Methods for determining parameters of an installment offer, payment devices, and payment servers

FIELD OF INVENTION

[1] The present invention relates broadly, but not exclusively, to methods for determining parameters of an installment offer, payment devices, and payment servers.

BACKGROUND

[2] Credit card holders commonly use their credit card to pay for their purchases towards the end of a pre-determined payment window (for example at or near a pre-determined day of each month, for example every first day of the month, or for example every 15th day of the month). Payment may not have to be made in full, but outstanding amounts may be carried over to the next month. Furthermore, there may be an option to convert the payment for their purchase into an installment with fixed rates over a pre-determined period of time.

[3] Purchase on installment is increasing rapidly in some of the markets like Europe, Asia-Pacific (APAC) and Latin America and the Caribbean (LAC). However, installment offering needs the cardholder and the issuer to agree before a transaction is processed as installment. Determination of the terms and conditions and agreement on the terms and conditions between the cardholder and the issuer may be cumbersome.

[4] A need therefore exists to provide devices, systems and methods to address the above problem.

SUMMARY

[5] According to a first aspect, there is provided a method for determining parameters of an installment offer. The method includes: capturing an image related to an item that a user wishes to purchase; determining geometric properties of the image; determining a creditability of the user in response to a request to a database; and determining at least one parameter of the installment offer for purchase of the item by the user based on the creditability of the user and based on the geometric properties of

the image wherein the creditability of the user is dynamically updated based on the user's financial behavior.

[6] According to a second aspect, there is provided a payment device, the payment device including: at least one processor; at least one memory including computer program code; a communication port coupled to the processor; and a camera. The at least one memory and the computer program code are configured to, with the at least one processor, cause the at least one processor to: capture, using the camera, an image related to an item that a user wishes to purchase; determine geometric properties of the image; transmit, using the communication port, information based to the geometric properties; and receive, using the communication port, at least one parameter of an installment offer for purchase of the item in response to the transmitted information and based on a creditability of the user, wherein the at least one parameter of the installment offer is determined based on a creditability of the user, and wherein the creditability of the user is dynamically updated based on the user's financial behavior.

[7] According to a third aspect, there is provided a payment server including: at least one processor; at least one memory including computer program code; and a communication port coupled to the processor. The at least one memory and the computer program code are configured to, with the at least one processor, cause the at least one processor to: receive, using the communication port, information related to an item that a user wishes to purchase; determine a creditability of the user in response to a request to a database; and determining at least one parameter of the installment offer for purchase of the item by the user based on the creditability of the user and based on the information related to the item that the user wishes to purchase; wherein wherein the at least one memory and the computer program code are further configured to, with the at least one processor, cause the at least one processor to: update the creditability of the user based on the user's financial behavior.

BRIEF DESCRIPTION OF THE DRAWINGS

[8] Embodiments and implementations are provided by way of example only, and will be better understood and readily apparent to one of ordinary skill in the art from the following written description, read in conjunction with the drawings, in which:

[9] Figure 1 shows a payment infrastructure, in accordance with an embodiment of present disclosure;;

[0010] Figure 2 shows a flow diagram illustrating a method for determining parameters of an installment offer, in accordance with an embodiment of present disclosure;

[0011] Figure 3 shows an illustration of dynamically moving users or identifiers associated with accounts or payment cards of the user, in accordance with an embodiment of present disclosure;

CLAIMS

1. A method for determining parameters of an installment offer, the method comprising:

capturing an image related to an item that a user wishes to purchase;

determining geometric properties of the image;

determining a creditability of the user in response to a request to a database; and

determining at least one parameter of the installment offer for purchase of the item by the user based on the creditability of the user and based on the geometric properties of the image, wherein the creditability of the user is dynamically updated based on the user's financial behavior.

2. The method of claim 1,

wherein the image comprises at least one of a QR code or a bar code.

3. The method of any one of claims 1 to 2,

wherein the image comprises encoded information, the encoded information representing information on at least one of a name of the item, a product category of the item, a price of the item, a minimum number of installments of the installment, a maximum number of installments of the installment, a fee for the installment, or an interest rate of the installment.

4. The method of claim 1,

wherein the user's financial behavior comprises at least one of a spending pattern of the user, a track record of previous installments, information on late payments, information on payment reversals, a bureau score, or a CIBIL score.

5. The method of any one of claims 1 to 4,

wherein the at least one parameter of the installment comprises at least one of terms and conditions under which the issuer would offer an installment to the user, an indicator indicating whether an issuer is willing to offer an installment to the user, a minimum number of installments of the installment, maximum number of installments of the installment, a fee for the installment, or an interest rate for the installment.

6. The method of any one of claims 1 to 5,

wherein determining the at least one parameter of the installment offer for purchase of the item by the user comprises comparing terms and conditions related to the geometric properties with terms and conditions provided by an issuer.

7. A payment device comprising:

at least one processor;

at least one memory including computer program code;

a communication port coupled to the processor; and

a camera;

the at least one memory and the computer program code configured to, with the at least one processor, cause the at least one processor to:

capture, using the camera, an image related to an item that a user wishes to purchase;

determine geometric properties of the image;

transmit, using the communication port, information based to the geometric properties; and

receive, using the communication port, at least one parameter of an installment offer for purchase of the item in response to the transmitted information and based on a creditability of the user, wherein the at least one parameter of the installment offer is determined based on a creditability of the user, and wherein the creditability of the user is dynamically updated based on the user's financial behavior.

8. The payment device of claim 7,

wherein the image comprises at least one of a QR code or a bar code.

9. The payment device of any one of claims 7 to 8,

wherein the image comprises encoded information, the encoded information representing information on at least one of a name of the item, a product category of the item, a price of the item, a minimum number of installments of the installment, a maximum number of installments of the installment, a fee for the installment, or an interest rate of the installment.

10. The payment device of claim 7,

wherein the user's financial behavior comprises at least one of a spending pattern of the user, a track record of previous installments, information on late payments, information on payment reversals, a bureau score, or a CIBIL score.

11. The payment device of any one of claims 7 to 10,

wherein the at least one parameter of the installment comprises terms and conditions under which the issuer would offer an installment to the user.

12. The payment device of claim 11,

wherein the at least one parameter comprises an indicator indicating whether an issuer is willing to offer an installment to the user.

13. The payment device of any one of claims 7 to 12,

wherein the at least one parameter comprises at least one of a minimum number of installments of the installment, maximum number of installments of the installment, a fee for the installment, or an interest rate for the installment.

14. A payment server comprising:

at least one processor;

at least one memory including computer program code; and

a communication port coupled to the processor;

the at least one memory and the computer program code configured to, with the at least one processor, cause the at least one processor to:

receive, using the communication port, information related to an item that a user wishes to purchase;

determine a creditability of the user in response to a request to a database; and

determine at least one parameter of the installment offer for purchase of the item by the user based on the creditability of the user and based on the information related to the item that the user wishes to purchase;

wherein the at least one memory and the computer program code are further configured to, with the at least one processor, cause the at least one processor to:

update the creditability of the user based on the user's financial behavior.

15. The payment server of claim 14,

wherein the user's financial behavior comprises at least one of a spending pattern of the user, a track record of previous installments, information on late payments, information on payment reversals, a bureau score, or a CIBIL score.

16. The payment server of any one of claims 14 to 15,

wherein determining the at least one parameter of the installment offer for purchase of the item by the user comprises comparing terms and conditions related to

the information related to the item that the user wishes to purchase with terms and conditions provided by an issuer.