage unit configured to store coupons available at a second store operated by a second business operator and coupon feature information indicating features of the coupons in association with each other;

a coupon selection unit configured to select one of the coupons from the coupon storage unit based on a selection rule for selecting the coupon including the coupon feature information related to the first event;

a coupon notification unit configured to notify the first application of the one coupon;

a second notification acquisition unit configured to acquire, from the first application, a notification of detection of occurrence of a second event related to the one coupon in the second store; and

an analysis unit configured to perform analysis for modifying the selection rule based on the notification of detection of occurrence of the second event, wherein

the analysis unit performs analysis for modifying the selection rule so as to increase a frequency of occurrence of the second event after occurrence of the first event, and modifies the selection rule based on a result of the analysis.

[Claim 2]

The advertising device according to claim 1, wherein the coupon notification unit notifies, instead of the first application, a second application provided by the second business operator of the one coupon, and

the second notification acquisition unit acquires the notification of detection of occurrence of the second event from the second application instead of the first application.

[Claim 3]

The advertising device according to claim 1, wherein the coupon notification unit notifies, instead of the first application, one advertisement application capable of receiving an advertisement, the advertisement application being installed on a user terminal identified by user terminal identification information which is information for specifying the user terminal, when an advertisement is notified by specifying the user terminal and an application installed on the user terminal, of the one coupon, and

the second notification acquisition unit acquires the notification of detection of occurrence of the second event from a second application provided by the second business operator instead of the first application.

[Claim 4]

The advertising device according to claim 1, wherein the coupon notification unit notifies a user terminal of the one coupon or link information to the one coupon using a short message service instead of the first application, and

the second notification acquisition unit acquires the notification of detection of occurrence of the second event from a second application provided by the second business operator instead of the first application.

[Claim 5]

The advertising device according to claim 1, wherein the coupon notification unit notifies the one coupon or link information to the one coupon as a paper receipt instead of the first application, and

the second notification acquisition unit acquires the notification of detection of occurrence of the second event from a second application provided by the second business operator instead of the first application.

[Claim 6]

The advertising device according to claim 1, wherein

the second notification acquisition unit acquires the notification of detection of occurrence of the second event from a second application provided by the second business operator instead of the first application.

[Claim 7]

An advertising method comprising:

a step of acquiring, from a first application provided by a first business operator, a notification of detection of occurrence of a first event in a first store operated by the first business operator by a first notification acquisition unit;

a step of selecting, from a coupon storage unit configured to store coupons available at a second store operated by a second business operator and coupon feature information indicating features of the coupons in association with each other, one of the coupons based on a selection rule for selecting the coupon including the coupon feature information related to the first event by a coupon selection unit;

a step of notifying the first application of the one coupon by a coupon notification unit;

a step of acquiring, from the first application, a notification of detection of occurrence of a second event related to the one coupon in the second store by a second notification acquisition unit; and

a step of performing, by an analysis unit, analysis for modifying the selection rule based on the notification of detection of occurrence of the second event, wherein

the analysis unit performs analysis for modifying the selection rule so as to increase a frequency of occurrence of the second event after occurrence of the first event, and modifies the selection rule based on a result of the analysis.

[Claim 8]

The advertising method according to claim 7, wherein the coupon notification unit notifies, instead of the first application, a second application provided by the second business operator of the one coupon, and

the second notification acquisition unit acquires the notification of detection of occurrence of the second event from the second application instead of the first application.

[Claim 9]

The advertising method according to claim 7, wherein the coupon notification unit notifies, instead of the first application, one advertisement application capable of receiving an advertisement, the advertisement application being installed on a user terminal identified by user terminal identification information which is information for specifying the user terminal, when an

advertisement is notified by specifying the user terminal and an application installed on the user terminal, of the one coupon, and

the second notification acquisition unit acquires the notification of detection of occurrence of the second event from a second application provided by the second business operator instead of the first application.

[Claim 10]

The advertising method according to claim 7, wherein the coupon notification unit notifies a user terminal of the one coupon or link information to the one coupon using a short message service instead of the first application, and

the second notification acquisition unit acquires the notification of detection of occurrence of the second event from a second application provided by the second business operator instead of the first application.

[Claim 11]

The advertising method according to claim 7, wherein the coupon notification unit notifies the one coupon or link information to the one coupon as a paper receipt instead of the first application, and

the second notification acquisition unit acquires the notification of detection of occurrence of the second event from a second application provided by the second

business operator instead of the first application.

[Claim 12]

The advertising method according to claim 7, wherein the second notification acquisition unit acquires the notification of detection of occurrence of the second event from a second application provided by the second business operator instead of the first application.

[Claim 13]

An advertising program for causing a computer to execute the method according to any one of claims 7 to 12.