third disbursement data entry including the third disbursement date, the third disbursement amount, and data associated with the third payment account; based on the plurality of data entries, transferring, with at least one processor and based on the at least one contribution date, the at least one contribution amount from each of the first, second, and third payment accounts to the group payment account; processing, with at least one processor, a schedule update event to exchange the first disbursement date in the first disbursement data entry with the second disbursement date in the second disbursement data entry ~~the second data entry~~ by modifying the first disbursement data entry and the second disbursement data entry; and automatically transferring, with at least one processor and based on the first disbursement date, the second disbursement amount from the group payment account to the second payment account, based on the modified second disbursement data entry.

[0012] In some non-limiting embodiments or aspects, the method may further include: transmitting a schedule update request message from a device of the second group member to a device of the first group member, the schedule update request message including a schedule update request corresponding to the schedule update event; and initiating processing of the schedule update event in response to receiving an acceptance message from the device of the first group member, the acceptance message accepting the schedule update request. The method may further include: automatically transferring, with at least one processor and based on the second disbursement date, the first disbursement amount from the group payment account to the first payment account, based on the modified first disbursement data entry. The method may further include tracking the group savings schedule using a blockchain based on the plurality of data entries associated with the group savings schedule. Tracking the group savings schedule using the blockchain may include tracking the schedule update event using the blockchain. At least two of the first payment account, second payment account, and third payment account may be based out of different countries. The first payment account, second payment account, and third payment account may be personal payment accounts. Processing the schedule update event may include invoking a smart contract associated with the group.

[0013] According to some non-limiting embodiments or aspects, a system for operating a private group transaction network includes at least one processor programmed or configured to: receive a group creation request to cause generation

disbursement date, the third disbursement amount, and data associated with the third payment account; based on the plurality of data entries, transferring based on the at least one contribution date, the at least one contribution amount from each of the first, second, and third payment accounts to the group payment account; processing a schedule update event to exchange the first disbursement date in the first disbursement data entry with the second disbursement date in the second disbursement data entry ~~the second data entry~~ by modifying the first disbursement data entry and the second disbursement data entry; and automatically transferring, based on the first disbursement date, the second disbursement amount from the group payment account to the second payment account, based on the modified second disbursement data entry.

[0014] In some non-limiting embodiments or aspects, the at least one processor may be programmed or configured to: transmit a schedule update request message from a device of the second group member to a device of the first group member, the schedule update request message including a schedule update request corresponding to the schedule update event; and initiate processing of the schedule update event in response to receiving an acceptance message from the device of the first group member, the acceptance message accepting the schedule update request. The at least one processor may be programmed or configured to: automatically transfer, based on the second disbursement date, the first disbursement amount from the group payment account to the first payment account, based on the modified first disbursement data entry. The at least one processor may be programmed or configured to: track the group savings schedule using a blockchain based on the plurality of data entries associated with the group savings schedule. Tracking the group savings schedule using the blockchain may include tracking the schedule update event using the blockchain. At least two of the first payment account, second payment account, and third payment account may be based out of different countries. The first payment account, second payment account, and third payment account may be personal payment accounts. Processing the schedule update event may include invoking a smart contract associated with the group.

[0015] According to some non-limiting embodiments or aspects, a computer program product for operating a private group transaction network includes at least one non-transitory computer-readable medium including program instructions that, when executed by at least one processor, cause the at least one processor to: receive

third disbursement data entry including the third disbursement date, the third disbursement amount, and data associated with the third payment account; based on the plurality of data entries, transferring based on the at least one contribution date, the at least one contribution amount from each of the first, second, and third payment accounts to the group payment account; processing a schedule update event to exchange the first disbursement date in the first disbursement data entry with the second disbursement date in the second disbursement data entry ~~the second data entry~~ by modifying the first disbursement data entry and the second disbursement data entry; and automatically transferring, based on the first disbursement date, the second disbursement amount from the group payment account to the second payment account, based on the modified second disbursement data entry.

[0016] In some non-limiting embodiments or aspects, the program instructions may cause the at least one processor to: transmit a schedule update request message from a device of the second group member to a device of the first group member, the schedule update request message including a schedule update request corresponding to the schedule update event; and initiate processing of the schedule update event in response to receiving an acceptance message from the device of the first group member, the acceptance message accepting the schedule update request. The program instructions may cause the at least one processor to: automatically transfer, based on the second disbursement date, the first disbursement amount from the group payment account to the first payment account, based on the modified first disbursement data entry. The program instructions may cause the at least one processor to: track the group savings schedule using a blockchain based on the plurality of data entries associated with the group savings schedule. Tracking the group savings schedule using the blockchain may include tracking the schedule update event using the blockchain. At least two of the first payment account, second payment account, and third payment account may be based out of different countries. The first payment account, second payment account, and third payment account may be personal payment accounts. Processing the schedule update event may include invoking a smart contract associated with the group.

[0017] Further non-limiting embodiments or aspects are set forth in the following numbered clauses:

[0018] Clause 1: A method for operating a private group transaction network, comprising: receiving, with at least one processor, a group creation request to cause

with at least one processor, a schedule update event to exchange the first disbursement date in the first disbursement data entry with the second disbursement date in the second disbursement data entry ~~the second data entry~~ by modifying the first disbursement data entry and the second disbursement data entry; and automatically transferring, with at least one processor and based on the first disbursement date, the second disbursement amount from the group payment account to the second payment account, based on the modified second disbursement data entry.

[0040] Clause 23: The method of clause 22, further comprising: transmitting a schedule update request message from a device of the second group member to a device of the first group member, the schedule update request message comprising a schedule update request corresponding to the schedule update event; and initiating processing of the schedule update event in response to receiving an acceptance message from the device of the first group member, the acceptance message accepting the schedule update request.

[0041] Clause 24: The method of clause 22 or 23, further comprising: automatically transferring, with at least one processor and based on the second disbursement date, the first disbursement amount from the group payment account to the first payment account, based on the modified first disbursement data entry.

[0042] Clause 25: The method of any of clauses 22-24, further comprising tracking the group savings schedule using a blockchain based on the plurality of data entries associated with the group savings schedule.

[0043] Clause 26: The method of any of clauses 22-25, wherein tracking the group savings schedule using the blockchain comprises tracking the schedule update event using the blockchain.

[0044] Clause 27: The method of any of clauses 22-26, wherein at least two of the first payment account, second payment account, and third payment account are based out of different countries.

[0045] Clause 28: The method of any of clauses 22-27, wherein the first payment account, second payment account, and third payment account are personal payment accounts.

[0046] Clause 29: The method of any of clauses 22-28, wherein processing the schedule update event comprises invoking a smart contract associated with the group.

second disbursement data entry comprising the second disbursement date, the second disbursement amount, and data associated with the second payment account; and a third disbursement data entry comprising the third disbursement date, the third disbursement amount, and data associated with the third payment account; based on the plurality of data entries, transferring based on the at least one contribution date, the at least one contribution amount from each of the first, second, and third payment accounts to the group payment account; processing a schedule update event to exchange the first disbursement date in the first disbursement data entry with the second disbursement date in the second disbursement data entry ~~the second data entry~~ by modifying the first disbursement data entry and the second disbursement data entry; and automatically transferring, based on the first disbursement date, the second disbursement amount from the group payment account to the second payment account, based on the modified second disbursement data entry.

[0048] Clause 31: The system of clause 30, wherein the at least one processor is programmed or configured to: transmit a schedule update request message from a device of the second group member to a device of the first group member, the schedule update request message comprising a schedule update request corresponding to the schedule update event; and initiate processing of the schedule update event in response to receiving an acceptance message from the device of the first group member, the acceptance message accepting the schedule update request.

[0049] Clause 32: The system of clause 30 or 31, wherein the at least one processor is programmed or configured to: automatically transfer, based on the second disbursement date, the first disbursement amount from the group payment account to the first payment account, based on the modified first disbursement data entry.

[0050] Clause 33: The system of any of clauses 30-32, wherein the at least one processor is programmed or configured to: track the group savings schedule using a blockchain based on the plurality of data entries associated with the group savings schedule.

[0051] Clause 34: The system of any of clauses 30-33, wherein tracking the group savings schedule using the blockchain comprises tracking the schedule update event using the blockchain.

amount is pushed from the group payment account to the second payment account, and a third disbursement date on which a third disbursement amount is pushed from the group payment account to the third payment account, wherein the first disbursement date, the second disbursement date, and the third disbursement date are different from each other; generating and storing a plurality of data entries associated with the group savings schedule, the plurality of data entries comprising: a contribution data entry comprising the contribution date, at least one contribution amount, and data associated with the first, second, and third payment accounts; a first disbursement data entry comprising the first disbursement date, the first disbursement amount, and data associated with the first payment account; a second disbursement data entry comprising the second disbursement date, the second disbursement amount, and data associated with the second payment account; and a third disbursement data entry comprising the third disbursement date, the third disbursement amount, and data associated with the third payment account; based on the plurality of data entries, transferring based on the at least one contribution date, the at least one contribution amount from each of the first, second, and third payment accounts to the group payment account; processing a schedule update event to exchange the first disbursement date in the first disbursement data entry with the second disbursement date in the second disbursement data entry ~~the second data entry~~ by modifying the first disbursement data entry and the second disbursement data entry; and automatically transferring, based on the first disbursement date, the second disbursement amount from the group payment account to the second payment account, based on the modified second disbursement data entry.

[0056] Clause 39: The computer program product of clause 38, wherein the program instructions cause the at least one processor to: transmit a schedule update request message from a device of the second group member to a device of the first group member, the schedule update request message comprising a schedule update request corresponding to the schedule update event; and initiate processing of the schedule update event in response to receiving an acceptance message from the device of the first group member, the acceptance message accepting the schedule update request.

[0057] Clause 40: The computer program product of clause 38 or 39, wherein the program instructions cause the at least one processor to: automatically transfer, based on the second disbursement date, the first disbursement amount from the group

push transfers may be automatically executed according to the disbursement data entries on the disbursement dates.

[0168] With continued reference to FIGS. 1 and 6, according to some non-limiting embodiments or aspects, the group savings schedule 600 originally generated may be modified based on at least one schedule update event. The schedule update event may exchange at least one disbursement date and/or amount of a first user with a disbursement date and/or amount of a second user so that the first user receives their disbursement amount earlier or later than was scheduled in the original group savings schedule 600.

[0169] Generating the schedule update event may comprise a device of the second group member (user device B 102b) transmitting a schedule update request message to a device of the first group member (user device A 102a), with the schedule update request message comprising the schedule update request being proposed by the second group member. The schedule update request may comprise the disbursement dates and/or amounts proposed to be exchanged. The first group member may decline the schedule update request using user device A 102a to transmit a decline message to user device B 102b. The first group member may accept the schedule update request using user device A 102a to transmit an acceptance message to user device B 102b. The group processor 106 may automatically initiate processing of the schedule update request in response to receiving the acceptance message (e.g., from user device A 102a or user device B 102b).

[0170] With continued reference to FIGS. 1 and 6, according to some non-limiting embodiments or aspects, the schedule update request may comprise exchanging the first disbursement date of the first group member (group member A) with the second disbursement date of the second group member (group member B). Processing the schedule update event may comprise exchanging the first disbursement date in the first disbursement data entry with the second disbursement date in the second disbursement data entry ~~the second data entry~~ by modifying the first disbursement data entry and the second disbursement data entry, so as to modify the group savings schedule 600. To execute the modified group savings schedule 600, the group processor 106 may automatically transfer, based on the first disbursement date, the second disbursement amount from the group account 110 to user account B 112b, based on the modified second disbursement data entry. Further, the group processor 106 may automatically transfer, based on the second disbursement date, the first

and a third disbursement data entry comprising the third disbursement date, the third disbursement amount, and data associated with the third payment account. At a step 916, the group processor may, based on the plurality of data entries, transfer, based on the at least one contribution date, the at least one contribution amount from each of the first, second, and third payment accounts to the group payment account. At a step 918, the group processor may automatically process a schedule update event to exchange the first disbursement date in the first disbursement data entry with the second disbursement date in the second disbursement data entry ~~the second data entry~~ by modifying the first disbursement data entry and the second disbursement data entry. At a step 920, the group processor may automatically transfer, based on the first disbursement date, the second disbursement amount from the group payment account to the second payment account, based on the modified second disbursement data entry.

[0191] In some non-limiting embodiment or aspects, a computer program product for operating a private group transaction network includes at least one non-transitory computer readable medium including program instructions that, when executed by at least one processor, cause the at least one processor to execute one of the previously-described methods. The at least one processor may include any of the components shown in FIGS. 1-9 (e.g., the group processor 106, the user devices 102a-102c, the issuer systems 104a-104c, the transaction processing system 218, the payment gateway 502, the payment service system 504, and the like).

[0192] Referring to FIG 10, a diagram is shown of example components of device 1000. Device 1000 may correspond to one or more devices and/or one or more systems described herein. As shown in FIG. 10, device 1000 may include bus 1002, processor 1004, memory 1006, storage component 1008, input component 1010, output component 1012, and communication interface 1014.

[0193] Bus 1002 may include a component that permits communication among the components of device 1000. In some non-limiting embodiments, processor 1004 may be implemented in hardware, software, or a combination of hardware and software. For example, processor 1004 may include a processor (e.g., a central processing unit (CPU), a graphics processing unit (GPU), an accelerated processing unit (APU), etc.), a microprocessor, a digital signal processor (DSP), and/or any processing component (e.g., a field-programmable gate array (FPGA), an application-specific integrated circuit (ASIC), etc.) that can be programmed to perform a function. Memory 1006 may

generating, with at least one processor, a group savings schedule comprising at least one contribution date on which a contribution amount is pulled from each of the first, second, and third payment accounts to the group payment account and a plurality of disbursement dates comprising: a first disbursement date on which a first disbursement amount is pushed from the group payment account to the first payment account, a second disbursement date on which a second disbursement amount is pushed from the group payment account to the second payment account, and a third disbursement date on which a third disbursement amount is pushed from the group payment account to the third payment account, wherein the first disbursement date, the second disbursement date, and the third disbursement date are different from each other;

generating and storing, with at least one processor, a plurality of data entries associated with the group savings schedule, the plurality of data entries comprising:

a contribution data entry comprising the contribution date, at least one contribution amount, and data associated with the first, second, and third payment accounts;

a first disbursement data entry comprising the first disbursement date, the first disbursement amount, and data associated with the first payment account;

a second disbursement data entry comprising the second disbursement date, the second disbursement amount, and data associated with the second payment account; and

a third disbursement data entry comprising the third disbursement date, the third disbursement amount, and data associated with the third payment account;

based on the plurality of data entries, transferring, with at least one processor and based on the at least one contribution date, the at least one contribution amount from each of the first, second, and third payment accounts to the group payment account;

processing, with at least one processor, a schedule update event to exchange the first disbursement date in the first disbursement data entry with the second disbursement date in the second disbursement data entry ~~the second data~~

~~entry~~ by modifying the first disbursement data entry and the second disbursement data entry; and

automatically transferring, with at least one processor and based on the first disbursement date, the second disbursement amount from the group payment account to the second payment account, based on the modified second disbursement data entry.

23. The method of claim 22, further comprising:

transmitting a schedule update request message from a device of the second group member to a device of the first group member, the schedule update request message comprising a schedule update request corresponding to the schedule update event; and

initiating processing of the schedule update event in response to receiving an acceptance message from the device of the first group member, the acceptance message accepting the schedule update request.

24. The method of claim 22, further comprising:

automatically transferring, with at least one processor and based on the second disbursement date, the first disbursement amount from the group payment account to the first payment account, based on the modified first disbursement data entry.

25. The method of claim 22, further comprising tracking the group savings schedule using a blockchain based on the plurality of data entries associated with the group savings schedule.

26. The method of claim 25, wherein tracking the group savings schedule using the blockchain comprises tracking the schedule update event using the blockchain.

27. The method of claim 22, wherein at least two of the first payment account, second payment account, and third payment account are based out of different countries.

pushed from the group payment account to the second payment account, and a third disbursement date on which a third disbursement amount is pushed from the group payment account to the third payment account, wherein the first disbursement date, the second disbursement date, and the third disbursement date are different from each other;

generating and storing a plurality of data entries associated with the group savings schedule, the plurality of data entries comprising:

a contribution data entry comprising the contribution date, at least one contribution amount, and data associated with the first, second, and third payment accounts;

a first disbursement data entry comprising the first disbursement date, the first disbursement amount, and data associated with the first payment account;

a second disbursement data entry comprising the second disbursement date, the second disbursement amount, and data associated with the second payment account; and

a third disbursement data entry comprising the third disbursement date, the third disbursement amount, and data associated with the third payment account;

based on the plurality of data entries, transferring based on the at least one contribution date, the at least one contribution amount from each of the first, second, and third payment accounts to the group payment account;

processing a schedule update event to exchange the first disbursement date in the first disbursement data entry with the second disbursement date in the second disbursement data entry ~~the second data entry~~ by modifying the first disbursement data entry and the second disbursement data entry; and

automatically transferring, based on the first disbursement date, the second disbursement amount from the group payment account to the second payment account, based on the modified second disbursement data entry.

31. The system of claim 30, wherein the at least one processor is programmed or configured to:

transmit a schedule update request message from a device of the second group member to a device of the first group member, the schedule update

generating and storing a plurality of data entries associated with the group savings schedule, the plurality of data entries comprising:

a contribution data entry comprising the contribution date, at least one contribution amount, and data associated with the first, second, and third payment accounts;

a first disbursement data entry comprising the first disbursement date, the first disbursement amount, and data associated with the first payment account;

a second disbursement data entry comprising the second disbursement date, the second disbursement amount, and data associated with the second payment account; and

a third disbursement data entry comprising the third disbursement date, the third disbursement amount, and data associated with the third payment account;

based on the plurality of data entries, transferring based on the at least one contribution date, the at least one contribution amount from each of the first, second, and third payment accounts to the group payment account;

processing a schedule update event to exchange the first disbursement date in the first disbursement data entry with the second disbursement date in the second disbursement data entry ~~the second data entry~~ by modifying the first disbursement data entry and the second disbursement data entry; and

automatically transferring, based on the first disbursement date, the second disbursement amount from the group payment account to the second payment account, based on the modified second disbursement data entry.

39. The computer program product of claim 38, wherein the program instructions cause the at least one processor to:

transmit a schedule update request message from a device of the second group member to a device of the first group member, the schedule update request message comprising a schedule update request corresponding to the schedule update event; and

initiate processing of the schedule update event in response to receiving an acceptance message from the device of the first group member, the acceptance message accepting the schedule update request.