

PAYMENT PROCESSING METHOD AND APPARATUS

TECHNICAL FIELD

[0001] This document relates to the field of payment technologies, and in particular, to a payment processing method and apparatus.

BACKGROUND

[0002] With development and popularization of e-commerce, users use an online payment method more frequently, and a network payment system is more widely used, which brings great convenience to daily lives of the users. With improvement of users' living standards, online payment channels are expanding, and requirements of different users on online payment methods are increasingly diversified. This also poses a higher test for online payment providers.

SUMMARY

[0003] One or more embodiments of this specification provide a payment processing method, including: determining a payment classification label of an obtained payment order of a user; matching the payment classification label with a payment type in a payment type set; if the matching succeeds, reading, based on a target payment type carried in a matching result, a payment channel configuration set by the user for the target payment type; and performing payment processing on the payment order based on the payment channel configuration.

[0004] One or more embodiments of this specification provide a payment processing apparatus, including: a determining module, configured to determine a payment classification label of an obtained payment order of a user; a matching module, configured to match the payment classification label with a payment type in a payment type set, where if the matching succeeds, a configuration reading module runs, and the configuration reading module is configured to read, based on a target payment type carried in a matching result, a payment channel configuration set by the user for the target payment type; and a payment module, configured to perform payment processing on the payment order based on the payment channel configuration.

[0005] One or more embodiments of this specification provide a payment processing device, including: a processor; and a storage configured to store computer-executable instructions, where when the computer-executable instructions are executed, the processor is enabled to: determine a payment classification label of an obtained payment order of a user; match the payment classification label with a payment type in a payment type set; if the matching succeeds, read, based on a target payment type carried in a matching result, a payment channel configuration set by the user for the target payment type; and perform payment processing on the payment order based on the payment channel configuration.

[0006] One or more embodiments of this specification provide a storage medium, configured to store computer-executable instructions, where when the computer-executable instructions are executed by a processor, the following procedure is implemented: determining a payment classification label of an obtained payment order of a user; matching the payment classification label with a payment type in a payment type set; if the matching succeeds, reading, based on a target payment type carried in a matching result, a payment channel configuration set by the user for the target payment type; and performing payment processing on the payment order based on the payment channel configuration.

BRIEF DESCRIPTION OF DRAWINGS

[0007] To describe the technical solutions in one or more embodiments of the specification more clearly, the following briefly describes the accompanying drawings required for describing the embodiments. Clearly, the accompanying drawings in the following description show merely some embodiments described in this specification, and a person of ordinary skill in the art can still derive other drawings from these accompanying drawings without creative efforts.

[0008] FIG. 1 is an execution flowchart of a payment processing method according to one or more embodiments of this specification;

[0009] FIG. 2 is a diagram of a payment setting page according to one or more embodiments of this specification;

[0010] FIG. 3 is a diagram of a label page according to one or more embodiments of this specification;

[0011] FIG. 4 is a diagram of a setting subpage according to one or more embodiments of this

specification;

[0012] FIG. 5 is a diagram of a payment channel adding page according to one or more embodiments of this specification;

[0013] FIG. 6 is an execution flowchart of a payment processing method applied to a first payment scenario according to one or more embodiments of this specification;

[0014] FIG. 7 is an execution flowchart of a payment processing method applied to a second payment scenario according to one or more embodiments of this specification;

[0015] FIG. 8 is a diagram of a payment processing apparatus according to one or more embodiments of this specification; and

[0016] FIG. 9 is a structural diagram of a payment processing device according to one or more embodiments of this specification.

DESCRIPTION OF EMBODIMENTS

[0017] To enable a person skilled in the art to better understand the technical solutions in one or more embodiments of this specification, the following clearly and comprehensively describes the technical solutions in one or more embodiments of this specification with reference to the accompanying drawings in one or more embodiments of this specification. Clearly, the described embodiments are merely some rather than all of the embodiments of this specification. All other embodiments obtained by a person of ordinary skill in the art based on one or more embodiments of this specification without creative efforts shall fall within the protection scope of this document.

[0018] Embodiments of this specification provide a payment processing method. According to the payment processing method provided in this specification, in a process of paying for a payment order of a user on this basis of setting corresponding payment channel configurations for payment channels of different payment types, a payment classification label of the obtained payment order of the user is determined, the payment type label is matched with a payment type in a payment type set that includes the payment type, to obtain a target payment type that matches with the payment type label, a payment channel configuration set for the target payment type is further read, and payment processing is performed on the payment order based on the payment channel configuration. In this way, personalized payment processing is performed on payment orders of different types, to meet payment needs of different users for different payment types. This

increases payment processing flexibility, and improves payment convenience for the user.

[0019] Refer to FIG. 1. This embodiment provides a payment processing method, and the method specifically includes step S102 to step S108.

[0020] Step S102: Determine a payment classification label of an obtained payment order of a user.

[0021] The payment classification label in this embodiment refers to a label used to identify an order type of a payment order. For example, a payment classification label of a payment order of the user generated by online shopping is "online shopping", a payment classification label of a payment order of the user generated by offline shopping is "offline shopping", and a payment classification label of a payment order of the user generated by bank transfer is "transfer".

[0022] During specific implementation, first, after the payment order of the user is obtained, the payment classification label of the payment order is determined, and the determined payment classification label is used as a data basis for subsequently matching a payment type in a payment type set, to determine a payment scenario in which the user pays, thereby meeting payment needs of different users for different payment scenarios, and enabling the user to experience more flexible and personalized payment.

[0023] This embodiment provides two optional implementations of determining a payment classification label. The following describes in detail the two implementations of determining the payment classification label.

[0024] In an optional implementation provided in this embodiment, the payment classification label is determined in the following way: reading an order classification label recorded in the payment order, and using the order classification label as the payment classification label.

[0025] In another optional implementation provided in this embodiment, the payment classification label is determined in the following way: determining the payment classification label based on order data carried in the payment order.

[0026] During specific execution, when the order classification label is recorded in the payment order, the order classification label recorded in the payment order can be read. For example, if a label of an order type of a payment order record of the user generated by online shopping is "online shopping", the label of "online shopping" is read and determined as a payment classification label of the payment order. In addition, when the order classification label is not recorded in the payment order, the payment classification label can be determined based on order

data carried in the payment order. The order data includes a merchant name, a merchant type, and/or an account type. For example, a payment order of the user generated by offline shopping carries a QR code payment mark, and a payment classification label of the payment order can be determined as "offline shopping" based on the QR code payment mark.

5 **[0027]** In addition, in a process of determining the payment classification label, a label entered by the user for the payment order can be collected as a payment classification label, so as to determine the payment classification label of the payment order. For example, for a payment order generated by rewarding an anchor when the user watches a live broadcast, the user can enter a label "live broadcast reward". In this case, the collected "live broadcast reward" label that is
10 entered by the user is used as a payment classification label of the payment order generated by rewarding the anchor.

[0028] Step S104: Match the payment classification label with a payment type in a payment type set.

[0029] The payment type in this embodiment refers to a payment scenario or a payment
15 environment in which payment processing is performed on a payment order, for example, a payment scenario in which payment is performed on an order generated by online shopping, a payment scenario in which payment is performed on an order generated by offline shop payment, and a payment scenario in which payment is performed on an order generated by red envelope transfer. The payment type set in this embodiment refers to a set including at least one payment
20 type, for example, a payment type set including online payment, offline payment, and red envelope payment.

[0030] During specific implementation, the payment classification label is matched with the payment type in the payment type set, and a matching result that the matching succeeds or the matching fails is obtained after matching. When the matching succeeds, the following step S106
25 is performed. When the matching fails, a matching failure prompt is sent to the user, or a payment priority of a global payment channel is read, and payment processing is performed on the payment order based on a payment sequence of reading the payment priority of the global payment channel.

[0031] In addition, to improve a success rate of payment processing performed by the user on a payment order in a corresponding payment type on the basis of matching the payment
30 classification label with the payment type in the payment type set, in an optional implementation provided in this embodiment, when the matching fails, a payment type that is in the payment type

set and whose similarity to the payment classification label is greater than a threshold is recommended to the user, to further improve payment flexibility.

[0032] Specifically, in a process of matching the payment classification label with the payment type in the payment type set, the payment classification label is compared with each payment type in the payment type set, a similarity between the payment classification label and each payment type in the payment type set is calculated, and a payment type with a high similarity is selected as the target payment type. In this way, payment orders are accurately classified, and this helps the user reasonably arrange expenditure. For example, if the payment classification label of the payment order is "online shopping", the payment classification label is sequentially compared with payment types in the payment type set. If the payment classification label is consistent with a payment type of online shopping, it is determined that the payment type of this payment is online shopping.

[0033] Optionally, each payment type in the payment type set is set with a payment channel configuration; and the payment channel configuration of the payment type includes: at least one payment channel set for performing order payment for the payment type, and a payment priority of the at least one payment channel. The payment priority refers to a priority of selecting a payment channel during payment, namely, a payment sequence of the payment channel. For example, for a payment type of offline shopping, a payment channel configuration set for the payment type includes three payment channels, namely, account balance payment, debit card payment, and credit payment, and a payment sequence of the three payment channels, as shown in FIG. 4.

[0034] In actual applications, to improve flexibility of a payment channel configuration set by the user for the target payment type, and meet personalized needs of the user, in an optional implementation provided in this embodiment, a recommendation list is provided for the user, so that the user can customize a priority of a payment channel. For example, at least one payment channel corresponding to a payment order of the user generated by offline shop payment is account balance payment, and payment priorities in descending order are account balance payment, credit payment, credit card payment, and debit card payment.

[0035] In an optional implementation provided in this embodiment, the payment priority is determined in the following way: determining a payment priority of a payment channel in a recommendation list based on preference data of the user, where the recommendation list includes the at least one payment channel.

[0036] Specifically, in a process of determining the payment priority of the at least one payment channel, the recommendation list of the at least one payment channel is obtained. The payment priority of the payment channel in the recommendation list is determined based on the preference data of the user. After the recommendation list is obtained, the recommendation list is sent to the user. A sequence of the payment channel in the recommendation list is adjusted according to an adjustment instruction of the user, to obtain an adjusted recommendation list. The payment priority of the payment channel in the adjusted recommendation list is determined based on a sequence of the payment channel adjusted by the user.

[0037] For example, on the basis that each payment type in the payment type set is set with a payment channel configuration, for the payment type of offline shopping, a payment sequence of the recommendation list determined based on the preference data of the user is credit payment, debit card payment, and account balance payment, a payment sequence adjusted by the user is account balance payment, debit card payment, and credit payment, and the adjusted payment sequence is used as the payment priority.

[0038] Optionally, a recommendation list of any payment type in the payment type set is displayed in a setting subpage of the any payment type, and the user enters a label page by triggering a setting entry configured in a setting page of an application, and the user enters a setting subpage of a payment type to which the payment classification label belongs by triggering a type label entry configured in the label page.

[0039] For example, the user enters a label page shown in FIG. 3 by triggering a setting entry of a "payment personality setting" configured in a setting page of an application shown in FIG. 2, can set an available status of the payment personality setting by using a status control 302, and enters a setting subpage shown in FIG. 4 by triggering a type label entry 304 of "offline shopping" configured in the label page, to adjust a sequence of payment channels of "offline shopping". The user can set an available status of offline shopping by using a status control 402, and adjust a payment sequence of the payment channels by triggering an adjustment control 404 of "credit payment".

[0040] In an optional implementation provided in this embodiment, a type control corresponding to the payment type is set in the setting subpage of the payment type, and if a control status of the type control is an enabled state, a payment status of the payment type to which the type control belongs is an available state.

[0041] In addition to a trigger control set in the label page, a type control corresponding to the payment type can be further set in the setting subpage of the payment type. If a control status of the type control is an enabled state, a payment status of the payment type to which the type control belongs is an available state.

5 **[0042]** In addition, on the basis that the trigger control is set in the label page, the type control corresponding to the payment type is set in the setting subpage of the payment type. If a control status of the trigger control is an enabled state, a payment status of all payment types in the payment type set is an available state; or if a control status of the type control is an enabled state, a payment status of the payment type to which the type control belongs is an available state.

10 **[0043]** For example, if an online payment type control is set in a setting subpage of online payment and is in an enabled state, online payment is in an available state.

[0044] During specific implementation, the payment classification label is matched with the payment type in the payment type set. If the matching succeeds, the following step S106 is performed, to read, based on the target payment type carried in the matching result, the payment
15 channel configuration set by the user for the target payment type. If the matching fails, a payment failure prompt is returned. In addition, on the basis that the payment failure prompt is returned, a payment channel can be further added by using a trigger control 502 configured in a payment channel adding page, as shown in FIG. 5.

[0045] In addition, to ensure that the user can normally complete payment, when the matching
20 between the payment classification label and the payment type in the payment type set provided in this embodiment fails, payment processing is performed on the payment order based on the global payment channel configuration, to read a payment sequence of a payment priority of the global payment channel and reverse payment processing on the payment order. Specifically, in an optional implementation provided in this embodiment, the performing payment processing on the
25 payment order based on the global payment channel configuration includes: reading a payment priority of the global payment channel, and performing payment processing on the payment order based on a payment sequence of the read payment priority of the global payment channel.

[0046] In a process of matching the payment classification label with the payment type in the payment type set, a matching similarity is used as a basis for determining a matching result, a
30 payment priority of the global payment channel is read, a target payment channel whose payment priority is first is selected, and payment is performed by using the target payment channel, to

ensure that payment of the user is successfully completed. If the payment fails, a payment channel whose payment priority is secondary is selected for payment until the payment is completed.

[0047] In the setting subpage shown in FIG. 4, a payment sequence of the payment priority of the global payment channel of the user is displayed. When the user performs payment, an account balance payment channel is preferred, if the payment fails, a debit card payment channel whose payment priority is secondary is selected for payment, and payment is sequentially performed until payment succeeds.

[0048] In addition to the performing payment processing on the payment order based on the global payment channel configuration mentioned above, to improve payment convenience for the user, optionally, the payment type that is in the payment type set and whose similarity to the payment classification label is higher than the threshold is recommended to the user, to meet payment needs of different users. For example, the user rewards an anchor when watching a live broadcast. If a payment type is not matched in the payment type set, the payment type of online shopping with a high similarity can be recommended as the target payment type, and a payment channel list of the payment type of online shopping is read.

[0049] Step S106: Read, based on the target payment type carried in the matching result, the payment channel configuration set by the user for the target payment type.

[0050] In this step, on the basis that the matching between the payment classification label and the payment type in the payment type set succeeds, the payment channel configuration set by the user for the target payment type is read based on the target payment type recorded in the matching result.

[0051] Specifically, after the matching between the payment classification label and the payment type in the payment type set succeeds, the matching result records the payment type of the payment order, and the payment channel list set by the user for the payment type is read.

[0052] For example, a classification label corresponding to a payment order of the user based on red envelope transfer is online payment, and matching is performed on the online payment and the online payment in the payment type set. If the matching succeeds, and the target payment type is online shopping, a payment channel list of the payment type of online shopping is read.

[0053] In an optional implementation provided in this embodiment, when a result of performing the step of matching the payment classification label with the payment type in the payment type set is that the matching succeeds, and before the operation of reading the payment

channel configuration set by the user for the target payment type is performed, the following operations are further performed: determining whether a payment status corresponding to the target payment type is an available state; and if yes, reading the payment channel configuration set by the user for the target payment type; or if no, performing payment processing on the payment order based on the global payment channel configuration.

[0054] Specifically, after matching is performed on the payment classification label and the payment type in the payment type set, and the matching succeeds, it is determined whether the payment status of the target payment type carried in the matching result is an available state; and if yes, the step of reading the payment channel configuration set by the user for the target payment type is performed; or if no, payment processing is performed on the payment order based on the global payment channel configuration.

[0055] For example, matching is performed on the payment classification label and the payment type in the payment type set, and the payment type recorded in the matching result is online shopping. In this case, it is determined whether a payment status of the payment type of online shopping is an available state; and if yes, a payment channel list of the payment type of online shopping is read; or if no, the payment priority of the global payment channel is read, and payment processing is performed on the payment order based on the payment sequence of the read payment priority of the global payment channel.

[0056] In addition, after it is determined whether the payment status corresponding to the target payment type is an available state, and the payment status corresponding to the target payment type is an unavailable state, in addition to the above-mentioned implementation of performing payment processing on the payment order based on the global payment channel configuration, a payment type with a high similarity can be further recommended to the user, or a payment failure prompt is returned.

[0057] Step S108: Perform payment processing on the payment order based on the payment channel configuration.

[0058] During specific implementation, after the payment channel configuration is read, payment order processing is performed based on the payment channel configuration. In an optional implementation provided in this embodiment, the performing payment processing on the payment order based on the payment channel configuration includes: reading the payment channel configuration of the user, and performing payment processing on the payment order based on the

payment priority of the payment channel configuration of the user.

[0059] Further, in a process of performing payment processing on the payment order based on the payment priority of the payment channel configuration of the user, to ensure that the user normally completes payment, in an optional implementation provided in this embodiment, the performing payment processing on the payment order based on the payment priority of the payment channel configuration of the user includes:

selecting a target payment channel whose payment priority is first for the target payment type, and performing payment by using the target payment channel; and after the payment fails, selecting a payment channel whose payment priority is secondary to the target payment channel to perform payment, or determining a payment channel from the at least one payment channel based on historical payment data of the user to perform payment processing.

[0060] Specifically, after the step of reading, based on the target payment type carried in the matching result, the payment channel configuration set by the user for the target payment type is performed, a payment priority of a payment channel set by the user for the target payment type is obtained, a payment channel whose payment priority is first for the target payment type is selected, and payment is performed by using the payment channel. After the payment fails, a payment channel whose payment priority is secondary to the target payment channel is selected to perform payment, or a payment channel is determined from the at least one payment channel based on historical payment data of the user to perform payment processing.

[0061] For example, a payment channel whose payment priority is first for the payment type of online shopping is credit card payment. When credit card payment fails to be performed, if it is detected that a payment order whose payment type is online shopping is paid by the user by using a credit payment channel, the credit payment channel can be selected for this payment.

[0062] In conclusion, according to the payment processing method provided in this embodiment, the payment classification label of the obtained payment order of the user is first determined. Then, matching is performed on the payment classification label and the payment type in the payment type set. If the matching succeeds, the payment channel configuration set by the user for the target payment type is read based on the target payment type carried in the matching result. Finally, payment processing is performed on the payment order based on the payment channel configuration, to meet different needs of different users for online payment methods. Further, when a result of performing the step of matching the payment classification label with the

payment type in the payment type set is that the matching succeeds, and before the payment channel configuration set by the user for the target payment type is read, whether a payment status corresponding to the target payment type is an available state is determined, and the payment channel configuration set by the user for the target payment type is read, to avoid a payment failure of the user caused by an unavailable payment state, and improve payment efficiency.

[0063] The following further describes the payment processing method provided in this embodiment with reference to FIG. 6 by using an application of the payment processing method provided in this embodiment in a first payment scenario as an example. Refer to FIG. 6. The payment processing method applied to the first payment scenario specifically includes the following steps.

[0064] Step S602: Read a payment classification label recorded in a payment order of a user.

[0065] Step S604: Match the payment classification label with a payment type in a payment type set; and if the matching succeeds, perform step S606 to step S608; or if the matching fails, perform step S612.

[0066] Step S606: Read, based on a target payment type carried in a matching result, a payment channel configuration set by the user for the target payment type.

[0067] Optionally, the user enters a label page by triggering a setting entry configured in a setting page of an application, and the user enters a setting subpage of a payment type to which the payment classification label belongs by triggering a type label entry configured in the label page.

[0068] Optionally, a type control corresponding to the payment type is set in the setting subpage of the payment type, and if a control status of the type control is an enabled state, a payment status of the payment type to which the type control belongs is an available state.

[0069] Step S608: Determine whether a payment status corresponding to the target payment type is an available state; and if yes, perform step S610; or if no, perform step S612.

[0070] Step S610: Perform payment processing on the payment order based on a payment priority of the payment channel configuration set for the target payment type.

[0071] Specifically, the performing payment processing on the payment order based on a payment priority of the payment channel configuration set for the target payment type includes: if payment of the first target payment channel succeeds, ending the process; if payment of the first target payment channel fails, selecting a payment channel whose payment priority is secondary to

the target payment channel to perform payment until payment succeeds, and ending the process; or if an order payment result of each payment channel in the target payment channel is that the payment fails, sending a payment failure prompt to the user.

[0072] Step S612: Perform payment processing on the payment order based on a global payment channel configuration.

[0073] In addition, before step S602, the following steps can be further performed: obtaining a recommendation list of the at least one payment channel and sending the recommendation list to the user; determining a payment priority of a payment channel in the recommendation list based on preference data of the user; and further determining the payment priority based on an adjustment instruction of the user for adjusting the payment channel in the recommendation list.

[0074] The following further describes the payment processing method provided in this embodiment with reference to FIG. 7 by using an application of the payment processing apparatus provided in this embodiment in a second payment scenario as an example. Refer to FIG. 7. The payment processing method applied to the second payment scenario specifically includes the following steps.

[0075] Step S702: Determine a payment classification label based on order data carried in a payment order of a user.

[0076] Step S704: Match the payment classification label with a payment type in a payment type set; and if the matching succeeds, perform step S706; or if the matching fails, perform step S712.

[0077] Step S706: Determine whether a control status of a trigger control set on a label page is an enabled state; and if yes, perform step S708 to step S710; or if no, perform step S714.

[0078] Optionally, the user enters the label page by triggering a setting entry configured in a setting page of an application, and the user enters a setting subpage of a payment type to which the payment classification label belongs by triggering a type label entry configured in the label page.

[0079] Optionally, a type control corresponding to the payment type is set in the setting subpage of the payment type, and if a control status of the type control is an enabled state, a payment status of the payment type to which the type control belongs is an available state.

[0080] Step S708: Read, based on a target payment type carried in a matching result, a payment channel configuration set by the user for the target payment type.

[0081] Step S710: Perform payment processing on the payment order based on a payment priority of the payment channel configuration set for the target payment type.

[0082] Specifically, the performing payment processing on the payment order based on a payment priority of the payment channel configuration set for the target payment type includes: if payment of the first target payment channel succeeds, ending the process; if payment of the first target payment channel fails, selecting a payment channel whose payment priority is secondary to the target payment channel to perform payment until payment succeeds, and ending the process; or if an order payment result of each payment channel in the target payment channel is that the payment fails, sending a payment failure prompt to the user.

[0083] Step S712: Recommend, to the user, a payment type that is in the payment type set and whose similarity to the payment classification label is greater than a threshold.

[0084] Step S714: Perform payment processing on the payment order based on a global payment channel configuration.

[0085] Before step S702, the following steps can be further performed: obtaining a recommendation list of at least one payment channel and sending the recommendation list to the user; determining a payment priority of a payment channel in the recommendation list based on preference data of the user; and further determining the payment priority based on an adjustment instruction of the user for adjusting the payment channel in the recommendation list.

[0086] An embodiment of a payment processing apparatus provided in this specification is as follows: In the above-mentioned embodiment, a payment processing method is provided, and correspondingly, a payment processing apparatus is further provided. The following describes the payment processing apparatus with reference to the accompanying drawings.

[0087] FIG. 8 is a diagram of a payment processing apparatus according to this embodiment.

[0088] The apparatus embodiment corresponds to the method embodiment, and therefore is briefly described. For a related part, refer to corresponding descriptions in the above-mentioned method embodiment. The following described apparatus embodiment is merely an example.

[0089] This embodiment provides a payment processing apparatus, including: a determining module 802, configured to determine a payment classification label of an obtained payment order of a user; a matching module 804, configured to match the payment classification label with a payment type in a payment type set, where if the matching succeeds, a configuration reading module 806 runs, and the configuration reading module 806 is configured to read, based on a target

payment type carried in a matching result, a payment channel configuration set by the user for the target payment type; and a payment module 808, configured to perform payment processing on the payment order based on the payment channel configuration.

[0090] An embodiment of a payment processing device provided in this specification is as follows: Corresponding to the above-mentioned payment processing method and based on a same technical concept, one or more embodiments of this specification further provide a payment processing device. The payment processing device is configured to perform the above-mentioned payment processing method. FIG. 9 is a structural diagram of a payment processing device according to one or more embodiments of this specification.

[0091] The payment processing device provided in this embodiment is shown in FIG. 9, and a payment processing device may vary greatly based on different configurations or performance, and can include one or more processors 901 and a storage 902. The storage 902 can store one or more storage applications or data. The storage 902 can be a transitory storage or a persistent storage. The application stored in the storage 902 can include one or more modules (not shown in the figure), and each module can include a series of computer-executable instructions in the payment processing device. Further, the processor 901 can be configured to: communicate with the storage 902, and execute, on the payment processing device, a series of computer-executable instructions in the storage 902. The payment processing device can further include one or more power supplies 903, one or more wired or wireless network interfaces 904, one or more input/output interfaces 905, one or more keyboards 906, etc..

[0092] In a specific embodiment, the payment processing device includes a storage and one or more programs. The one or more programs are stored in the storage, and the one or more programs can include one or more modules. Each module can include a series of computer-executable instructions in the payment processing device. One or more processors are configured to: execute the one or more programs and perform the following computer-executable instructions: determining a payment classification label of an obtained payment order of a user; matching the payment classification label with a payment type in a payment type set; if the matching succeeds, reading, based on a target payment type carried in a matching result, a payment channel configuration set by the user for the target payment type; and performing payment processing on the payment order based on the payment channel configuration.

[0093] An embodiment of a storage medium provided in this specification is as follows:

Corresponding to the above-mentioned payment processing method and based on a same technical concept, one or more embodiments of this specification further provide a storage medium.

[0094] The storage medium provided in this embodiment is configured to store computer-executable instructions. When the computer-executable instructions are executed by a processor, the following procedure is implemented: determining a payment classification label of an obtained payment order of a user; matching the payment classification label with a payment type in a payment type set; if the matching succeeds, reading, based on a target payment type carried in a matching result, a payment channel configuration set by the user for the target payment type; and performing payment processing on the payment order based on the payment channel configuration.

[0095] It is worthwhile to note that the embodiment of the storage medium in this specification and the embodiment of the payment processing method in this specification are based on a same invention concept. Therefore, for a specific implementation of this embodiment, refer to the implementation of the above-mentioned corresponding method. Details are omitted here for simplicity.

[0096] The above-mentioned content describes specific embodiments of this specification. Other embodiments fall within the scope of the appended claims. In some cases, the actions or steps described in the claims can be performed in a sequence different from that in embodiments and can still achieve the expected results. In addition, the process depicted in the accompanying drawings does not necessarily require a particular sequence or continuous sequence shown to achieve the expected results. In some implementations, multi-task processing and parallel processing are feasible or may be advantageous.

[0097] In the 1930s, whether a technical improvement is a hardware improvement (for example, an improvement to a circuit structure, like a diode, a transistor, or a switch) or a software improvement (an improvement to a method procedure) can be clearly distinguished. However, with development of technologies, an improvement to many existing method procedures can be considered as a direct improvement to hardware circuit structures. A designer usually programs an improved method procedure to a hardware circuit, to obtain a corresponding hardware circuit structure. Therefore, a method procedure can be improved by using a hardware entity module. For example, a programmable logic device (PLD) (for example, a field programmable gate array (FPGA)) is such an integrated circuit, and a logical function of the PLD is determined by a user through device programming. The designer performs programming to "integrate" a digital system

to a PLD without requesting a chip manufacturer to design and manufacture an application-specific integrated circuit chip. In addition, at present, instead of manually manufacturing an integrated circuit chip, this type of programming is mostly implemented by using "logic compiler" software. The programming is similar to a software compiler used to develop and write a program. Original
5 code needs to be written in a particular programming language for compilation. The language is referred to as a hardware description language (HDL). There are many HDLs instead of only one HDL, such as the Advanced Boolean Expression Language (ABEL), the Altera Hardware Description Language (AHDL), Confluence, the Cornell University Programming Language (CUPL), HDCal, the Java Hardware Description Language (JHDL), Lava, Lola, MyHDL,
10 PALASM, and the Ruby Hardware Description Language (RHDL). The very-high-speed integrated circuit hardware description language (VHDL) and Verilog are most commonly used. It should also be clear to a person skilled in the art that a hardware circuit that implements a logical method procedure can be readily obtained once the method procedure is logically programmed by using the several hardware description languages described above and is programmed into an
15 integrated circuit.

[0098] The controller can be implemented in any suitable way. For example, the controller can be in a form like a microprocessor, a processor, or a computer-readable medium, a logic gate, a switch, an application-specific integrated circuit (ASIC), a programmable logic controller, or an embedded microcontroller storing computer-readable program code (for example, software or
20 firmware) that can be executed by the (micro)processor. Examples of the controller include but are not limited to the following microcontrollers: ARC 625D, Atmel AT91SAM, Microchip PIC18F26K20, and Silicone Labs C8051F320. A storage controller can also be implemented as a part of control logic of the storage. A person skilled in the art also knows that in addition to implementing the controller by using only the computer-readable program code, logic
25 programming can be performed on method steps to enable the controller to implement the same function in a form of a logic gate, a switch, an application-specific integrated circuit, a programmable logic controller, an embedded microcontroller, etc.. Therefore, the controller can be considered as a hardware component, and an apparatus configured to implement various functions in the controller can also be considered as a structure in the hardware component.
30 Alternatively, an apparatus configured to implement various functions can be considered as a software module implementing a method or a structure in a hardware component.

[0099] The systems, apparatuses, modules, or units described in the above-mentioned embodiments can be specifically implemented by a computer chip or an entity, or can be implemented by a product having a specific function. A typical implementation device is a computer. Specifically, for example, the computer can be a personal computer, a laptop computer,
5 a cellular phone, a camera phone, a smartphone, a personal digital assistant, a media player, a navigation device, an email device, a game console, a tablet computer, a wearable device, or a combination of any of these devices.

[0100] For ease of description, the above-mentioned apparatus is described by dividing functions into various units. Certainly, during implementation of embodiments of this specification,
10 functions of units can be implemented in the same or more software and/or hardware.

[0101] A person skilled in the art should understand that the one or more embodiments of this specification can be provided as methods, systems, or computer program products. Therefore, a form of hardware only embodiments, software only embodiments, or embodiments with a combination of software and hardware can be used in one or more embodiments of this
15 specification. In addition, a form of a computer program product that is implemented on one or more computer-usable storage media (including but not limited to a disk storage, a CD-ROM, an optical storage, etc.) that include computer-usable program code can be used in this specification.

[0102] This specification is described with reference to a flowchart and/or block diagram of the method, the device (system), and the computer program product according to embodiments of
20 this specification. It should be understood that computer program instructions can be used to implement each procedure and/or each block in the flowcharts and/or the block diagrams and a combination of a procedure and/or a block in the flowcharts and/or the block diagrams. These computer program instructions can be provided for a general-purpose computer, a dedicated computer, an embedded processor, or a processor of any other programmable data processing
25 device to generate a machine, so that the instructions executed by a computer or a processor of any other programmable data processing device generate an apparatus for implementing a specific function in one or more procedures in the flowcharts and/or in one or more blocks in the block diagrams.

[0103] These computer program instructions can alternatively be stored in a computer-readable memory that can indicate a computer or another programmable data processing device to
30 work in a specific way, so that an instruction stored in the computer-readable memory generates a

manufacturer including an instruction apparatus, and the instruction apparatus implements a function specified in one or more procedures in a flowchart and/or one or more blocks in a block diagram.

[0104] These computer program instructions can alternatively be loaded onto a computer or another programmable data processing device, so that a series of operations and steps are performed on the computer or the another programmable device to generate computer-implemented processing. Therefore, the instructions executed on the computer or the another programmable device provide steps for implementing a specific function in one or more procedures in the flowcharts and/or in one or more blocks in the block diagrams.

[0105] In a typical configuration, a computing device includes one or more processors (CPUs), one or more input/output interfaces, one or more network interfaces, and one or more memories.

[0106] The memory may be in a form like a non-permanent memory, a random access memory (RAM), and/or a nonvolatile memory in a computer-readable medium, for example, a read-only memory (ROM) or a flash memory (flash RAM). The memory is an example of the computer-readable medium.

[0107] Computer-readable media, including permanent and non-permanent, removable and non-removable media, can be implemented by any method or technology for information storage. The information can be computer-readable instructions, a data structure, a program module, or other data. Examples of the computer storage medium include but are not limited to a phase change random access memory (PRAM), a static random access memory (SRAM), a dynamic random access memory (DRAM), another type of random access memory (RAM), a read-only memory (ROM), an electrically erasable programmable read-only memory (EEPROM), a flash memory or another memory technology, a compact disc read-only memory (CD-ROM), a digital versatile disc (DVD) or another optical storage, a cassette magnetic tape, a magnetic tape/magnetic disk storage, another magnetic storage device, or any other non-transmission medium. The computer storage medium can be configured to store information that can be accessed by a computing device. As specified in this specification, the computer-readable medium does not include transitory computer-readable media (transitory media), such as a modulated data signal and carrier.

[0108] It is worthwhile to further note that the terms "include", "comprise", or any other variant thereof are intended to cover a non-exclusive inclusion, so that a process, a method, a product, or a device that includes a list of elements not only includes those elements but also includes other

elements that are not expressly listed, or further includes elements inherent to such a process, method, product, or device. Without more constraints, an element preceded by "includes a ..." does not preclude the presence of additional identical elements in the process, method, product, or device that includes the element.

5 **[0109]** One or more embodiments of this specification can be described in a general context of computer-executable instructions executed by a computer, for example, a program module. Generally, the program module includes a routine, a program, an object, a component, a data structure, etc. for executing a specific task or implementing a specific abstract data type. One or more embodiments of this specification can alternatively be practiced in distributed computing
10 environments. In the distributed computing environments, tasks are executed by remote processing devices connected through a communication network. In the distributed computing environment, a program module can be located in local and remote computer storage media including a storage device.

[0110] The embodiments of this specification are described in a progressive way. For same or
15 similar parts in the embodiments, refer to each other. Each embodiment focuses on a difference from other embodiments. Particularly, the system embodiment is basically similar to the method embodiment, and therefore is briefly described. For a related part, refer to some descriptions in the method embodiment.

[0111] The above-mentioned content is merely embodiments of this document, and is not
20 intended to limit this document. A person skilled in the art can make various changes and variations to this document. Any modification, equivalent replacement, or improvement made without departing from the spirit and principle of this document shall fall within the scope of the claims in this document.

CLAIMS

1. A payment processing method, comprising:

determining a payment classification label of an obtained payment order of a user;

matching the payment classification label with a payment type in a payment type set;

5 if the matching succeeds, reading, based on a target payment type carried in a matching result, a payment channel configuration set by the user for the target payment type; and

performing payment processing on the payment order based on the payment channel configuration.

2. The payment processing method according to claim 1, wherein each payment type in the
10 payment type set is set with a payment channel configuration; and

the payment channel configuration of the payment type comprises: at least one payment channel for performing order payment for the payment type, and a payment priority of the at least one payment channel.

3. The payment processing method according to claim 2, wherein the payment priority is
15 determined in the following way:

obtaining a recommendation list formed by the at least one payment channel, and sending the recommendation list to the user; and

determining the payment priority based on an adjustment instruction of the user for adjusting the payment channel in the recommendation list.

20 4. The payment processing method according to claim 2, wherein the payment priority is determined in the following way:

determining a payment priority of a payment channel in a recommendation list based on preference data of the user, wherein the recommendation list comprises the at least one payment channel.

25 5. The payment processing method according to claim 2, wherein a recommendation list of any payment type in the payment type set is displayed in a setting subpage of the any payment type; and

the user enters a label page by triggering a setting entry configured in a setting page of an application, and the user enters a setting subpage of a payment type to which the payment
30 classification label belongs by triggering a type label entry configured in the label page.

6. The payment processing method according to claim 5, wherein a type control corresponding to the any payment type is set in the setting subpage of the any payment type, and if a control status of the type control is an enabled state, a payment status of the payment type to which the type control belongs is an available state; or

5 a trigger control is set in the label page, and if a control status of the trigger control is an enabled state, a payment status of all payment types in the payment type set is an available state.

7. The payment processing method according to claim 1, wherein when a result of performing the step of matching the payment classification label with a payment type in a payment type set is that the matching succeeds, and before the reading, based on a target payment type carried in a matching result, a payment channel configuration set by the user for the target payment type, the method further comprises:

determining whether a payment status corresponding to the target payment type is an available state; and

15 if yes, reading, based on the target payment type carried in the matching result, the payment channel configuration set by the user for the target payment type.

8. The payment processing method according to claim 7, wherein if a result of performing the step of determining whether a payment status corresponding to the target payment type is an available state is no, the following operation is performed:

20 performing payment processing on the payment order based on a global payment channel configuration.

9. The payment processing method according to claim 8, wherein the performing payment processing on the payment order based on a global payment channel configuration comprises:

25 reading a payment priority of a global payment channel, and performing payment processing on the payment order based on a payment sequence corresponding to the read payment priority of the global payment channel.

10. The payment processing method according to claim 1, wherein the performing payment processing on the payment order based on the payment channel configuration comprises:

performing payment processing on the payment order based on a payment priority of the payment channel configuration set for the target payment type.

30 11. The payment processing method according to claim 10, wherein the performing payment processing on the payment order based on a payment priority of the payment channel configuration

set for the target payment type comprises:

determining a target payment channel whose payment priority is first for the target payment type, and performing payment processing by using the target payment channel; and

5 after the payment fails, selecting a payment channel whose payment priority is secondary to the target payment channel to perform payment processing, or determining a payment channel from at least one payment channel based on historical payment data of the user to perform payment processing.

12. The payment processing method according to claim 1, wherein after the step of matching the payment classification label with a payment type in a payment type set is performed, the method further comprises:

if the matching fails, recommending, to the user, a payment type that is in the payment type set and whose similarity to the payment classification label is greater than a threshold.

13. The payment processing method according to claim 1, wherein the payment classification label is determined in the following way:

15 reading an order classification label recorded in the payment order, and using the order classification label as the payment classification label; or

determining the payment classification label based on order data carried in the payment order.

14. A payment processing apparatus, comprising:

20 a determining module, configured to determine a payment classification label of an obtained payment order of a user;

a matching module, configured to match the payment classification label with a payment type in a payment type set, wherein

25 if the matching succeeds, a configuration reading module runs, and the configuration reading module is configured to read, based on a target payment type carried in a matching result, a payment channel configuration set by the user for the target payment type; and

a payment module, configured to perform payment processing on the payment order based on the payment channel configuration.

15. A payment processing device, comprising:

a processor; and

30 a storage configured to store computer-executable instructions, wherein when the computer-executable instructions are executed, the processor is enabled to:

determine a payment classification label of an obtained payment order of a user;
match the payment classification label with a payment type in a payment type set;
if the matching succeeds, read, based on a target payment type carried in a matching result, a
payment channel configuration set by the user for the target payment type; and

5 perform payment processing on the payment order based on the payment channel
configuration.

16. A storage medium, configured to store computer-executable instructions, wherein when
the computer-executable instructions are executed by a processor, the following procedure is
implemented:

10 determining a payment classification label of an obtained payment order of a user;
 matching the payment classification label with a payment type in a payment type set;
 if the matching succeeds, reading, based on a target payment type carried in a matching result,
a payment channel configuration set by the user for the target payment type; and

 performing payment processing on the payment order based on the payment channel
15 configuration.