

CLAIMS:

1. A computer-implemented system for a package delivery, the system comprising:
 - a memory storing instructions; and
 - at least one processor configured to execute the instructions to:
 - receive, by a computer-implemented system, a customer order;
 - generate, using the computer-implemented system, an order identifier based on the customer order;
 - associate each item of a plurality of items of the customer order with the order identifier;
 - determine, based on the order identifier, an intended delivery destination for each item, a storage space associated with the intended delivery destination, a delivery route, a storage cell associated with the delivery route, and a parcel count;
 - determine whether the order identifier meets a condition;
 - if the condition is met, cause each item of the plurality of items to be processed as a consolidated shipment;
 - if the condition is not met, cause each item of the plurality of items to be processed as an individual shipment by executing a delivery process comprising:
 - sending, to at least one user-device for display and for each item available for sorting, a first indication to sort, using a first sortation process, the item into the storage space associated with the intended delivery destination;
 - receiving, from at least one user-device and for each item sorted into the storage space, a first input related to a status of the first sortation process;
 - sending, to at least one user-device for display and for each item sorted into the storage space, a second indication to sort, using a second sortation process,

the item into the storage cell associated with the delivery route that is configured to include the intended delivery destination, without regard to the status of the first sortation process;

receiving, from at least one user-device and for each item sorted into the storage cell, a second input related to a status of the second sortation process;

sending, to at least one user-device for display and for each item sorted into the storage cell, a third indication to place the item into a container associated with the delivery route, without regard to the status of the second sortation process;

receiving, from at least one user-device for display and for each item placed into the container, a third input related to placing the item into the container;

sending, to at least one user-device for display and for each item placed into the container, a fourth indication to load the container in a delivery vehicle associated with the intended delivery destination, without regard to a status of the other items of the plurality of items of the customer order; and

track a delivery status of the customer order by updating at least one database in response to receiving the first input, the second input, and the third input.

2. The system of claim 1, wherein the condition is met if the parcel count meets or exceeds a threshold amount.
3. The system of claim 2, wherein the threshold amount is fixed.

4. The system of claim 2, wherein the processor is further configured to determine a volume associated with the parcel count, and the threshold amount comprises a volume.
5. The system of claim 1, wherein the processor is further configured to determine whether a third party carrier will ship the order, and the condition is met if the third party carrier will ship the order.
6. The system of claim 1, wherein the processor is further configured to, based on the condition being if the condition is met, send, to at least one user-device for display, a fifth indication to place the plurality of items consolidated shipment in at least one storage cell, and to pack each placed item the consolidated shipment in at least one common package.
7. The system of claim 6, wherein the processor is further configured to, if the condition is met;
 - send a sixth indication to load the common package for delivery on a delivery vehicle, based on an arrangement determined by a promised delivery date for each item of the plurality of items; and
 - display, using at least one user-device, a visual representation of a loading arrangement of a plurality of containers in the delivery vehicle.
8. The system of claim 1, wherein tracking the delivery status of the customer order further comprises updating the at least one database with information related with placing the consolidated shipment in the at least one storage cell, packing the consolidated shipment in the at least one common package, loading the common package for delivery on a delivery vehicle, and a delivery schedule of the common package for delivery.
9. The system of claim 1, wherein tracking the delivery status of the customer order comprises updating the at least one database the processor is further configured

to update a database of the computer-implemented system with information related with at least one of the first sortation process, the second sortation process, placing each sorted item items in the container, loading the container in the delivery vehicle, and a delivery schedule of the placed items.

10. A computer-implemented method for a package delivery, the method comprising:
- receiving, by a computer-implemented system, a customer order;
 - generating, using the computer-implemented system, an order identifier based on the customer order;
 - associating each item of a plurality of items of the customer order with the order identifier;
 - determining, based on the order identifier, an intended delivery destination for each item, a storage space associated with the intended delivery destination, a delivery route, a storage cell associated with the delivery route, and a parcel count;
 - determining whether the order identifier meets a condition;
 - if the condition is met, causing each item of the plurality of items to be processed as a consolidated shipment;
 - if the condition is not met, causing each item of the plurality of items to be processed as a separated shipment by executing a delivery process comprising:
 - sending, to at least one user-device for display and for each item available for sorting, a first indication to sort, using a first sortation process, the item into the storage space associated with the intended delivery destination;
 - receiving, from at least one user-device and for each item sorted into the storage space, a first input related to a status of the first sortation process;
 - sending, to at least one user-device for display and for each item sorted into the storage space, a second indication to sort, using a second sortation process, the item into the storage

cell associated with the delivery route that is configured to include the intended delivery destination, without regard to the status of the first sortation process;

receiving, from at least one user-device and for each item sorted into the storage cell, a second input related to a status of the second sortation process;

sending, to at least one user-device for display and for each item sorted into the storage cell, a third indication to place the item into a container associated with the delivery route, without regard to the status of the second sortation process;

receiving, from at least one user-device for display and for each item placed into the container, a third input related to placing the item into the container;

sending, to at least one user-device for display and for each item placed into the container, a fourth indication to load the container in a delivery vehicle associated with the intended delivery destination, without regard to a status of the other items of the plurality of items of the customer order; and

tracking a delivery status of the customer order by updating at least one database in response to receiving the first input, the second input, and the third input.

11. The method of claim 10, wherein the condition is met if the parcel count meets or exceeds a threshold amount.
12. The method of claim 11, wherein the threshold amount is fixed.
13. The method of claim 11, further comprising determining a volume associated with the parcel count, and the threshold amount comprises a volume.

14. The method of claim 10, further comprising determining whether a third party carrier will ship the order, and the condition is met if the third party carrier will ship the order.
15. The method of claim 10, further comprising, if the condition is met, sending, to at least one user-device for display, a fifth indication to place the consolidated shipment in at least one storage cell, and to pack the consolidated shipment in at least one common package.
16. The method of claim 15, further comprising, if the condition is met;
 sending a sixth indication to load the common package for delivery on a delivery vehicle, based on an arrangement determined by a promised delivery date for each item of the plurality of items; and
 displaying, using at least one user-device, a visual representation of a loading arrangement of a plurality of containers in the delivery vehicle.
17. The method of claim 10, wherein tracking the delivery status of the customer order comprises updating the at least one database with information related with placing the consolidated shipment in the at least one storage cell, packing the consolidated shipment in the at least one common package, loading the common package for delivery on a delivery vehicle, and a delivery schedule of the common package for delivery.
18. The method of claim 10, wherein tracking the delivery status of the customer order comprises updating the at least one database the processor is further configured to update a database of the computer-implemented system with information related with at least one of the first sortation process, the second sortation process, placing each sorted item items in the container, loading the container in the delivery vehicle, and a delivery schedule of the placed items.

19. A computer-implemented system for a package delivery, the system comprising:
a memory storing instructions; and
at least one processor configured to execute the instructions to:
- receive, by a computer-implemented system, a customer order;
 - generate, using the computer-implemented system, an order identifier based on the customer order;
 - associate each item of a plurality of items of the customer order with the order identifier;
 - determine, based on the order identifier, an intended delivery destination for each item, a storage space associated with the intended delivery destination, a delivery route, a storage cell associated with the delivery route, and a parcel count;
 - determine whether the parcel count meets or exceeds a threshold amount;
 - if the parcel count does not meet or exceed the threshold amount, cause each item of the plurality of items to be processed as an individual shipment by executing a delivery process comprising:
 - sending, to at least one user-device for display and for each item available for sorting, a first indication to sort, using a first sortation process, the item into the storage space associated with the intended delivery destination;
 - receiving, from at least one user-device and for each item sorted into the storage space, a first input related to a status of the first sortation process;
 - sending, to at least one user-device for display and for each item sorted into the storage space, a second indication to sort, using a second sortation process, the item into the storage cell associated with the delivery route that is configured to include the

intended delivery destination, without regard to the status of the first sortation process;
receiving, from at least one user-device and for each item sorted into the storage cell, a second input related to a status of the second sortation process;
sending, to at least one user-device for display and for each item sorted into the storage cell, a third indication to place the item into a container associated with the delivery route, without regard to the status of the second sortation process;
sending, to at least one user-device for display and for each item placed into the container, a fourth indication to load the container in a delivery vehicle associated with the intended delivery destination, without regard to a status of the other items of the plurality of items of the customer order;
if the parcel count meets or exceeds the threshold amount, cause each item of the plurality of items to be processed as a consolidated shipment by sending, to at least one user-device for display, a fifth indication to place the plurality of items in at least one storage cell, and to pack each placed item in at least one common package; and
track a delivery status of the customer order by updating at least one database in response to receiving the first input, the second input, and the third input.

20. The system of claim 19, further comprising, wherein the processor is further configured to, if the condition is met;
- send a sixth indication to load the common package for delivery on a delivery vehicle, based on an arrangement determined by a promised delivery date for each item of the plurality of items; and

display, using at least one user-device, a visual representation of a loading arrangement of a plurality of containers in the delivery vehicle.