transactions. Accordingly, the use of traditional payment networks and payment systems technologies in combination with blockchain currencies may provide consumers and merchants the benefits of the decentralized blockchain while still maintaining security of account information and provide a strong defense against fraud and theft.

## SUMMARY

The present disclosure provides a description of systems and methods for linking blockchain transactions to privately verified identities.

In an aspect, the present disclosure refers to a method for linking blockchain transactions to privately verified identities, comprising: receiving, by a receiving device, a transaction message including at least a personal account number, a merchant identifier, and a blockchain network identifier; identifying, by a processing device, a first account profile where an included account identifier corresponds to the personal account number included in the received transaction message; identifying, by the processing device, a second account profile where an included account identifier corresponds to the merchant identifier included in the received transaction message; receiving, by the receiving device, a transaction notification, wherein the transaction notification indicates a transaction processed using a blockchain network associated with the blockchain network identifier included in the received transaction message and includes at least a transaction identifier and an address identifier associated with one of the first account profile and the second account profile; and storing, by the processing device, a linkage between the transaction identifier included in the received transaction notification and at least one of: the address identifier, the personal account number, and the merchant identifier.

In an aspect, the present disclosure refers to a system for linking blockchain transactions to privately verified identities, comprising: a receiving device configured to receive a transaction message including at least a personal account number, a merchant identifier, and a blockchain network identifier; and a processing device configured to identify a first account profile

where an included account identifier corresponds to the personal account number included in the received transaction message, and identify a second account profile where an included account identifier corresponds to the merchant identifier included in the received transaction message, wherein the receiving device is further configured to receive a transaction notification, wherein the transaction notification indicates a transaction processed using a blockchain network associated with the blockchain network identifier included in the received transaction message and includes at least a transaction identifier and an address identifier associated with one of the first account profile and the second account profile, and the processing device is further configured to store a linkage between the transaction identifier included in the received transaction notification and at least one of: the address identifier, the personal account number, and the merchant identifier.

In an example, a method for linking blockchain transactions to privately verified identities includes: storing, in an account database, a plurality of account profiles, wherein each account profile includes data related to a transaction account including at least an account identifier and account data; receiving, by a receiving device, a transaction message, wherein the transaction message is formatted based on one or more standards and includes a plurality of data elements including at least a first data element configured to store a personal account number, a second data element configured to store a merchant identifier, and a third data element configured to store at least a blockchain network identifier; identifying, by a processing device, a first account profile stored in the account database where the included account identifier corresponds to the personal account number stored in the first data element included in the received transaction message; identifying, by the processing device, a second account profile stored in the account database where the included account identifier corresponds to the merchant identifier stored in the second data element included in the received transaction message; receiving, by the receiving device, a transaction notification, wherein the transaction notification indicates a transaction processed using a blockchain network associated with the blockchain network identifier stored in the third data element included in the received transaction message and includes at least a transaction identifier

and an address identifier associated with one of the first account profile and the second account profile; and storing, by the processing device, a linkage between the transaction identifier included in the received transaction notification and at least one of: the address identifier, the personal account number, and the merchant identifier.

In an example, a system for linking blockchain transactions to privately verified identities includes an account database, a receiving device, and a processing device. The account database is configured to store a plurality of account profiles, wherein each account profile includes data related to a transaction account including at least an account identifier and account data. The receiving device is configured to receive a transaction message, wherein the transaction message is formatted based on one or more standards and includes a plurality of data elements including at least a first data element configured to store a personal account number, a second data element configured to store a merchant identifier, and a third data element configured to store at least a blockchain network identifier. The processing device is configured to: identify a first account profile stored in the account database where the included account identifier corresponds to the personal account number stored in the first data element included in the received transaction message; and identify a second account profile stored in the account database where the included account identifier corresponds to the merchant identifier stored in the second data element included in the received transaction message. The receiving device is further configured to receive a transaction notification, wherein the transaction notification indicates a transaction processed using a blockchain network associated with the blockchain network identifier stored in the third data element included in the received transaction message and includes at least a transaction identifier and an address identifier associated with one of the first account profile and the second account profile. The processing device is further configured to store a linkage between the transaction identifier included in the received transaction notification and at least one of: the address identifier, the personal account number, and the merchant identifier.

## BRIEF DESCRIPTION OF THE DRAWING FIGURES

The scope of the present disclosure is best understood from the following detailed description of exemplary embodiments when read in conjunction with the accompanying drawings. Included in the drawings are the following figures: