SUMMARY

According to a first aspect, there is provided method of operating a payment-enabled mobile device that runs a merchant wallet application, the wallet application issued by a merchant, the method comprising:

engaging in a transaction with the payment-enabled mobile device at a point of sale;

transmitting transaction detail data via the internet from the wallet application in the payment-enabled mobile device to a transaction authentication server; the transaction detail data including details of said transaction;

receiving a response message at the payment-enabled mobile device from the authentication server; and

in response to receiving the response message, making payment credential information available to at least one of (a) a POS terminal operated by the merchant; and (b) a payment processor acting for the merchant, wherein the transmitted transaction detail data includes purchased item details that identify items purchased in the transaction, wherein the transmitted transaction detail data includes a respective price range for each purchased item.

According to a second aspect, there is provided a method comprising receiving, in a computer, transaction detail data from a payment-enabled mobile device; said transaction detail data including details of a transaction engaged in by said payment-enabled mobile device, said details identifying product items purchased in said transaction; and in response to the receiving step, performing, by the computer, risk management processing based at least in part on said details identifying product items purchased in said transaction, said risk management processing for determining whether to approve the transaction.

According to a third aspect, there is provided a method comprising:

transmitting transaction detail data from a payment-enabled mobile device to a remote computer, said remote computer operated by one of: (a) a payment account issuer; and (b) a transaction authentication service; said transaction detail data related to a transaction, said transaction detail data identifying product items purchased in said transaction; and

receiving an indication that the remote computer has authenticated the transaction, wherein the payment-enabled mobile device transmits, to the remote computer, prior to the receiving step, an indication that the payment-enabled mobile

device has performed a user authentication procedure in connection with the transaction, wherein said indication specifies a type of said user authentication procedure.

WHAT IS CLAIMED IS:

1. A method of operating a payment-enabled mobile device that runs a merchant wallet application, the wallet application issued by a merchant, the method comprising:

engaging in a transaction with the payment-enabled mobile device at a point of sale;

transmitting transaction detail data via the internet from the wallet application in the payment-enabled mobile device to a transaction authentication server; the transaction detail data including details of said transaction;

receiving a response message at the payment-enabled mobile device from the authentication server; and

in response to receiving the response message, making payment credential information available to at least one of (a) a POS terminal operated by the merchant; and (b) a payment processor acting for the merchant, wherein the transmitted transaction detail data includes purchased item details that identify items purchased in the transaction, wherein the transmitted transaction detail data includes a respective price range for each purchased item.

2. The method of claim 1, wherein the wallet application transmits to the transaction authentication server, prior to the receiving step, location data that indicates a current location of the payment-enabled mobile device.

3. The method of claim 1, wherein the wallet application transmits to the transaction authentication server, prior to the receiving step, device identification data that uniquely identifies the payment-enabled mobile device.

4. The method of claim 1, wherein the wallet application transmits to the transaction authentication server, prior to the receiving step, an indication that the payment-enabled mobile device has performed a user authentication procedure in connection with the transaction.

5. The method of claim 4, wherein said indication specifies a type of said user authentication procedure.

6. The method of claim 1, further comprising:

prior to said transmitting step, receiving a digital receipt for the transaction, by the payment-enabled mobile device, from a merchant device at the point of sale.

7. The method of claim 6, wherein the payment-enabled mobile device extracts at least some of the transaction detail data from the digital receipt.

8. A method comprising:

receiving, in a computer, transaction detail data from a payment-enabled mobile device; said transaction detail data including details of a transaction engaged in by said payment-enabled mobile device, said details identifying product items purchased in said transaction; and

in response to the receiving step, performing, by the computer, risk management processing based at least in part on said details identifying product items purchased in said transaction, said risk management processing for determining whether to approve the transaction.

9. The method of claim 8, wherein said details include a respective price range associated with each of the identified product items.

10. The method of claim 9, wherein said risk management processing is based at least in part on said price ranges associated with the identified product items.

11. The method of claim 8, further comprising:

in response to a result of the risk management processing, generating a cryptogram by the computer; and

transmitting the cryptogram by the computer to (a) a merchant device associated with the transaction; or (b) a transaction processor associated with a merchant involved in the transaction.

12. The method of claim 8, wherein the risk management processing is based at least in part on at least one of: (i) device identification data received from the payment-enabled mobile device, said device identification data uniquely identifying said payment-enabled mobile device; and (ii) an indication that the payment-enabled mobile device has

performed a user authentication procedure in connection with the transaction, said indication received by the computer from said payment-enabled mobile device.

13. The method of claim 12, wherein the risk management processing is based at least in part on said indication that the payment-enabled mobile device has performed a user authentication procedure in connection with the transaction, said indication specifying a type of said user authentication procedure.

14. A method comprising:

transmitting transaction detail data from a payment-enabled mobile device to a remote computer, said remote computer operated by one of: (a) a payment account issuer; and (b) a transaction authentication service; said transaction detail data related to a transaction, said transaction detail data identifying product items purchased in said transaction; and

receiving an indication that the remote computer has authenticated the transaction, wherein the payment-enabled mobile device transmits, to the remote computer, prior to the receiving step, an indication that the payment-enabled mobile device has performed a user authentication procedure in connection with the transaction, wherein said indication specifies a type of said user authentication procedure.

15. The method of claim 14, wherein the transmitted transaction detail data includes a respective price range for each purchased item.

16. The method of claim 14, wherein the payment-enabled mobile device transmits, to the remote computer, prior to the receiving step, device identification data that uniquely identifies the payment-enabled mobile device.