SYSTEMS AND METHODS FOR PROCESSING LOYALTY REWARDS

CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims priority to and the benefit of the filing date of U.S. Application Serial No. 14/938,603, filed November 11, 2015, which is hereby incorporated by reference in its entirety.

FIELD

The present disclosure generally relates to systems and methods for processing loyalty rewards, and in particular, to associating loyalty reward accounts to payment accounts.

BACKGROUND

This section provides background information related to the present disclosure which is not necessarily prior art.

Consumers are known to use one or multiple payment accounts to fund transactions for different types of products (*e.g.*, goods and services, etc.), from different merchants. The transactions result in transaction data, associated with authorization, settlement and/or clearing of the transactions, being compiled by the merchants, issuers of the payment accounts, acquirers associated with the merchants, and the payment networks processing the transactions. Additional transaction data may be compiled specific to the individual transactions. Separately, consumers are known to use loyalty accounts associated with merchants to accumulate rewards or benefits for making purchases at the merchants or for being loyal to the merchants. The consumers often associate different transactions with their particular loyalty account by presenting separate loyalty identifiers (*e.g.*, loyalty cards, etc.) at the time of the purchase transactions. As such, the consumers typically maintain the loyalty identifiers in their wallet, purse, etc., and often have multiple such loyalty identifiers, particularly when the consumers have multiple loyalty accounts at multiple different merchants.

SUMMARY

According to an aspect, there is a computer-implemented method for processing loyalty rewards for a transaction, the method comprising:

receiving, by at least one computing device, an authorization reply message for a transaction associated with a payment account and including a primary account number (PAN) for the payment account and a merchant identifier for a merchant involved in said transaction, the at least one computing device included in a payment network;

in response to the authorization reply message, identifying, by the at least one computing device, in a data structure, a loyalty account from multiple loyalty accounts included in the data structure based on the PAN for the payment account and the merchant identifier, the data structure further including multiple PANs associated with the multiple loyalty accounts, and each of the loyalty accounts specific to a merchant identifier and associated with a loyalty account indicator unique to the loyalty account;

determining, by the at least one computing device, that the transaction satisfies at least one purchase parameter associated with the identified loyalty account;

embedding, by the at least one computing device, the loyalty account indicator in the authorization reply message when the transaction satisfies the at least one purchase parameter; and

causing, by the at least one computing device, the authorization reply message to be transmitted, via an acquirer, to said merchant, via at least one communications network, whereby the merchant is permitted to identify the transaction to the loyalty account based on the loyalty account indicator, without a consumer involved in the transaction separately presenting the loyalty account indicator to the merchant, and update a loyalty account reward value for the loyalty account based on the transaction.

According to an aspect, there is the computer-implemented method of claim 1, further comprising causing, by the at least one computing device, a reward notification message to be delivered to a consumer associated with at least one of the payment account and the loyalty account after causing the authorization reply message to be transmitted to the merchant.

According to an aspect, there is a computer-implemented method for processing loyalty rewards for a transaction, the method comprising:

transmitting an authorization request for a transaction involving a consumer and a merchant, the authorization request being independent of a loyalty account for the consumer and associated with the merchant;

receiving an authorization reply for the transaction, the authorization reply including a unique indicator of the loyalty account for the consumer and associated with the merchant; and

based on a product identifier associated with the transaction, updating, by at least one computing device, a loyalty account value for the consumer based on at least the authorization reply, thereby permitting the merchant to manage the loyalty account value without the consumer separately identifying the loyalty account when initiating the transaction.

According to an aspect, there is a system for use in processing transactions to payment accounts, the system comprising:

a memory including a loyalty engine having a data structure, the data structure including multiple primary account numbers (PANs), each associated with a payment account, each PAN associated with at least one loyalty account; and

at least one processor coupled with the memory and configured to:

initiate a loyalty engine application programming interface (API) and receive, via the loyalty engine API, loyalty account information for a consumer for a loyalty account associated with a merchant;

store the loyalty account information in the memory in association with a payment account associated with the consumer;

in response to a transaction message associated with a transaction involving the consumer and the merchant, identify the loyalty account in the memory based on a PAN included in the transaction message for the payment account associated with the consumer, the loyalty account specific to the merchant associated with the transaction message;

embed an indicator associated with the loyalty account and unique to the loyalty account in the transaction message, the indicator including an account number for the loyalty account; and

enable an update to a loyalty account value associated with the loyalty account, by the merchant, based on identification of the loyalty account in the transaction message and at least one parameter of the transaction, whereby the loyalty

account value is updated without the consumer presenting a separate indictor for the loyalty account to the merchant.

CLAIMS

What is claimed is:

1. A computer-implemented method for processing loyalty rewards for a transaction, the method comprising:

receiving, by at least one computing device, an authorization reply message for a transaction associated with a payment account and including a primary account number (PAN) for the payment account and a merchant identifier for a merchant involved in said transaction, the at least one computing device included in a payment network;

in response to the authorization reply message, identifying, by the at least one computing device, in a data structure, a loyalty account from multiple loyalty accounts included in the data structure based on the PAN for the payment account and the merchant identifier, the data structure further including multiple PANs associated with the multiple loyalty accounts, and each of the loyalty accounts specific to a merchant identifier and associated with a loyalty account indicator unique to the loyalty account;

determining, by the at least one computing device, that the transaction satisfies at least one purchase parameter associated with the identified loyalty account;

embedding, by the at least one computing device, the loyalty account indicator in the authorization reply message when the transaction satisfies the at least one purchase parameter; and

causing, by the at least one computing device, the authorization reply message to be transmitted, via an acquirer, to said merchant, via at least one communications network, whereby the merchant is permitted to identify the transaction to the loyalty account based on the loyalty account indicator, without a consumer involved in the transaction separately presenting the loyalty account indicator to the merchant, and update a loyalty account reward value for the loyalty account based on the transaction.

2. The computer-implemented method of claim 1, further comprising:

receiving, at the at least one computing device, prior to receiving the authorization reply message for the transaction, a request to associate the loyalty account with the payment account,

the request including at least the PAN for the payment account and the loyalty account indicator; and

storing, in the data structure, the association between the payment account and the loyalty account indicator.

3. The computer-implemented method of claim 1, wherein receiving the authorization reply message includes receiving the authorization reply message from an issuer of the payment account associated with the transaction, the authorization reply message including an approval of the transaction.

4. The computer-implemented method of claim 1, wherein the authorization reply message for the transaction includes a purchase total for the transaction.

5. The computer-implemented method of claim 1, wherein the authorization reply message for the transaction includes a product identifier, whereby the merchant is permitted to update the loyalty account reward value when the product identifier is indicative of an eligible product.

6. The computer-implemented method of claim 1, further comprising embedding, by the at least one computing device, the loyalty account reward value in the authorization reply message.

7. The computer-implemented method of claim 1, wherein the authorization reply message includes an ISO message; and

wherein the loyalty account indicator is embedded in a segment designated in the ISO message, the loyalty account indicator including an account number for the loyalty account.

8. The computer-implemented method of claim 1, further comprising causing, by the at least one computing device, a reward notification message to be delivered to a consumer associated with at least one of the payment account and the loyalty account after causing the authorization reply message to be transmitted to the merchant.

9. A computer-implemented method for processing loyalty rewards for a transaction, the method comprising:

transmitting an authorization request for a transaction involving a consumer and a merchant, the authorization request being independent of a loyalty account for the consumer and associated with the merchant;

receiving an authorization reply for the transaction, the authorization reply including a unique indicator of the loyalty account for the consumer and associated with the merchant; and

based on a product identifier associated with the transaction, updating, by at least one computing device, a loyalty account value for the consumer based on at least the authorization reply, thereby permitting the merchant to manage the loyalty account value without the consumer separately identifying the loyalty account when initiating the transaction.

10. A computer-implemented method for processing loyalty rewards for a transaction, the method comprising

receiving, at a payment network, an authorization response message associated with a transaction to a payment account, the authorization response message received from an issuer of the payment account and including:

a primary account number (PAN) for the payment account;

an approval of the transaction;

a merchant identifier for a merchant involved in said transaction; and

at least one purchase parameter;

identifying, in a data structure maintained by the payment network, a loyalty account associated with both the merchant identifier and the payment account , and a unique indicator associated with the loyalty account; and

updating, by the payment network, a loyalty account value associated with the loyalty account based on the at least one purchase parameter, whereby the loyalty account is updated by use of the payment account, without a consumer associated with the payment account and/or the transaction separately presenting an indicator of the loyalty account to the merchant; and

embedding, by the payment network, at least one of the loyalty account value and a loyalty value associated with the transaction in the authorization response message, whereby the

loyalty account value and/or the loyalty value associated with the transaction is able to be reported to the consumer.

11. The computer-implemented method of claim 10, wherein identifying the loyalty account includes identifying said loyalty account from among multiple loyalty accounts unique to said consumer in the data structure, the multiple loyalty accounts associated with said payment account, each of the multiple loyalty accounts associated with a different merchant.

12. The computer-implemented method of claim 10, wherein the at least one purchase parameter includes a purchase total for the transaction; and

wherein updating the loyalty account value associated with the loyalty account includes adding a percentage of the purchase total to the loyalty account value.

13. The computer-implemented method of claim 10, wherein the at least one purchase parameter includes a product identifier; and

wherein updating the loyalty account value associated with the loyalty account includes adding to the loyalty account value, by the payment network, when the product identifier is indicative of a qualifying product.

14. The computer-implemented method of claim 10, further comprising embedding directing the authorization response message to said merchant.

15. The computer-implemented method of claim 10, wherein updating the loyalty account value associated with the loyalty account includes altering the loyalty account value based on the at least one purchase parameter; and

wherein the at least one purchase parameter includes at least one of a purchase total and a product identifier.

16. A system for use in processing transactions to payment accounts, the system comprising:

a memory including a loyalty engine having a data structure, the data structure including multiple primary account numbers (PANs), each associated with a payment account, each PAN associated with at least one loyalty account; and

at least one processor coupled with the memory and configured to:

initiate a loyalty engine application programming interface (API) and receive, via the loyalty engine API, loyalty account information for a consumer for a loyalty account associated with a merchant;

store the loyalty account information in the memory in association with a payment account associated with the consumer;

in response to a transaction message associated with a transaction involving the consumer and the merchant, identify the loyalty account in the memory based on a PAN included in the transaction message for the payment account associated with the consumer, the loyalty account specific to the merchant associated with the transaction message;

embed an indicator associated with the loyalty account and unique to the loyalty account in the transaction message, the indicator including an account number for the loyalty account; and

enable an update to a loyalty account value associated with the loyalty account, by the merchant, based on identification of the loyalty account in the transaction message and at least one parameter of the transaction, whereby the loyalty account value is updated without the consumer presenting a separate indictor for the loyalty account to the merchant.