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(54) Title: METHODS, SYSTEMS, AND COMPUTER READABLE MEDIA FOR PROVIDING BENEFITS TO LOYALTY CARDHOLDERS VIA LOYALTY CARD TRANSACTIONS

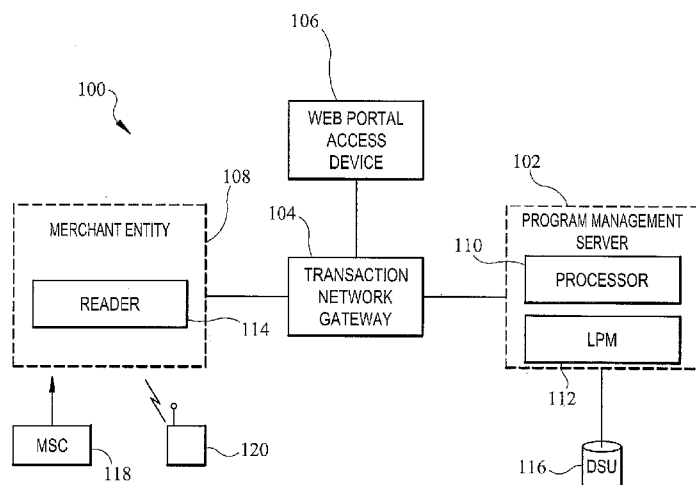


FIG. 1

(57) Abstract: Methods, systems, and computer readable media for providing benefits to loyalty cardholders via loyalty card transactions are disclosed. In one example, the method includes receiving, by a loyalty program module, a message indicating that a loyalty card transaction has been initiated at a participating merchant site using a loyalty card associated with a cardholder account, wherein the cardholder account is enrolled in a loyalty benefit program managed via the loyalty program module, determining a loyalty level assigned to the cardholder account using information regarding the loyalty card transaction contained in the message, and utilizing the loyalty level assigned to the cardholder account to determine at least one merchant-specific differentiated benefit to be provided to a holder of the loyalty card, wherein each loyalty level includes at least one merchant-specific differentiated benefit designated by the participating partner merchant.

DESCRIPTION

METHODS, SYSTEMS, AND COMPUTER READABLE MEDIA FOR
PROVIDING BENEFITS TO LOYALTY CARDHOLDERS VIA LOYALTY CARD
TRANSACTIONS

5

PRIORITY CLAIM

This application claims the benefit of U.S. Patent Application Serial No. 14/520,265, filed October 21, 2014; the disclosure of which is incorporated herein by reference in its entirety.

10

TECHNICAL FIELD

The subject matter described herein relates to card transactions and associated reward programs. More particularly, the subject matter described herein relates to systems, methods, and computer readable media for providing benefits to loyalty cardholders via loyalty card transactions.

15

BACKGROUND

Currently, there are few, if any, loyalty card programs in the market that provide the cardholder with purchase-independent benefits. Notably, most loyalty card programs require a cardholder account to obtain a certain number
20 of points, dollars, or other symbolic value, in order to receive a benefit or perk. The benefit or perk then, is generally a discount on a future purchase, such that these programs would be considered purchase-dependent loyalty programs. The object of these programs is to entice a cardholder into purchasing from the merchant site, then providing a discount at some future point. However, such
25 purchase-dependent programs require the cardholder user to actually make enough purchase transactions to reach the point or dollar amount required in order to receive the perk or benefit. They must also make an additional purchase in order to take advantage of the perk where these future 'discounts' may not be something the cardholder most values when shopping at a
30 particular merchant. In addition, the merchant may have other non-future

purchase benefits they could provide that would also succeed in having a customer return to their business. Thus, such purchase-dependent loyalty card programs may not be the optimal program structure to engender good-will and incentivize cardholders to provide their patronage to participating merchants.

- 5 Accordingly, there exists a need for systems, methods, and computer readable media for providing benefits to loyalty cardholders via loyalty card transactions.

SUMMARY

- 10 According to one aspect, the subject matter described herein relates to methods, systems, and computer readable media for providing benefits to loyalty cardholders via loyalty card transactions. In one embodiment, the method includes receiving a message, by a loyalty program module, indicating that a loyalty card transaction has been initiated at a participating merchant site
- 15 using a loyalty card associated with a cardholder account, wherein the cardholder account is enrolled in a loyalty benefit program managed via the loyalty program module. The method further includes determining a loyalty level assigned to the cardholder account using information regarding the loyalty card transaction contained in the message. Additionally, the method includes
- 20 utilizing the loyalty level assigned to the cardholder account to determine at least one merchant-specific differentiated benefit to be provided to a holder of the loyalty card, wherein each loyalty level comprises at least one merchant-specific differentiated benefit designated by the participating partner merchant.

- In another embodiment, the system comprises at least one processor,
- 25 memory, and a loyalty program module utilizing the at least one processor and the memory. The loyalty program module is configured to receive a message indicating that a loyalty card transaction has been initiated at a participating merchant site using a loyalty card associated with a cardholder account, wherein the cardholder account is enrolled in a loyalty benefit program
- 30 managed via the loyalty program module. The loyalty program module is also configured to determine a loyalty level assigned to the cardholder account using

information regarding the loyalty card transaction contained in the message, and is configured to utilize the loyalty level assigned to the cardholder account to determine at least one merchant-specific differentiated benefit to be provided to a holder of the loyalty card, wherein each loyalty level comprises at least one
5 merchant-specific differentiated benefit designated by the participating partner merchant.

The subject matter described herein may be implemented in hardware, software, firmware, or any combination thereof. As such, the terms "function", "node", or "module" as used herein refer to hardware, which may also include
10 software and/or firmware components, for implementing the feature being described. In one exemplary implementation, the subject matter described herein may be implemented using a non-transitory computer readable medium having stored thereon computer executable instructions that when executed by the processor of a computer control the computer to perform steps. Exemplary
15 computer readable media suitable for implementing the subject matter described herein include non-transitory computer-readable media, such as disk memory devices, chip memory devices, programmable logic devices, and application specific integrated circuits. In addition, a computer readable medium that implements the subject matter described herein may be located on
20 a single device or computing platform or may be distributed across multiple devices or computing platforms.

BRIEF DESCRIPTION OF THE DRAWINGS

Preferred embodiments of the subject matter described herein will now
25 be explained with reference to the accompanying drawings, wherein like reference numerals represent like parts, of which:

Figure 1 is a block diagram illustrating an exemplary system for providing benefits to loyalty cardholders via loyalty card transactions according to an embodiment of the subject matter described herein;

Figure 2 is a flow chart illustrating an exemplary process for providing benefits to loyalty cardholders via loyalty card transactions according to an embodiment of the subject matter described herein; and

Figure 3 is a high level block diagram of a general purpose computer system suitable for use in providing benefits to loyalty cardholders via loyalty card transactions according to an embodiment of the subject matter described herein.

DETAILED DESCRIPTION

In accordance with the subject matter disclosed herein, methods, systems, and computer readable media for providing benefits to loyalty cardholders via loyalty card transactions are disclosed.

In some embodiments, the disclosed subject matter may be implemented via a program management server as a loyalty program module (LPM) that is aimed toward providing a loyalty benefit program that rewards prepaid cardholder users at participating merchant sites. Notably, in some embodiments, the loyalty program module may host and support a loyalty program website and a loyalty application.

An issuing entity of the prepaid card or another third party may be a manager (e.g. Perk Program Manager) of the loyalty benefit program. The manager of the loyalty benefit program may leverage the LPM to establish generic loyalty levels to be assigned to cardholder accounts and a set of guidelines for assigning individual loyalty levels to cardholder accounts. In some embodiments, for example, these guidelines may be in the form of a questionnaire or set of questions requesting information about the cardholder user. The information supplied by the cardholder user in response to the questions may be then used to determine which generic loyalty level should be assigned to the cardholder user. The different, generic loyalty levels may be synonymous with how desirous or important a cardholder user is as a prospective customer. For example, higher loyalty levels may be indicative of a highly desirable patron, while lower loyalty levels may be indicative of a less

desirable patron. The program manager may also set parameters for how each individual loyalty level is to be assigned. In some embodiments, for example, this may include weighting each piece of information in view of what participating merchants may find important in potential customers.

5 In some embodiments, to obtain a loyalty level, a cardholder user may also leverage the LPM in order to supply the information requested by the loyalty program manager. The information supplied by the cardholder user may include demographic information such as, for example, age, income, marital status, amount of travel, etc., and account information such as, for example,
10 cardholder user name, card number, etc. Once the cardholder user supplies the requested information, the cardholder account may be either automatically (for e.g. by an algorithm) or manually (for e.g. by a program manager) assigned a loyalty level based off of the information supplied. Different pieces of information supplied by the cardholder user may receive a different weight in
15 assigning the loyalty level.

 The program module may further be leveraged by participating merchants in order to designate and/or define merchant-specific differentiated benefits for each of the generic loyalty levels established by the program manager. Differentiated benefits may be considered as specialized perks or
20 services provided by each partner merchant to participating cardholder users based on the participating users' individual loyalty levels assigned to their cardholder account. In keeping with the design of the loyalty benefit program, each partner merchant may define a specific benefit for each generic loyalty level, where the benefits may be scaled according to level. For example, higher
25 loyalty levels may receive higher quality or more desirable perks than lower loyalty levels. Each participating partner merchant may leverage the LPM to list out the perks associated with each loyalty level of the loyalty benefit program. This list may be accessible to cardholder users. Thus cardholder users may access the list to determine participating merchants and their merchant-specific
30 differentiated benefits. In some embodiments, the list may be filtered based on

a current location of the cardholder user. This may be advantageous to traveling cardholder users who are unfamiliar with area merchants.

As a result, merchants who participate in the loyalty benefit program may incentivize participating cardholder users to visit their merchant site in order to receive such benefits independent of any purchase transactions by the participating cardholder user. Notably, the present subject matter effectively directs customer traffic to participating merchant sites at little to no cost to such businesses. Participating merchants are also incentivized, by the potential for increased foot traffic and revenue, to cross-promote the associated prepaid card product.

The LPM may additionally be leveraged by participating merchants when a loyalty card transaction is conducted at a participating merchant site. The loyalty benefit program is designed to provide benefits to cardholder users independent of any purchase transactions. Thus, a cardholder user may receive at least one benefit or perk as soon as they enter a participating merchant site. However, a cardholder user may choose to combine receiving a perk and conducting a purchase transaction. Therefore, in some embodiments, the LPM may be contacted by a reader device, or a point of sale (POS) device connected to the reader device at the merchant site, to request authorization and/or identification of the loyalty level associated with the cardholder account. Once the loyalty level associated with the cardholder account is identified and/or communicated back to the merchant (e.g., employee), the cardholder user may receive at least one merchant-specific differentiated benefit or perk associated with the loyalty level assigned to the cardholder's account. Although the present disclosure herein describes the conducting of a loyalty card transaction at a "merchant site," the aforementioned transaction may be performed at any location associated with any type of provider of goods, products, and/or services (e.g., a hardware store, restaurant, a law firm, a dentist office, a movie cinema, a medical supply wholesaler, etc.) that is participating in the loyalty benefit program, without departing from the scope of the disclosed subject matter.

Notably, the program management server and its components and functionality described herein constitute a special purpose device that improves the technological field of prepaid card reward or benefit programs by providing i) a prepaid loyalty card reward program that encourages cardholder users to frequent merchant sites, ii) a loyalty program module that enables the participating merchants to customize the prepaid card reward or benefit program, and iii) at least one benefit or perk for one or more cardholder users (e.g., incentivized patronage of participating merchant sites) independent of purchase transaction.

Although the following description discloses the use of a MasterCard network, other third party networks or entities may utilize the methods and systems disclosed herein without departing from the scope of the present subject matter. Figure 1 depicts an exemplary loyalty card system **100** that includes a program management server **102**, a transaction network gateway **104**, a web portal access device **106**, and at least one merchant entity **108**. Figure 1 further depicts participating merchant entity **108** comprising a reader device **114**. Reader device **114** may include a magnetic stripe card reader or a smart card reader that may read data from a magnetic stripe card **118** that is swiped at reader device or from an EMV chip on the card when the smart card is dipped in a smart card reader **114**, and/or a wireless device reader that is configured to wirelessly read data from smart cards and/or an NFC-enabled mobile device **120** brought in proximity to reader device **114**. In some embodiments for example, reader device **114** may be in communication with a point of sale (POS) system (not shown). As illustrated in Figure 1, each of components **102-106** may be embodied as a computer server and/or computer network node capable of electronic communications (e.g., via the Internet) with the other remaining components.

In some embodiments, program management server **102** may include any server, node, computer, or unit that is configured to i) establish, modify and/or update a number of loyalty levels in a loyalty benefit program, ii) process registrations of participating cardholder accounts made by cardholder users, iii)

assign loyalty levels to participating cardholder accounts based off of information supplied by the cardholder users during registration, iv) process defined merchant-specific differentiated benefits for each loyalty level, v) communicate the loyalty level associated with a cardholder account when
5 contacted by a merchant reader device, and vi) implement management and monitoring tasks using the methods described herein. Program management server **102** may include or implement a loyalty program module (LPM) **112**, where LPM **112** may be used by both merchant entities and cardholder users to manage and monitor aspects of a loyalty benefit program. Although Figure 1
10 depicts program management server **102** as a single network element, program management server **102** may include a plurality of network elements, a plurality of network components, and/or a network itself without departing from the scope of the present subject matter.

In some embodiments, program management server **102** may include at
15 least one processor **110** and a loyalty program module (LPM) **112**. LPM **112** may comprise separate modules, such as, a website support module and a loyalty application support module. In some embodiments, processor **110** may include a microprocessor, a central processing unit (CPU), or any other like hardware-based processor unit that is configured to execute and/or utilize LPM
20 **112** (e.g., a software based algorithm) to communicate with a data storage unit **116**, which may be configured to store loyalty benefit program data (i.e., established number of generic loyalty levels, cardholder account qualifications, merchant-specific differentiated benefits for each loyalty level, parameters, etc.). In some embodiments, LPM **112** may be stored in memory (not shown),
25 such as random access memory (RAM), read only memory (ROM), optical read/write memory, cache memory, magnetic read/write memory, flash memory, or any other non-transitory storage media. In one embodiment, processor **110** and the aforementioned memory may be used to execute and manage the operation of LPM **112**. In some embodiments, data storage unit **116** may
30 include any storage medium that is configured to store prepaid cardholder account data and participating merchant data associated with the loyalty benefit

program. Exemplary data storage units may include one or more external database servers accessible by program management server **102**. Alternatively, data storage unit **116** may include a local database hosted by program management server **102**. In some embodiments, data storage unit

5 **116** may be provisioned with a plurality of profiles that include the specific parameters corresponding to the loyalty benefit programs operated by program management server **102**.

In some embodiments, a representative (e.g., website administrator or program manager) associated with the prepaid card issuer entity (e.g.

10 MasterCard) and/or another third party associated with the loyalty benefit program may access LPM **112** in order to manage and/or modify the loyalty benefit program. For example, the representative may establish the number of loyalty levels in the loyalty benefit program. In another example, the representative may update the parameters or qualifications needed for a

15 cardholder account to be assigned to a certain loyalty level.

In some aspects, LPM **112** may support a configuration webpage associated with the loyalty benefit program. For example, the configuration webpage may be utilized by an issuer entity or another associated third party to configure and manage the loyalty benefit program. Specifically, the

20 configuration webpage may comprise a plurality of different user interface (UI) elements that enable a user, such as a program manager (e.g. Perk Program Manager), to configure the specific parameters and characteristics of the loyalty benefit program. For example, the configuration webpage may comprise the functionality to allow a program manager to establish generic loyalty levels

25 associated with the loyalty benefit program. The number of generic loyalty levels established by the administrator may be dependent on a variety of factors, which may include, for example, the ease of management. In some embodiments, between three and seven generic loyalty levels may be established.

30 In another example, the configuration webpage may comprise the functionality to allow a program manager to establish guidelines and/or

parameters for assigning individual loyalty levels to cardholder accounts. In some embodiments, the parameters may be in the form of a set questions requesting information about the cardholder user to be supplied by the cardholder user. Such information may include, for example, demographic information and/or cardholder account information. In some aspects, demographic information may comprise information that an issuing entity believes merchants may find relevant and valuable, such as, for example, age, sex, income, marital status, frequency of travel, etc. Cardholder account information may comprise information associated with the cardholder account, such as, for example, name, card number, etc. In some embodiments, some of the information requested by the issuing entity may not be used in assigning the cardholder account a loyalty level. This information may just be used for advertising purposes, research purposes, etc., and may just be optional for the cardholder to input. However, some of the information requested may be necessary in determining the loyalty level associated with the cardholder account.

Returning to Figure 1, a web portal access device **106** may be utilized by a cardholder user to enroll in and manage a loyalty benefit program account (e.g., an account established and/or configured above via an associated web portal) hosted by program management server **102**. In some embodiments, web portal access device **106** may also comprise any computing device (e.g., a personal computer, a mobile smartphone device, a tablet computer, etc.) that is provisioned with an application (e.g., a web browser application or mobile phone app) that may establish communication with and access LPM **112**. For example, web portal access device **106** may be utilized by a cardholder user to access a prepaid cardholder account associated with the loyalty benefit program in order to enroll in the program. LPM **112** may provide and support content associated with the loyalty benefit program. For example, LPM **112** may support a web portal associated with the loyalty benefit program. The web portal may comprise a plurality of UI elements that enable a cardholder user to enter information required for enrollment in the loyalty benefit program. The

information required may be established by an issuing entity or another third party associated with the loyalty benefit program.

The LPM **112** may be configured to enable the issuing entity or another third party entity to assign a loyalty level to the participating cardholder account based off of the information supplied by the cardholder user. In some embodiments, once a cardholder user successfully inputs the required information, the issuing entity may utilize the LPM **112** to assign a loyalty level to the cardholder account from the established generic loyalty levels. Determining the loyalty level to be assigned to the cardholder account may be based on an algorithm, or other formula, designed by the issuing entity, and/or it may be manually done. Where the loyalty level is determined based on an algorithm determined by the issuing entity, the loyalty level may be automatically assigned to the cardholder account once all the required information has been input, for e.g., on the web portal by the cardholder user. The algorithm may weight different information input by the cardholder user at different values and output a loyalty level assigned to the cardholder account based on these weighted values. Alternatively, a program manager may manually assign a loyalty level to a cardholder account. For example, the program manager may consider the information input by the cardholder user and make a determination of the loyalty level appropriate for that cardholder account (e.g. a subjective determination, an objective determination, or a combination of both). For example, cardholder users with higher incomes and frequent travel may be assigned a higher loyalty level than cardholder users with lower incomes and less frequent travel.

LPM **112** may also be configured to enable cardholder users to monitor and manage their cardholder account. For example, an associated web portal, accessible for e.g., by web portal access device **106**, may enable a cardholder user to perform tasks such as viewing the assigned loyalty level, managing cardholder information, etc. In some embodiments, the loyalty level may be updated based on changes in the cardholder user's demographic information (e.g. income increase, change in marital status, increase in traveling, etc.). In

one embodiment, this may be accomplished via the cardholder user requesting to the issuing entity a change to the loyalty level or may be automatically done when the cardholder updates cardholder information.

In some embodiments, interested merchants may be able to enroll in the loyalty benefit program. Merchants interested in becoming a participating or a partner merchant in the program may first need to define or designate differentiated services or benefits to be offered at a defined merchant site for each generic loyalty level established by the issuing entity or other third party. With regard to the subject matter of this application, differentiated benefits means separate and distinct perks or services. The differentiated benefits may include services or perks to be delivered to the cardholder user at the merchant site, independent of any purchase transaction. The differentiated services or benefits associated with each generic loyalty level may be scaled accordingly, whereby higher tier loyalty levels may equate to more desirable perks than lower tier loyalty levels. For example, where the partner merchant is a spa or other type of salon merchant, the spa merchant may offer cardholder users whose accounts are associated with the highest loyalty level the benefit of a complimentary facial, while the spa merchant may offer cardholder users whose accounts are associated with the lowest loyalty level the benefit of a complimentary eyebrow wax. In some embodiments, the different loyalty levels may also receive a different quantity of perks, where higher loyalty levels may receive several perks or services and lower loyalty levels may receive fewer. For example, where the partner merchant is a mechanic, the mechanic may offer a complimentary tire rotation and a complimentary exterior car detail to cardholder users whose accounts are associated with the highest loyalty level, while the mechanic may offer only a complimentary car wash to cardholder users whose accounts are associated with the lowest loyalty level. The perks to be delivered by the participating partner merchant may also depend on the services, goods, etc. offered by the partner merchant. For example, where the partner merchant is a restaurant, the perk offered to cardholder users whose accounts are associated with the highest loyalty level may be a complimentary

bottle of expensive champagne, while the perk offered to cardholder users whose accounts are associated with the lowest loyalty level may be a complimentary dessert. In comparison, a spa or salon partner merchant may provide the benefits described above. One of ordinary skill in the art will
5 understand that intermediate loyalty levels may receive benefits that are appropriately scaled between the highest and the lowest loyalty levels. For example, where the partner merchant is the above-described restaurant, the perk offered to cardholder users whose accounts are associated with an intermediate loyalty level (i.e. a loyalty level that is not the highest and not the
10 lowest loyalty level) may receive a complimentary bottle of less expensive champagne. Thus, each generic loyalty level may have an appropriately scaled, differentiated perk to be defined by each partner merchant.

In some embodiments, the issuing entity or other third party may require the interested merchants to submit to a verification process, for e.g., a phone
15 call, a merchant site visit, etc. by an administrator of the issuing entity. The verification process may be implemented in order to determine that each interested merchant has defined a merchant-specific differentiated perk or benefit for each generic loyalty level. In some aspects, this may include the issuing entity approving the benefit(s) defined for each loyalty level. Once the
20 interested merchant has been approved by the issuing entity, the merchant may be designated a participating partner merchant.

LPM **112** may be configured to display all participating partner merchants. For example, LPM **112** may be configured to provide a listing of all participating partner merchants and their merchant-specific different benefits for
25 each of the loyalty levels on a web portal or other website associated with the loyalty benefit program. Such information may be accessible using a web portal access device **106** or other similar type of device, where web portal access device **106** may include an application or "app" for accessing a listing of all participating partner merchants from LPM **112**. For example, the application
30 may be a loyalty application downloaded from an application store onto web portal access device **106**. The loyalty application may comprise a plurality of

user interface (UI) elements that enable a user, such as a cardholder user, to filter the listing in terms of type of merchant, merchant rating, etc. The loyalty application may also be configured to list participating merchants within a certain distance to the user of web portal access device **106**. For example, web portal access device **106** may include a global positioning system (GPS) and/or other location service that may interface with the program management server **102** to display only those participating merchants within a geographic region, for example a ten mile radius. One of the UI elements of the loyalty application may enable the user of web portal access device **106** to modify the geographic region to be one of a range of regions.

Returning to Figure 1, after utilizing web portal access device **106** to enroll in the loyalty benefit program, a cardholder user may access the web portal to determine participating partner merchants. Thus, a cardholder user may identify a participating merchant in order to visit their merchant site and conduct a loyalty transaction. As used herein, a loyalty transaction may include a loyalty card identification system associated with a loyalty benefit program that is concerned with identifying both a cardholder user and a loyalty level associated with a cardholder account enrolled in the loyalty benefit program, and delivering at least one differentiated merchant-specific benefit to the cardholder user based on the loyalty level associated with the cardholder account of the cardholder user, where the delivery of the differentiated merchant-specific perk may be purchase independent.

In some embodiments, a cardholder user may initiate a loyalty card or loyalty transaction at a reader device **114** at a merchant site location, such as a brick and mortar merchant store. Exemplary reader devices may include a magnetic stripe reader, a wireless smartcard reader, a wireless device reader, and the like. For example, reader device **114** in Figure 1 may include a magnetic stripe card reader that is configured to read a magnetic stripe card (MSC) **118** (e.g., a prepaid loyalty card associated with the cardholder account) that is swiped by the cardholder user. In some embodiments, the prepaid loyalty card associated with the cardholder account may not be a physical card.

For example, reader device **114** may also or alternatively comprise a wireless device reader that is configured to wirelessly communicate with a cardholder user's near field communications (NFC) enabled smartcard or mobile device **120** in order to wirelessly receive loyalty card information (e.g., loyalty card number or a proxy number) to initiate a loyalty transaction at reader **114** (e.g., wirelessly receiving loyalty card data associated with a loyalty card "softcard" application provisioned on the smart card or mobile device). For example, mobile device **120** may be configured to communicate loyalty card data with a wireless device reader **114** via near field communications (NFC) to initiate the purchase transaction. In some embodiments, since the loyalty transaction may be independent of a purchase transaction, reader device **114** may or may not be in communication with a point of service (POS) device or system (not shown), where the POS device may include any type of device or unit that is configured to facilitate a payment card transaction. Exemplary POS devices may include self-service kiosks, self-checkout units, point of sale cashier terminals/registers, and the like.

Upon presenting and/or interfacing the loyalty card (e.g., a magnetic strip card **118** or an electronic loyalty card provisioned on mobile device **120**) with reader device **114**, reader **114** may obtain loyalty card credentials and related data from the loyalty card and subsequently generate loyalty transaction data. Exemplary loyalty transaction data may include, but is not limited to, i) a cardholder account number (e.g., a primary account number or PAN), ii) a card number, and iii) a card proxy number. The loyalty transaction data may then be sent from reader **114** to program management server **102** as a loyalty card authorization request message via transaction network gateway **104**. Although not shown in Figure 1, the loyalty card authorization request message may also traverse other network elements, such as an acquirer entity server or network routing server, prior to reaching the transaction network gateway **104** or program management server **102**. In some embodiments, transaction network gateway **104** may include any gateway server, node, or unit that serves as an entry and exit point for communications (e.g., packet traffic) entering and

leaving a loyalty transaction network and associated infrastructure (e.g., MasterCard network infrastructure or "MasterCard network"). Transaction network gateway **104** may be communicatively connected to program management server **102**, which may also be located within the loyalty transaction network.

Upon receiving the loyalty card authorization request, transaction network gateway **104** may be configured to perform a plurality of functions. For example, transaction network gateway **104** may be configured to forward the loyalty card authorization request message containing the loyalty transaction data to program management server **102**. As an alternative to forwarding the loyalty card authorization request message, transaction network gateway **104** may instead be configured to extract the loyalty transaction data from the loyalty card authorization request message received from merchant entity **108** and subsequently generate a loyalty indication message that includes the extracted loyalty transaction data. Afterwards, transaction network gateway **104** may send loyalty indication message containing the loyalty transaction data to program management server **102**. In some embodiments, each of the loyalty card authorization request message and the loyalty indication message may comprise a web based message, such as an XML request message. However, each of the loyalty card authorization request message and the loyalty indication message may be generated in any web based protocol, format, or specification in alternative embodiments without departing from the scope of the present subject matter.

Regardless of the manner in which the loyalty transaction data is received (e.g., loyalty card authorization request message or loyalty indication message) program management server **102** may be configured to utilize the loyalty transaction data to determine the generic loyalty level associated with the cardholder account. In some embodiments, program management server **102** utilizes the cardholder account information (e.g. card number or a proxy number) contained in the received loyalty indication message or loyalty card authorization request message to determine the loyalty level associated with

that cardholder account via the card number. For example, program management server **102** may identify the loyalty level assigned to the cardholder account by the issuer entity or other third party based on the received card number and/or the cardholder name. In some embodiments, the
5 card numbers (or proxy numbers) associated with the cardholder account and the corresponding loyalty level are securely stored in data storage unit **116**.

The program management server **102** may then communicate back to reader **114**, traversing transaction network gateway **104** in a manner similar to the one described above, the loyalty level associated with the cardholder
10 account. The at least one merchant-specific differentiated perk or benefit that corresponds to the loyalty level of that cardholder user may then be delivered to the cardholder user by a representative (e.g. employee) of the participating merchant.

Figure 2 depicts a flow chart illustrating an exemplary method **200** for
15 loyalty cardholders via loyalty card transactions according to an embodiment of the subject matter described herein. In step **202**, a loyalty card transaction is conducted with a loyalty card. In some embodiments, a cardholder user may utilize the loyalty card at a participating merchant site (e.g., a brick and mortar merchant store). The loyalty card transaction may be independent of any type
20 of purchase transaction. For example, the loyalty card may be presented and utilized at a reader **114**, either via the swiping of magnetic swipe card (MSC) **118** at a magnetic card stripe reader **114**, which may or may not be connected to a point of sale (POS) device (not shown) or via NFC conducted between a wireless device reader **114** and an NFC enabled mobile device **120** (or smart
25 card) to initiate the loyalty transaction.

At that point, a transaction indication message may be received at a program management server **102**. In some embodiments, loyalty transaction data associated with the conducted loyalty transaction may be sent from merchant entity **108** to program management server **102** via transaction
30 network gateway **104**. In some embodiments, merchant entity **108** may generate and send a loyalty card authorization request message that includes

information regarding the loyalty card transaction, which includes details corresponding to the loyalty transaction initiated by the cardholder user at the merchant store site. Upon receipt of the message, transaction network gateway **104** may forward the loyalty card authorization request message containing the
5 loyalty transaction data to program management server **102**. In some alternate embodiments, transaction network gateway **104** may be configured to i) extract loyalty card transaction information from the received loyalty card authorization request message, ii) generate a loyalty indication message that includes the extracted loyalty transaction data, and iii) send the generated loyalty indication
10 message to program management server **102**. Exemplary loyalty transaction information included in the payment card authorization request message and/or the purchase indication message includes, but is not limited to a cardholder account number, card number and/or proxy number.

At step **204**, loyalty card transaction information is extracted and
15 processed to determine a loyalty level assigned to the cardholder account. In some embodiments, program management server **102** may be configured (e.g., via execution of LPM **112** by processor **110**) to extract loyalty card transaction information from the received loyalty card authorization request message (or the loyalty indication message). In some embodiments, program management
20 server **102** may extract a cardholder account number, card number and/or proxy number. In some embodiments, program management server **102** may be configured to utilize the extracted cardholder account number, card number, and/or proxy number to access a cardholder's account, which specifies the loyalty level assigned to the cardholder account.

25 In step **206**, the loyalty level assigned to the cardholder's account is utilized to determine at least one merchant-specific differentiated benefit to be provided to a holder of the loyalty card (e.g. cardholder user) in the event the loyalty card transaction is initiated at a participating merchant site. In some embodiments, program management server **102** may be configured to
30 communicate the extracted loyalty level from the received loyalty card transaction information (e.g., obtained in step **204**) in response to determining

the loyalty level assigned to the cardholder account. The extracted loyalty level may be communicated through transaction network gateway **104** to a reader device **114** back at merchant site **108**. Once the extracted loyalty level assigned to the cardholder account is provided to reader device **114** or any other device, such as, e.g. POS device (not shown), an employee or other associate of the participating partner merchant may determine the corresponding benefit to provide to the cardholder user. The at least one merchant-specific differentiated benefit may be the benefit designated by the participating partner merchant, where each generic loyalty level established by the issuing entity may have at least one correspondingly scaled and differentiated merchant-specific benefit. Therefore, the merchant-specific differentiated benefit provided to the cardholder user may be based upon the loyalty level associated with that cardholder's cardholder account. For example, if a cardholder user enters a merchant site and initiates a loyalty card transaction, an employee of the participating partner merchant may determine the loyalty level assigned to the cardholder user's account, using the process as indicated above. The employee may then provide to the cardholder user the at least one differentiated merchant-specific benefit corresponding to the cardholder user's assigned loyalty level.

Figure 3 depicts a high level block diagram of exemplary components of program management server **102** suitable for use in performing the functions described herein. As depicted in Figure 3, server **102** comprises a processor **110**, a memory **304**, and a network interface card (NIC) **306** communicatively connected via a system bus **308**. In some embodiments, processor **110** can comprise a microprocessor, central processing unit (CPU), or any other like hardware based processing unit. In some embodiments, a loyalty program module (LPM) **112** can be stored in memory **304**, which can comprise random access memory (RAM), read only memory (ROM), optical read/write memory, cache memory, magnetic read/write memory, flash memory, or any other non-transitory computer readable medium. In some embodiments, processor **110** and memory **304** can be used to execute and manage the

operation of LPM **112**. NIC **306** may be an Ethernet card or other I/O interface card that allows server **102** to communicate with other devices over a computer network. Thus, when configured with LPM **112**, as described herein, server **102** becomes a special purpose computing platform that improves the technological
5 area of distributing loyalty-level-differentiated perks to loyalty program members over a computer network.

It will be understood that various details of the subject matter described herein may be changed without departing from the scope of the subject matter described herein. Furthermore, the foregoing description is for the purpose of
10 illustration only, and not for the purpose of limitation.

CLAIMS

What is claimed is:

1. A method for providing benefits to loyalty cardholders via loyalty card transactions, the method comprising:
 - 5 receiving, by a loyalty program module, a message indicating that a loyalty card transaction has been initiated at a participating merchant site using a loyalty card associated with a cardholder account, wherein the cardholder account is enrolled in a loyalty benefit program managed via the loyalty program module;
 - 10 determining a loyalty level assigned to the cardholder account using information regarding the loyalty card transaction contained in the message; and
 - utilizing the loyalty level assigned to the cardholder account to determine at least one merchant-specific differentiated benefit to be provided to a holder of the loyalty card, wherein each loyalty level comprises at least one merchant-specific differentiated benefit designated by the participating partner merchant.
- 15 2. The method of claim 1, further comprising: receiving, by the loyalty program module, cardholder user information associated with the cardholder account.
- 20 3. The method of claim 2, wherein the cardholder user information comprises demographic information, such as at least one of age, income, marital status, and other relevant demographic information; loyalty card number; and name of the cardholder user.
- 25 4. The method of claim 2, wherein the loyalty level is assigned to the cardholder account by the loyalty program module based on the cardholder user information.

5. The method of claim 4, wherein the loyalty program module stores one or more of the cardholder user information associated with the cardholder account, the loyalty level assigned to the cardholder account, a listing of the participating partner merchants, and the merchant-specific differentiated benefit for each of the loyalty levels.
6. The method of claim 1, wherein a listing of the participating partner merchants and their merchant-specific differentiated benefits for each of the loyalty levels is accessible via the loyalty program module.
7. The method of claim 1, wherein each participating partner merchant utilizes the loyalty program module to designate the at least one merchant-specific differentiated benefit for each of the loyalty levels.
8. The method of claim 1, wherein the message includes either a loyalty card transaction indication message or a loyalty card authorization request message.
9. A system for providing benefits to loyalty cardholders via loyalty card transactions, the system comprising:
at least one processor;
memory; and
a loyalty program module utilizing the at least one processor and the memory, wherein the loyalty program module is configured to:
receive a message indicating that a loyalty card transaction has been initiated at a participating merchant site using a loyalty card associated with a cardholder account, wherein the cardholder account is enrolled in a loyalty benefit program managed via the loyalty program module;
determine a loyalty level assigned to the cardholder account using information regarding the loyalty card transaction contained in the message; and

utilize the loyalty level assigned to the cardholder account to determine at least one merchant-specific differentiated benefit to be provided to a holder of the loyalty card, wherein each loyalty level comprises at least one merchant-specific differentiated benefit designated by the participating partner merchant.

10. The system of claim 9, wherein the loyalty program module is configured to receive cardholder user information associated with the cardholder account.
- 10 11. The system of claim 10, wherein the cardholder user information comprises demographic information, such as at least one of age, income, marital status, and other relevant demographic information; loyalty card number; and name of the cardholder user.
12. The system of claim 10, wherein the loyalty program module is configured to assign the loyalty level to the cardholder account based on the cardholder user information.
13. The system of claim 12, wherein the loyalty program module is configured to store one or more of the cardholder user information associated with the cardholder account, the loyalty level assigned to the cardholder account, a listing of the participating partner merchants, and the merchant-specific differentiated benefit for each of the loyalty levels
14. The system of claim 9, wherein the loyalty program module is configured to provide a listing of the participating partner merchants and their merchant-specific differentiated benefits for each of the loyalty levels that is accessible to cardholder users.
15. The system of claim 9, wherein each participating partner merchant utilizes the loyalty program module to designate the at least one merchant-specific differentiated benefit for each of the loyalty levels.

16. The system of claim 9, wherein the message includes either a loyalty card transaction indication message or a loyalty card authorization request message.
17. A non-transitory computer readable medium having stored thereon executable instructions for controlling a computer to perform steps comprising:
- 5 receiving, by a loyalty program module, a message indicating that a loyalty card transaction has been initiated at a participating merchant site using a loyalty card associated with a cardholder account, wherein the cardholder account is enrolled in a loyalty benefit program managed via the loyalty program module;
- 10 determining a loyalty level assigned to the cardholder account using information regarding the loyalty card transaction contained in the message; and
- 15 utilizing the loyalty level assigned to the cardholder account to determine at least one merchant-specific differentiated benefit to be provided to a holder of the loyalty card, wherein each loyalty level comprises at least one merchant-specific differentiated benefit designated by the participating partner merchant.
- 20 18. The non-transitory computer readable medium of claim 17, further comprising receiving, by the loyalty program module, cardholder user information associated with the cardholder account; and assigning to the cardholder account the loyalty level based on the cardholder user information.
- 25 19. The non-transitory computer readable medium of claim 18, wherein the loyalty program module stores one or more of the cardholder user information associated with the cardholder account, the loyalty level assigned to the cardholder account, a listing of the participating partner

merchants, and the merchant-specific differentiated benefit for each of the loyalty levels.

20. The non-transitory computer readable medium of claim 17, wherein each participating partner merchant utilizes the loyalty program module to designate the merchant-specific differentiated benefit for each of the loyalty levels.
- 5

1/2

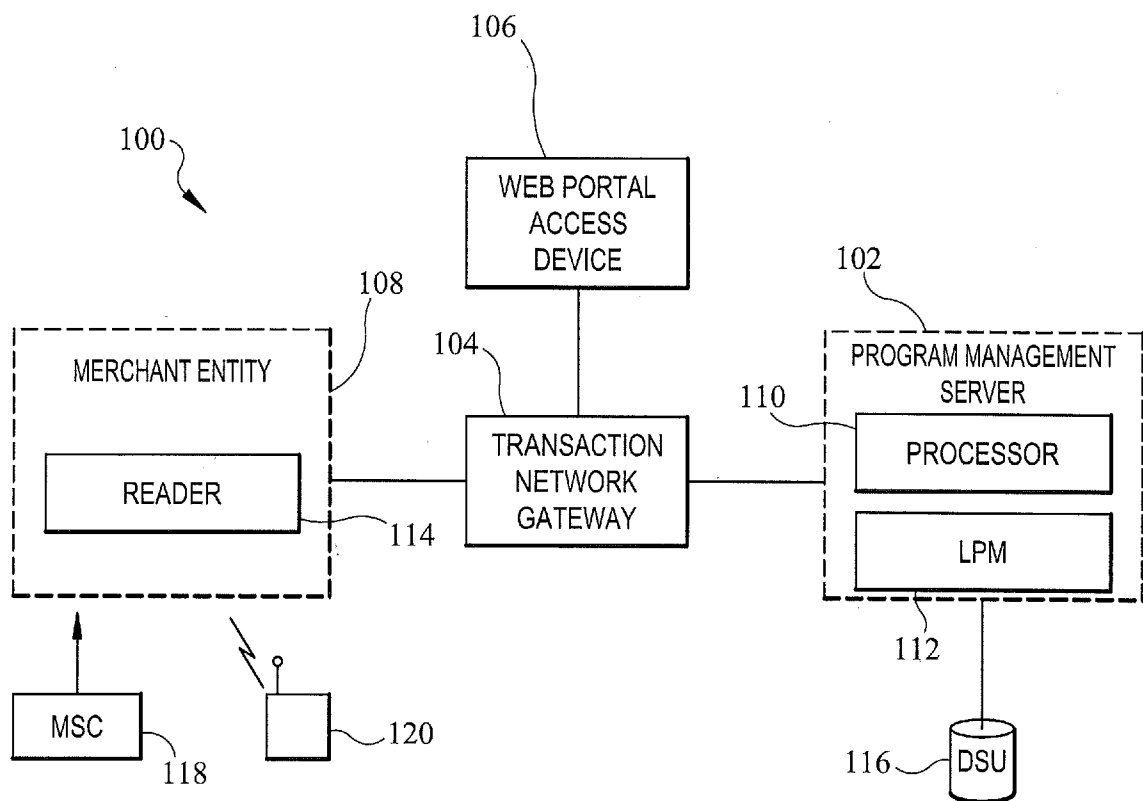


FIG. 1

2/2

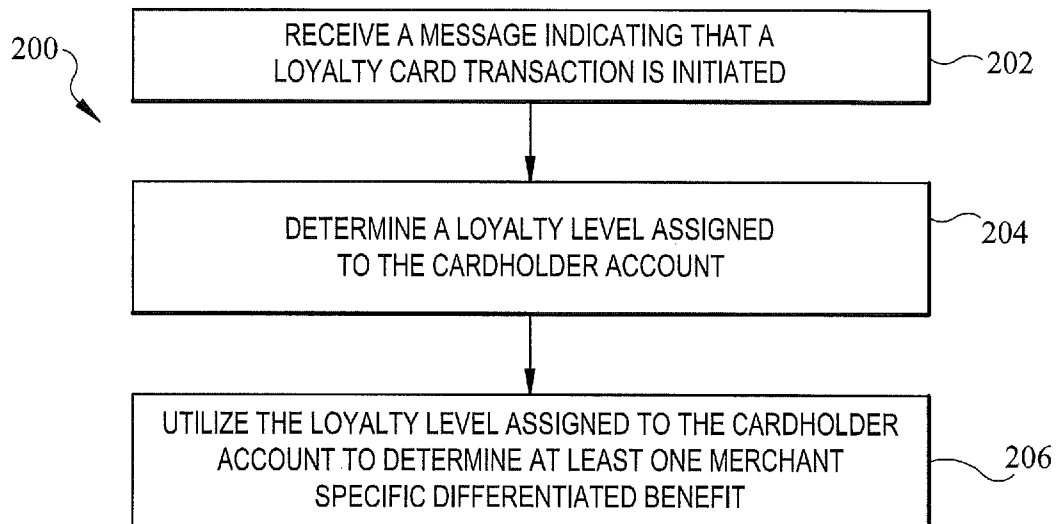


FIG. 2

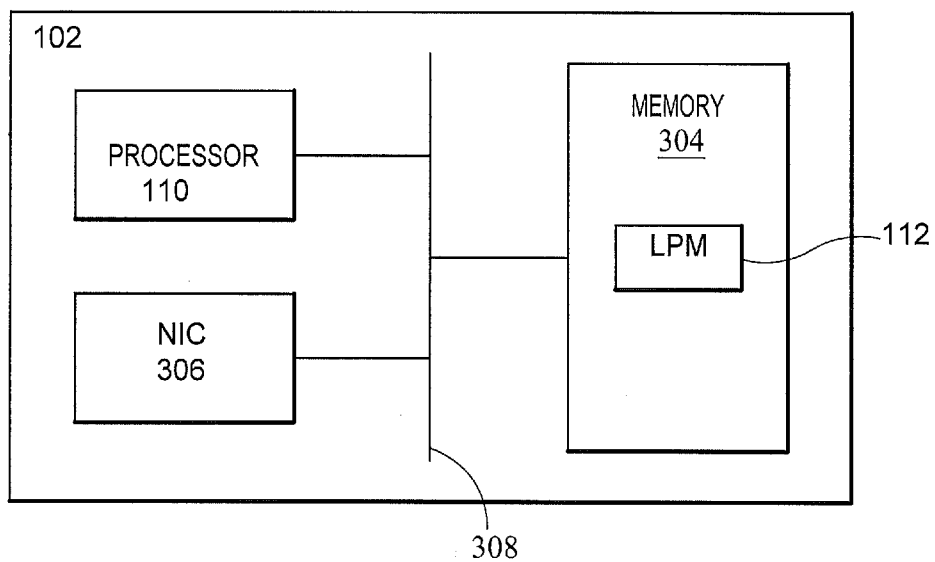


FIG. 3

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2015/054321**A. CLASSIFICATION OF SUBJECT MATTER****G06Q 30/06(2012.01)i, G06Q 50/10(2012.01)i, G06Q 20/04(2012.01)i, H04W 4/12(2009.01)i, G06Q 50/30(2012.01)i, H04L 12/66(2006.01)i**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

G06Q 30/06; G06Q 30/02; G06F 17/00; G06Q 30/00; G06Q 50/10; G06Q 20/04; H04W 4/12; G06Q 50/30; H04L 12/66

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: cardholder account, loyalty benefit program, loyalty level, merchant-specific differentiate benefit**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2014-0310080 A1 (VISA INTERNATIONAL SERVICE ASSOCIATION) 16 October 2014 See abstract, paragraphs [0128]-[0131], [0138], [0141], [0142], [0246], [0249], [0252], [0253] and claims 1, 9, 14.	1-20
A	US 2013-0211886 A1 (LOC ENTERPRISES, LLC) 15 August 2013 See abstract and claims 1-21.	1-20
A	US 2013-0332245 A1 (JOHN PARKER SHANNON, JR. et al.) 12 December 2013 See abstract and claims 1, 2, 5.	1-20
A	US 8800857 B1 (SHEILA S. BUTLER et al.) 12 August 2014 See abstract and claim 1.	1-20
A	US 2008-0010154 A1 (TERRANCE PATRICK TIETZEN et al.) 10 January 2008 See abstract and claims 1-6.	1-20

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

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22 January 2016 (22.01.2016)

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Name and mailing address of the ISA/KR

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2015/054321

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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US 8800857 B1	12/08/2014	None	
US 2008-0010154 A1	10/01/2008	CA 2550067 A1 US 7857210 B2	09/12/2007 28/12/2010