

CLAIMS

What is claimed is:

1. A method, comprising:

receiving, by a computer based system, an order confirmation, associated with a purchase order (PO), from a supplier system;

receiving, by the computer based system, the PO associated with the order confirmation from a buyer system;

receiving, by the computer based system, a plurality of invoices associated with the PO and the order confirmation from the supplier system;

reconciling, by the computer based system, between the PO, the plurality of invoices, and the order confirmation, wherein the reconciliation comprises:

determining a matched line item set comprising a same set of line items across each of the plurality of invoices, the PO, and the order confirmation based at least in part on a common attribute; and

determining a running total for the matched line item set based at least in part on an item price and an item quantity, wherein the running total for the matched line item set is determined across the plurality of invoices;

generating, by the computer based system, a further invoice in response to the reconciling, wherein the further invoice is generated based at least in part on the running total for the matched line item set; and

passing, by the computer based system, the further invoice to the buyer system.

2. The method of claim 1, further comprising:

consuming, by the computer based system, an order confirmation message and recording the order confirmation to an order confirmation table;

posting, by the computer based system, the order confirmation message to an order confirmation API of the buyer system and receiving a buyer order confirmation response message;

updating, by the computer based system, a status of the order confirmation based on the buyer order confirmation response message; and

resending, by the computer based system, the order confirmation message to the order confirmation API in response to an error.

3. The method of claim 2, further comprising:

comparing, by the computer based system, a first of the plurality of invoices against a second plurality of invoices in a first invoice table to determine a new invoice;

writing, by the computer based system, the first of the plurality of invoices to the first invoice table in response determining the new invoice;

fetching, by the computer based system, the PO and the order confirmation; and

matching, by the computer based system, the first of the plurality of invoices, the PO, and the order confirmation.

4. The method of claim 1, wherein generating the second invoice further comprises:
fetching, by the computer based system, the first of the plurality of invoices from the first invoice table;

generating, by the computer based system, the further invoice based on the PO, the first of the plurality of invoices, and the running total;

passing, by the computer based system, the further invoice to an electronic invoicing API of the buyer system and receiving a reply; and

updating, by the computer based system, a status of the further invoice recorded in a second invoice table based on the reply.

5. The method of claim 4, further comprising:

generating, by the computer based system, a generate payment instruction file (PIF) message;

generating, by the computer based system, a PIF based on the first of the plurality of invoices and the PO in response to the generate PIF message;

passing, by the computer based system, the PIF to a payment API and receiving a payment confirmation ID in response; and

associating, by the computer based system, at least one of the payment confirmation ID or the PIF with the further invoice.

6. The method of any of claims 1-5, wherein the computer based system comprises a kafka architecture.

7. A system comprising:

a processor; and

a tangible, non-transitory memory configured to communicate with the processor, the tangible, non-transitory memory having instructions stored thereon that, in response to execution by the processor, cause the processor to perform operations comprising:

receiving, by the processor, an order confirmation, associated with a purchase order (PO), from a supplier system;

receiving, by the processor, the PO associated with the order confirmation from a buyer system;

receiving, by the processor, a plurality of invoices associated with the PO and the order confirmation from the supplier system;

reconciling, by the processor, between the PO, the plurality of invoices, and the order confirmation, wherein the reconciliation comprises:

determining a matched line item set comprising a same set of line items across each of the plurality of invoices, the PO, and the order confirmation based at least in part on a common attribute; and

determining a running total for the matched line item set based at least in part on an item price and an item quantity, wherein the running total for the matched line item set is determined across the plurality of invoices;

generating, by the processor, a further invoice in response to the reconciling, wherein the further invoice is generated based at least in part on the running total for the matched line item set; and

passing, by the processor, the further invoice to the buyer system.

8. The system of claim 7, further comprising:

consuming, by the processor, an order confirmation message and recording the order confirmation to an order confirmation table;

posting, by the processor, the order confirmation message to an order confirmation API of the buyer system and receiving a buyer order confirmation response message;

updating, by the processor, a status of the order confirmation based on the buyer order confirmation response message; and

resending, by the processor, the order confirmation message to the order confirmation API in response to an error.

9. The system of claim 8, further comprising:

comparing, by the processor, the first of the plurality of invoices against a second plurality of invoices in a first invoice table to determine a new invoice;

writing, by the processor, the first of the plurality of invoices to the first invoice table in response determining the new invoice;

fetching, by the processor, the PO and the order confirmation; and

matching, by the processor, the first of the plurality of invoices, the PO, and the order confirmation.

10. The system of claim 9, further comprising:

reading, by the processor, a plurality of line items from each of the first invoice, the PO, and the order confirmation;

determining, by the processor, a matched line item set comprising a same set of line items across each of the first invoice, the PO, and the order confirmation based on a common attribute; and

calculating, by the processor, a running total for the matched line item set based on an item price and an item quantity.

11. The system of claim 10, further comprising:
- fetching, by the processor, the first of the plurality of invoices from the first invoice table;
 - passing, by the processor, the further invoice to an electronic invoicing API of the buyer system and receiving a reply; and
 - updating, by the processor, a status of the further invoice recorded in a second invoice table based on the reply.
12. The system of claim 10 or 11, further comprising:
- generating, by the processor, a generate payment instruction file (PIF) message;
 - generating, by the processor, a PIF based on the first of the plurality of invoices and the PO in response to the generate PIF message;
 - passing, by the processor, the PIF to a payment API and receiving a payment confirmation ID in response; and
 - associating, by the processor, at least one of the payment confirmation ID or the PIF with the further invoice.
13. The system of any of claims 7-12, further comprising a kafka architecture.

14. A computer readable storage medium having instructions stored thereon that, in response to execution by a computer based system, cause the computer based system to perform operations comprising:

receiving, by the computer based system, an order confirmation associated with a purchase order (PO) from a supplier system;

receiving, by the computer based system, the PO associated with the order confirmation from a buyer system;

receiving, by the computer based system, a plurality of invoices associated with the PO and the order confirmation from the supplier system;

reconciling, by the computer based system, between the PO, the plurality of invoices, and the order confirmation, wherein the reconciliation comprises:

determining a matched line item set comprising a same set of line items across each of the plurality of invoices, the PO, and the order confirmation based at least in part on a common attribute; and

determining a running total for the matched line item set based at least in part on an item price and an item quantity, wherein the running total for the matched line item set is determined across the plurality of invoices;

generating, by the computer based system, a further invoice in response to the reconciling, wherein the further invoice is generated based at least in part on the running total for the matched line item set; and

passing, by the computer based system, the further invoice to the buyer system.

15. The computer readable storage medium of claim 14, further comprising:

consuming, by the computer based system, an order confirmation message and recording the order confirmation to an order confirmation table;

posting, by the computer based system, the order confirmation message to an order confirmation API of the buyer system and receiving a buyer order confirmation response message;

updating, by the computer based system, a status of the order confirmation based on the buyer order confirmation response message; and

resending, by the computer based system, the order confirmation message to the order confirmation API in response to an error.

16. The computer readable storage medium of claim 15, further comprising:

comparing, by the computer based system, the first invoice against a plurality of invoices in a first invoice table to determine a new invoice;

writing, by the computer based system, the first invoice to the first invoice table in response determining the new invoice;

fetching, by the computer based system, the PO and the order confirmation; and

matching, by the computer based system, the first invoice, the PO, and the order confirmation.

17. The computer readable storage medium of claim 14, further comprising:
fetching, by the computer based system, the first invoice from the first invoice table;

generating, by the computer based system, the further invoice based on the PO, the first invoice, and the running total;

passing, by the computer based system, the further invoice to an electronic invoicing API of the buyer system and receiving a reply; and

updating, by the computer based system, a status of the further invoice recorded in a further invoice table based on the reply.

18. The computer readable storage medium of claim 15, further comprising:
generating, by the computer based system, a generate payment instruction file (PIF) message;

generating, by the computer based system, a PIF based on the first invoice and the PO in response to the generate PIF message;

passing, by the computer based system, the PIF to a payment API and receiving a payment confirmation ID in response; and

associating, by the computer based system, at least one of the payment confirmation ID or the PIF with the further invoice.

19. The computer readable storage medium of any of claims 14-18, further comprising a kafka architecture.