A PERSONAL COMMUNICATION DEVICES BASED CUSTOMER LOYALTY FULFILLMENT PROGRAM

Background and Field of the Invention

The invention relates to a method of conducting customer loyalty fulfillment program using personal communication devices, more particularly but not exclusively to allow customers who purchase goods and/or services from a company, to redeem their rewards and for the company to deliver the redeemed rewards to such customers.

Customer loyalty programs reward customers in the form of bonus points, rebates, discounts and other incentives which are issued at a pre-determined rate according to the value of the customer's purchases. For example, for every dollar spent on a company's products/services by a customer, a certain amount of pre-determined bonus points, rebates and/or discounts are given to the customer. Such rewards may be used subsequently to redeem vouchers, free goods or services, or used to offset the costs of future purchases of goods or services from the company.

Customer loyalty fulfillment programs provide the methods for customers to redeem their rewards and for the company to deliver the redeemed rewards to the customers. It is an important process that allows the company to deliver gratifications to customers to enhance the customers' experience with the company; to win the top of customers' mind share; and to build customer loyalty. Currently, companies use a few fulfillment methods to allow their customers to redeem their bonus points, rebates, discounts and other incentives. For example, customers can redeem vouchers with their rewards from the company by logging into the web-site of the company; or by calling the company by telephone; or by sending an SMS to the company; or by mailing or faxing the redemption form back to the company; or by going personally to the company. After verifying the authenticity of the reward redemption from the customer, the company mails the

redeemed vouchers to the customer. Alternatively, the customer can collect the redeemed vouchers from the company. Such vouchers can be used to redeem for free goods or services, or used to offset the costs of future purchases of goods or services from the company.

Such customer loyalty fulfillment methods, however, suffer from a disadvantage in that the customer is engaged only when the customer contacts the company and therefore they are reactive rather than pro-active and may not be sufficient to retain the customers to encourage them to use the loyalty programs more frequently. Another disadvantage is that the redemption process is slow and it can take a few days, depending on the efficiency of the local postal service, before the customer receives the vouchers by mail after the customer had made the redemption. Another further disadvantage is that the customer has to remember to bring the voucher when the customer wants to use the voucher and this potentially, can be the source of customer disappointment if the customer forgets to do so.

In other customer loyalty fulfillment methods, the company sends short text messages to the handphones and/or PDAs of the customers to reward them for their loyalty. As a variation to short text messages, a specially designed logo or picture can be sent to the handphones and/or PDAs. By retrieving and showing the short text message or logo or picture in the handphone or PDA, the customer can get pre-determined free goods or services; or pre-determined discount for purchases of products or services from the company.

The method whereby short text messages or logos or pictures are sent to the handphones and/or PDAs of customers is an improvement from the considerations of being pro-active, instant, and convenient because most customers always carry their handphones and PDAs with them. This method, however, suffers from a disadvantage in that it is not secured because the text messages or logos or pictures in the handphones and/or PDAs

are not authenticated and the company cannot control and monitor their proper usage to prevent fraud.

It is an object of the invention to provide a method of conducting customer loyalty fulfillment program which alleviates at least one of the disadvantages of the prior art.

Summary of the Invention

According to the invention, there is provided a method of conducting customer loyalty fulfillment programs using personal communication devices to allow customers who purchase goods and/or services from a company, to redeem their rewards and for the company to deliver the redeemed rewards to such customers. The method comprises the steps of

sending a short message or "m-voucher" to the personal communication devices of a customer;

authenticating the "m-voucher" using the customer identification and unique code of the "m-voucher" when the customer uses the "m-voucher" to redeem his or her rewards; and

canceling the redeemed "m-voucher" to prevent it to be used more than once by canceling the unique code associated with the customer identification from the database.

An advantage of the preferred embodiment of the invention is that the "m-vouchers" can be authenticated and thus it enables the company to monitor and control the usage of the "m-vouchers" to prevent fraud. Another advantage is that by delivering personalized reward in the form of "m-voucher" to the personal communication device of the customer, the company is pro-actively capturing the top of mind share of the customer so that there is increased chance that the customer will choose the company as the preferred company. It also allows the company to reward the customer instantly with "m-voucher". A further advantage is that the "m-voucher" is convenient to use because the majority of customers carry their personal communication devices with them most of the time and thus it is compelling for customers to use the "m-voucher".

The invention also relates to a computer program operable to perform the above methods and a computer system which comprises the computer program.

Brief Description of the Drawings

An embodiment of the invention will now be described, by way of example, with reference to the accompanying drawings, in which:

Figure 1 shows a schematic representation of a system for conducting customer loyalty fulfillment program according to the preferred embodiment of the invention;

Figure 2 shows a schematic representation of an alternative system of Figure 1 for conducting customer loyalty fulfillment program;

Figure 3 illustrates the flowchart of the process flow of the customer loyalty fulfillment program according to the preferred embodiment of the invention;

Figure 4 illustrates an example of the short message sent to a personal communication device according to the preferred embodiment of the inventions;

Figure 5a illustrates an example of the information input needed to authenticate the "m-voucher";

Figure 5b illustrates an example of the display on the computer terminal or Point of Sales terminal when the reward is in terms of "discount";

Figure 5c illustrates an example of the display on the computer terminal or Point of Sales terminal when the reward is in terms of "points"; and

Figure 6 illustrates an example of the display on the computer terminal or Point of Sales terminal when the "m-voucher" is redeemed for vouchers.

Detailed Description of the Preferred Embodiment

The following definitions will be used throughout this specification:

Customer relationship --- means the relationship of the company with her customers which creates loyalty in these customers.

Loyal customers --- means customers of a company who choose the company as the preferred company and who buy repeatedly from the company.

Loyalty program --- means a program conducted by a company to develop or enhance customer relationships.

Reward --- means a form of incentive that is given by a company to a customer for his purchases from the company. The incentive can be in the form of but not limited to, rebates, bonus points, discounts or lucky draw numbers given to the customer.

Loyalty fulfillment --- means a process that provides for customers to redeem their rewards and for the company to deliver the redeemed rewards to the customers.

Rebate --- means cash incentive that is given by a company to customers or buyers for the purchases from the company.

Bonus points --- means points that are given by a company to customers as a bonus for their purchases from the company. These points have a certain pre-determined value which can used to exchange for goods or services from pre-selected companies.

Voucher --- a coupon issued by the company which can be used by the holder of the voucher to redeem or exchange for free goods or services, or used to offset the costs of future purchases of goods or services from the company;

Redemption --- means the process by which the customer who has been rewarded by the company makes a claim for the reward;

Customers --- means people who purchases products or services from the company

Mind share --- means the share of the customer's mind which encourages the customer to choose a company as the preferred company.

SMS – means short messaging service which is a means of sending short messages to mobile wireless devices such as mobile phones, pagers, PDAs and any device that can receive text messages.

Software engine --- means software that is used to conduct the customer loyalty program and the customer loyalty fulfillment program.

Gratification ---- means the satisfaction and pleasure experienced by the customer or buyer.

Personal communication devices --- means handheld electronic devices used by people for their personal communication with others and these include handphones, pagers, PDAs, handheld computers or other mobile electronic communication devices.

Handphone --- means the wireless mobile telephone device that people use for their personal communications over the telephone and wireless network;

PDA --- means "Personal Digital Assistant" and it is a small handheld electronic device that people use to manage their personal data and communications, and it can operate over the telephone and wireless network.

Internet --- means an electronic network used to connect different terminals, devices and computers at different geographical locations together.

Server --- means the computer system on which the software engine is coded, stored and executed.

Figure 1 shows a schematic representation of a system for conducting customer loyalty fulfillment program according to the preferred embodiment of the invention. At the back end of the system, there is provided a computer system or server 101 which contains a software engine responsible for conducting the customer loyalty program and the customer loyalty fulfillment program. The information or data required by the software engine for processing of the customer loyalty fulfillment system are stored in the database 102.

The computer system or server 101 is connected to the communication server 103 which allows the software engine in the server 101 to send short messages through the wireless communication network 104 to the personal communication devices 105, 107, 402 of the customers 106, 108. Examples of wireless communication network are the GSM, CDMA, W-CDMA, GPRS or other wireless communication technologies. The communication server 103 can send short messages such as but not limited to SMS, by using a network of wireless modems or using the communication lines provided by telecommunication operators or service providers.

Figure 3 illustrates the flowchart of the process flow of the customer loyalty fulfillment program according to the preferred embodiment of the invention. Typically, a loyalty program records the purchases of each customer together with an identification of the customer, and calculate the rewards to be given to the customer according to pre-determined rates at step 301. For example, for every dollar spent on the company's products/services by the customer, a certain amount of pre-determined bonus points, rebates and/or discounts are given to the customer. The reward information of customer is then stored in the database 102 which is subsequently retrieved and processed by the software engine of the loyalty fulfillment program.

When the loyalty program at step 301 determines that a customer is to be notified of his or her rewards, it will trigger the customer loyalty fulfillment program 303 at step 302 to send a short message at step 304 to the personal communication device 105, 107, 402 of the customer 106, 108. For example, the short message can be but not limited to, a SMS which is sent to the handphone or PDA of the customer. The short message shall be referred to as "mobile voucher" or "m-voucher". Each "m-voucher" sent by the customer loyalty fulfillment program is recorded and stored in the database 102.

The process of triggering the sending of short messages at step 302 is controlled by rules set by the company. For example, the company may set the rule to inform all customers of their current rewards at a particular time and day like on every Friday of the week at 5.00 pm. Another example is the company may set pre-determined monetary amount in dollars for each customer and when the total purchases of a customer reach or exceed this pre-determined amount, it triggers the loyalty program at step 302 to notify the customer. A further example is the company may set the rule to trigger the loyalty program at step 302 to send an updated "m-voucher" to the customer after each purchase by the customer.

The "m-voucher" is received and stored by the personal communication device 105, 107, 402 of the customer at step 305.

Figure 4 illustrates an example of the "m-voucher" 401 received and stored by the personal communication device 402 of a customer. The "m-voucher" 401 contains the following information:

1. customer identification 403
2. unique code 404
3. reward information 405

The customer identification 403 is used to identify the customer. For example, it can be an unique membership number assigned to the customer by the company or the unique

handphone number of the customer or any other unique combination of numbers and/or letters that can be used to identify the customer uniquely. The unique code 404 is a randomly generated text by the customer loyalty fulfillment program, containing combination of numbers and/or letters and it is unique to each "m-voucher". The loyalty fulfillment program uses the customer identification 403 and the unique code 404 together to authenticate the validity of the "m-voucher". The reward information 405 informs the customer of his or her current rewards which may be but not limited to, in the form of bonus points, rebates and/or discounts. It can also contain other information like the next higher reward level and how the customer can reach the next higher reward level. For example, it may inform a customer that the current discount for the customer is 10%, and that if the customer spends $100 more, the discount will increase to 15%. It will be apparent that the example can also applies to other rewards such as bonus points and rebates.

In case the customer accidentally erase the "m-voucher" 401 from the personal communication device 105, 107, 402, the customer 106, 108 can send an electronic request to the loyalty fulfillment program to request for a replacement "m-voucher" with a new unique code to be sent to his or her personal communication device 105, 107, 402. The replacement "m-voucher" replaces the lost "m-voucher" and the lost "m-voucher" is cancelled from the database 102 of the loyalty fulfillment program.

After the customer 106, 108 received the "m-voucher" 401 in the personal communication device 105, 107, 402, the customer can immediately use it to redeem the rewards 405 in the form of vouchers, free goods or services, or discount for purchases of goods or services from the company. For example, the customer 106, 108 can use the "m-voucher" 401 in the personal communication device 105, 107, 402 at the payment counter of the company when he or she is paying for goods or service purchased from the company.

To redeem the rewards 405 in the "m-voucher" 401, the customer retrieve the "m-voucher" 401 from the personal communication device 105, 107, 402 and shows the "m-voucher" 401 to the cashier at the payment counter. The cashier enters the customer identification 403 and the unique code 404 of the "m-voucher" 401 into the computer terminal or Point of Sales terminal 109 for authentication at step 306. Figure 5a illustrate an example of the display on the computer terminal or Point of Sales terminal 109 for entering the customer identification 501 and unique code 502. Alternatively, the cashier can scan the customer identification 403 and unique code 404 of the "m-voucher" 401 in the personal communication device 105, 107, 402 of the customer using an electronic scanning device connected to the computer terminal or Point of Sales terminal 109 at step 306.

The computer terminal or Point of Sales terminal 109 is connected to the computer system or server 101 via the internet or other electronic means 110. The loyalty fulfillment program in the computer system or server 101 authenticates the "m-voucher" 401 by checking the customer identification 403 and unique code 404 at step 307 against that recorded and stored in the database 102. If the authentication fails, it rejects the redemption at step 308 and informs the cashier. If the authentication passes, it will display on the screen of the computer terminal or Point of Sales terminal 109, the information of the customer's reward which is similar to that in the "m-voucher", to the cashier at step 309. Figure 5b and Figure 5c illustrate examples of the displays of the computer terminal or Point of Sales terminal 109 that show the customer's reward information in terms of discount and bonus points respectively. The customer decides how much rewards to redeem and inform the cashier who will then enter the redemption amount into the computer terminal or Point of Sales terminal 109 at step 310. If the redemption amount is not sufficient to pay for the purchase, the computer terminal or Point of Sales terminal 109 will calculate and inform the customer of the net amount in dollars that the customer has to pay after deducting the monetary redemption value from the price of the purchase at step 311.

In the above example, the computer terminals or Point of Sales terminals 109 can be located at the company or at other companies that participate in the customer loyalty fulfillment program of the company.

As a variation to the above example, the "m-voucher" 401 can be used to redeem or exchange for vouchers from the company or from other companies that participate in the customer loyalty fulfillment program of the company. Figure 6 illustrates an example of the display on the computer terminal or Point of Sales terminal 109 at step 309 that inform the cashier of the number of vouchers of pre-determined dollar value 601 that the customer can redeem with the "m-voucher" 401. The customer decides how many vouchers of pre-determined dollar value to redeem and inform the cashier who will then enter the redemption amount 602 into the computer terminal or Point of Sales terminal 109 at step 310. The cashier issues the redeemed number of vouchers of pre-determined dollar value to the customer at step 311. Besides payment counters, the redemption of "m-vouchers" 401 for vouchers can be conducted at conveniently located customer service counters equipped with computer terminals or Point of Sales terminals 109.

Figure 2 shows a schematic representation of an alternative system of Figure 1 for conducting customer loyalty fulfillment program according to the preferred embodiment. In Figure 2, the computer terminals or Point of Sales terminals 209 are not connected directly to the computer system or server 201 via the internet or other electronic means 211. Instead, clusters of computer terminals or Point of Sales terminals 209 are connected to a local computer server 210 which in turn is connected to the computer system or server 201 via the internet or other electronic means 211. The alternative system as illustrated by Figure 2 is useful for companies that have several shops and each shop has many computer terminals or Point of Sales terminals 209. The local computer server 210 can be conveniently located at the shop to manage the clusters of computer terminals or Point of Sales terminals 209 at the shop.

After each redemption of rewards by a customer, the customer loyalty fulfillment program in computer system or server 101,201 updates the record of the customer's reward stored in the database 102, 202 via the customer loyalty program by deducting the redeemed rewards from it and adding to it the new rewards from the latest purchase at step 312. The customer loyalty fulfillment program also cancels the redeemed "m-voucher" at step 312 by canceling the used unique code associated with the customer identification from the database 102, 202. Cancellation of redeemed "m-vouchers" 401 prevents "m-voucher" 401 to be used more than once. At step 312, the customer loyalty fulfillment program further records the details of all the redemptions of customers together with the identification 313 of the computer terminal or Point of Sales terminal 109, 209 so that the company, at a later time, can monitor and consolidate all the redeemed rewards in dollar value from all the computer terminals or Point of Sales terminals 109, 209 of the company or other companies that participate in the customer loyalty fulfillment program of the company.

Using the above approach, a pro-active, instant, convenient and secured method of fulfilling the rewards to loyal customers is thus possible to increase the level of gratifications in customer relationship; to capture the top of mind share of customers; and to help to retain loyal customers and win new customers.

Having now fully described the invention, it will be apparent to one of ordinary skill in the art that many changes and modifications can be made thereto without departing from the scope of the invention as claimed.

Claims

1. A method of conducting customer loyalty fulfillment programs that allows customers to redeem their rewards and the company to deliver the redeemed rewards to the customers, the method comprising the steps of sending a short message or "m-voucher" to the personal communication devices of a customer; authenticating the "m-voucher" when the customer use the "m-voucher" to redeem his or her rewards; and canceling the redeemed "m-voucher" to prevent it to be used more than once.

2. A method according to claim 1, wherein the short message or "m-voucher" sent by the customer loyalty fulfillment program and received and stored in the personal communication device of the customer contains the customer identification, unique code and reward information.

3. A method according to claim 1 and claim 2, wherein the customer identification and the unique code of the "m-voucher" is used together, to authenticate the validity of the "m-voucher" by comparing the customer identification and unique code of the "m-voucher' with that stored in the database of the customer loyalty fulfillment program.

4. A method according to claim 1 to claim 3, wherein a replacement "m-voucher" is sent upon request by a customer to replace a lost "m-voucher", and the method comprises the step of:
canceling the lost unique code associated with the customer identification in the database;
generating a new unique code to replace the cancelled unique code; and
sending a replacement "m-voucher" with the new unique code to the personal communication device of the customer.

5. A method according to claim 1 to claim 4, wherein the "m-voucher" is cancelled by the customer loyalty fulfillment program after it is redeemed by the customer by canceling the used unique code of the redeemed "m-voucher" from the database.

6. A software program operable to perform a method according to any one of the preceding claims.

7. A computer system comprising a software program operable to perform a method according to any one of the preceding claims.