CLAIMS

1. A computer-implemented system for providing stowing location recommendation, the system comprising:

a memory storing instructions; and

at least one processor configured to execute the instructions to:

receive, from a user device associated with a user, a request for a location recommendation for stowing at least one inbound product, wherein the request comprises a section in a zone associated with the at least one inbound product, wherein the section in the zone is selected based on a scan of a location identifier, associated with the section, by the user device;

determine a plurality of locations to recommend within the section in the zone, the plurality of locations having an emptiness and capacity to store the at least one inbound product and being configured to store the at least one inbound product, wherein:

the plurality of locations have not been recommended to another user different from the user;

sample, based on a predetermined rule, a number of locations from the plurality of locations for stowing the at least one inbound product;

display, via the user device, the sampled number of locations to the user for stowing the at least one inbound product, wherein the predetermined rule comprises at least one of:

a first restriction on a number of stock keeping units (SKUs) that can be stored in each location,

a second restriction on an expiration date associated with each SKU,

a third restriction on a barcode associated with each SKU, or

a fourth restriction on a risk level associated with each SKU;

provide a recommendation, based on the predetermined rule, to store a maximum of three different SKUs in each location;

receive, from the user device, a selection of a stowing location among the sampled number of locations; and

modify a database to assign a location identifier associated with the selected stowing location to the inbound product.

2. The system of claim 1, wherein the plurality of locations are at least 30%, 50%, or 70% empty.

3. The system of claim 1, wherein the zone comprises at least one of a picking zone or a buffer zone.

4. The system of claim 3, wherein the picking zone is configured to store inbound products that are available for purchase by a customer.

5. The system of claim 3, wherein the buffer zone is configured to store inbound products that are not available for purchase by a customer.

6. The system of claim 1, wherein, the selection of a stowing location includes touching or pressing the displayed sampled number of locations.

7. The system of claim 1, wherein the at least one processor is configured to execute the instructions to prevent, based on the second restriction, a first inbound product associated with a first SKU having a first expiration date from being stored with a second inbound product associated with the first SKU having a second expiration date.

8. The system of claim 1, wherein the at least one processor is configured to execute the instructions to prevent, based on the third restriction, a first inbound product associated with a first SKU having a first barcode from being stored with a second inbound product associated with the first SKU having a second barcode.

9. The system of claim 1, wherein the at least one processor is configured to execute the instructions to provide, based on the fourth restriction, a recommendation to store SKUs having risk levels higher than a predetermined threshold separately.

10. The system of claim 1, wherein the at least one processor is configured to execute the instructions to provide, based on the fourth restriction, a recommendation to store SKUs having risk levels lower than a predetermined threshold in a particular location.

11. A computer-implemented method for providing stowing location recommendation, the method comprising:

receiving, from a user device associated with a user, a request for a location recommendation for stowing at least one inbound product, wherein the request comprises a section in a zone associated with the at least one inbound product, wherein the section in the zone is selected based on a scan of a local identifier, associated with the section, by the user device;

determining a plurality of locations to recommend within the section in the zone, the plurality of locations having an emptiness and capacity to store the at least one inbound product and being configured to store the at least one inbound product, wherein:

the plurality of locations have not been recommended to another user different from the user;

sampling, based on a predetermined rule, a number of locations, among the plurality of locations, for stowing the at least one inbound product;

displaying, via the user device, the sampled number of locations to the user for stowing the at least one inbound product, wherein the predetermined rule comprises at least one of:

a first restriction on a number of stock keeping units (SKUs) that can be stored in each location,

a second restriction on an expiration date associated with each SKU,

a third restriction on a barcode associated with each SKU, or

a fourth restriction on a risk level associated with each SKU;

providing a recommendation, based on the predetermined rule, to store a maximum of three different SKUs in each location;

receiving, from the user device, a selection of a stowing location among the sampled number of locations; and

modifying a database to assign a location identifier associated with the selected stowing location to the inbound product.

12. The method of claim 11, wherein the plurality of locations are at least 30%, 50%, or 70% empty.

13. The method of claim 11, wherein the zone comprises at least one of a picking zone or a buffer zone.

14. The method of claim 13, wherein the picking zone is configured to store inbound products that are available for purchase by a customer.

15. The method of claim 13, wherein the buffer zone is configured to store inbound products that are not available for purchase by a customer.

16. The method of claim 11, wherein the selection of a stowing location includes touching or pressing the displayed sampled number of locations.

17. The method of claim 11, further comprising preventing, based on the second restriction, a first inbound product associated with a first SKU having a first expiration date from being stored with a second inbound product associated with the first SKU having a second expiration date.

18. The method of claim 11, further comprising preventing, based on the third restriction, a first inbound product associated with a first SKU having a first barcode from being stored with a second inbound product associated with the first SKU having a second barcode.

19. The method of claim 11, further comprising providing, based on the fourth restriction, a recommendation to store SKUs having risk levels higher than a predetermined threshold separately, and to store SKUs having risk levels lower than a predetermined threshold in a particular location.

20. A computer-implemented system for providing stowing location recommendation, the system comprising:

a memory storing instructions; and

at least one processor configured to execute the instructions to:

receive, from a user device associated with a user, a request for a location recommendation for stowing at least one inbound product, wherein the request comprises:

a section in a zone associated with the at least one inbound product, the zone comprising at least one of a picking zone configured to store inbound products that are available for purchase by a customer, or a buffer zone configured to store inbound products that are not available for purchase by a customer, wherein the section in the zone is selected based on a scan of a location identifier, associated with the section, by the user device;

determine a plurality of locations to recommend within the section in the zone, the plurality of locations having an emptiness and capacity to store the at least one inbound product and being configured to store the at least one inbound product, wherein:

the plurality of locations have not been recommended to another user different from the user;

sample, based on a predetermined rule, a number of locations, among the plurality of locations, for stowing the at least one inbound product; and

display, via the user device, the sampled number of locations to the user for stowing the at least one inbound product, wherein the predetermined rule comprises at least one of:

a first restriction on a number of stock keeping units (SKUs) that can be stored in each location,

a second restriction on an expiration date associated with each SKU,

a third restriction on a barcode associated with each SKU, or

a fourth restriction on a risk level associated with each SKU;

provide a recommendation, based on the predetermined rule, to store a maximum of three different SKUs in each location;

receive, from the user device, a selection of a stowing location among the sampled number of locations; and

modify a database to assign a location identifier associated with the selected stowing location to the inbound product.