CLAIMS

What is claimed is:

1. A computer-implemented system for outbound forecasting, the system comprising:

a memory storing instructions; and

at least one processor configured to execute the instructions to:

receive, from a sales forecast system, a prediction of a regional sales forecast indicative of a customer demand for each stock keeping unit (SKU) in a plurality of regions;

receive, from a SKU correlation system, a prediction of a correlation of one or more SKUs that will be combined in customer orders in the plurality of regions;

receive, from an order size calculation system, a prediction of a size of customer orders in the plurality of regions, wherein a customer order profile is simulated based on the predicted correlation and the predicted size;

apply a fulfillment center (FC) priority filter to the simulated customer order profile;

predict a FC, among a plurality of FCs, for managing outbound of each SKU based on the predicted regional sales forecast and the simulated customer order profile; and

modify a database to assign the predicted FC to each corresponding SKU.

2. The system of claim 1, wherein the at least one processor is further configured to execute the instructions to simulate inventory using at least one of open purchase orders or past customer orders.

3. The system of claim 2, wherein open purchase orders comprise unfulfilled customer orders.

4. The system of claim 2, wherein the at least one processor is further configured to execute the instructions to predict the FC for managing outbound of each SKU based on the simulated inventory.

5. The system of claim 1, wherein predicting the FC further comprises selecting a FC, among the plurality of FCs, with a highest priority level.

6. The system of claim 1, wherein predicting the FC further comprises selecting a FC, among the plurality of FCs, capable of delivering a maximum number of the one or more SKUs that will be combined in customer orders.

7. The system of claim 1, wherein the FC priority filter varies based on each customer order.

8. The system of claim 1, wherein receiving the prediction of the regional sales forecast further comprises separating national sales forecast into a plurality of regions.

9. The system of claim 1, wherein the at least one processor is further configured to execute the instructions to predict inventory at the predicted FC on a particular future date.

10. The system of claim 1, wherein the steps of receiving the prediction of the regional sales forecast, receiving the prediction of the correlation of one or more SKUs, receiving the prediction of the size of customer orders in the plurality of regions, applying the FC priority filter to the simulated customer order profile, and predicting the FC for managing outbound of each SKU are repeated based on a number of days of outbound forecasting.

11. A computer-implemented method for outbound forecasting, the method comprising:

receiving, from a sales forecast system, a prediction of a regional sales forecast indicative of a customer demand for each stock keeping unit (SKU) in a plurality of regions;

receiving, from a SKU correlation system, a prediction of a correlation of one or more SKUs that will be combined in customer orders in the plurality of regions;

receiving, from an order size calculation system, a prediction of a size of customer orders in the plurality of regions, wherein a customer order profile is simulated based on the predicted correlation and the predicted size;

applying a fulfillment center (FC) priority filter to the simulated customer order profile;

predicting a FC, among a plurality of FCs, for managing outbound of each SKU based on the predicted regional sales forecast and the simulated customer order profile; and

modifying a database to assign the predicted FC to each corresponding SKU.

12. The method of claim 11, further comprising simulating inventory using at least one of open purchase orders or past customer orders.

13. The method of claim 12, wherein open purchase orders comprise unfulfilled customer orders.

14. The method of claim 12, further comprising predicting the FC for managing outbound of each SKU based on the simulated inventory.

15. The method of claim 11, wherein predicting the FC further comprises selecting a FC, among the plurality of FCs, with a highest priority level.

16. The method of claim 11, wherein predicting the FC further comprises selecting a FC, among the plurality of FCs, capable of delivering a maximum number of the one or more SKUs that will be combined in customer orders.

17. The method of claim 11, wherein the FC priority filter varies based on each customer order.

18. The method of claim 11, wherein receiving the prediction of the regional sales forecast further comprises separating national sales forecast into the plurality of regions.

19. The method of claim 11, further comprising predicting inventory at the predicted FC on a particular future date.

20. A computer-implemented system for outbound forecasting, the system comprising:

a memory storing instructions; and

at least one processor configured to execute the instructions to:

receive, from a sales forecast system, a prediction of a regional sales forecast indicative of a customer demand for each stock keeping unit (SKU) in a plurality of regions;

receive, from a SKU correlation system, a prediction of a correlation of one or more SKUs that will be combined in customer orders in the plurality of regions;

receive, from an order size calculation system, a prediction of a size of customer orders in the plurality of regions, wherein a customer order profile is simulated based on the predicted correlation and the predicted size;

apply a fulfillment center (FC) priority filter to the simulated customer order profile;

simulate inventory using open purchase orders and past customer orders, wherein the open purchase orders comprise unfulfilled customer orders;

predict a FC, among a plurality of FCs, for managing outbound of each SKU based on the predicted regional sales forecast, the simulated customer order profile, and the simulated inventory; and

modify a database to assign the predicted FC to each corresponding SKU.