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Crowdsourced Selection Of Payment Instrument

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CROWDSOURCED SELECTION OF PAYMENT INSTRUMENT

Abstract

A payment instrument for a pending transaction using a digital wallet system is selected based on data obtained from crowdsourced responses to selection requests sent to interested users.

Description

Payment instruments, or cards, for transactions are typically selected by users of a digital wallet before or during a transaction. The user may want a specific credit card or debit card to be used to conduct a transaction based on the rewards points provided by the card, interest rates charged by the card, or for any other suitable reason. The card is selected on a digital wallet application operating on a user's mobile device or on a digital wallet system server that manages the digital wallet of the user. In certain examples, the digital wallet or the digital wallet system makes the selection on behalf of the user.

In a conventional system, when a user attempts to conduct a transaction, the digital wallet may ask the user which card or other payment instrument to use. The user may make a selection on a user interface of the mobile device, and the selected card is used to conduct the transaction. In another example, the digital wallet application or the digital wallet system makes a selection based on configured rules or criteria. The rules may be based on user preferences or other criteria.

The present technology can select a backing instrument based on crowdsourced information received from readers of websites related to the industry. Questionnaires are communicated to the readers to determine which card is best suited for a transaction with a

particular set of characteristics. With the crowdsourced data, the digital wallet system is able to select preferred cards for future transactions with one or more of those characteristics.

Referring to Figure 1, in some implementations of the technology, a digital wallet management system or other payment processing system identifies websites that are related to preferred topics, such as payment instrument selections. For example, a related website may be an aggregator of news articles about credit card technologies and credit card programs. In another example, a related website may be a message board where people interested in credit card programs discuss issues, such as new credit card rewards, reward comparisons, credit card technologies, debit card programs, or other related issues. In another example, a website may be directed to presenting educational information about the credit card industry and other financial industries. Any website that attracts users with an interest in payment instrument selection could be identified. The websites may be selected by an analysis of the content of the website or by a manual selection by digital wallet system operators.

The digital wallet system communicates with the website system to request permission to provide questionnaires to readers of the website. In an example, the digital wallet system provides the questionnaire as an advertisement on the website. This advertisement may be configured through the website system, a provider of the website, an advertising management system that works with the website, or through any other suitable party. The advertisement may be presented to the user in any suitable manner, such as with a popup advertisement, a banner advertisement, or as an advertisement incorporated in the user interface of the website.

In another example, the questionnaire is used as a challenge-response program or other internet object regulating entry into the website. A challenge-response program is typically used to distinguish a human website viewer from a machine, or identify an authorized user. For

example, in a challenge-response object, a viewer is asked to enter data into an object on the website in order to enter the website. In this example, the challenge-response system would present the questionnaire to the user and require the user to provide feedback to enter the website.

The questionnaire that is provided to the users asks the users to select the card that they would use based on the fictional transaction characteristics presented. For example, the questionnaire proposes a purchase of gasoline at a particular chain of gas stations and offers three different card options. The different credit card options may be three different credit cards from three different issuers. In another example, the different credit card options may be a credit card, a debit card, and a stored value card.

In another example, the different card options may be from the same credit card issuer, but may have different rewards programs, such as a flight rewards card, a cash rewards card, and a points rewards card. In another example, a different number of card options, such as 2, 5, or 10 cards are presented to the user for selection.

Any type of fictional transaction characteristics may be presented. For example, a characteristic may include one or more of a merchant name, a transaction location such as a city or state, a product to be purchased, a merchant type, a dollar amount, or any other suitable characteristic.

After receiving a configured number of responses to a particular questionnaire scenario, the digital wallet system aggregates the responses to formulate rules, suggestions, predictions, or other suitable actions to take based on the responses. For example, if eighty users responded to a particular questionnaire that asks which card to use at a particular gas station, and sixty users selected the same card, then the digital wallet system may make that card the default card for transactions at that particular gas station. The digital wallet system may continue to present the

questionnaire and modify the results based on additional questionnaire responses. In an example, different combinations of cards may be presented for the particular gas station to determine the preferred card from among a larger selection of cards.

The system may use the preferred card selection when a user next attempts a transaction that has characteristics that are similar to the characteristics of the questionnaire. For example, if a user attempts a transaction at the example gas station, then the card that was determined via questionnaire results to be preferred for that gas station might be selected for the transaction. That is, a digital wallet may offer the card to the user in a recommendation for the transaction. The user may select the recommended card or ignore the recommendation. In another example, the user uses a proxy card, and the backing instrument for the transaction is selected by the digital wallet system. That is, the user presents a proxy card associated with an account of the user on the digital wallet system. The digital wallet system processes the transaction, but processes a second transaction with a backing instrument in the user account. In the example, the backing instrument selected is based on the preferred card for a transaction with similar characteristics.

If the user does not override the recommendation, the transaction is then conducted with the selected card. For example, if the digital wallet recommended a card that is a credit card, then the transaction may be conducted with the recommended card via a traditional credit card network.