We Claim

1. An autonomously navigating robotic device for distributing items in a hotel or similar facility based on a flow of process, comprising:

a dispensing unit,

a plurality of storage compartments housed on the robotic device, each capable of storing items to be distributed; wherein the items stored in the plurality of storage compartments are dispensed by the dispensing unit form the robotic device, and

a control unit, the control unit further comprising a stock control handler, wherein the control unit is configured to control the dispensing unit, operate autonomous navigation, and receive requests for items,

wherein the stock control handler is configured to determine stock levels for the items in the plurality of storage compartments, and wherein the stock control handler can trigger the robot to perform a restock,

wherein the restock comprises navigating to a stock room, then restocking needed items with the assistance of a staff member,

wherein the trigger will come from tracking stock or will come from the flow of process,

wherein the trigger from tracking stock comes from at least one of determining: when all or most items run low or run out, when several items run low or run out, when an item runs low or runs out, when a frequently selected item is running out or running low, when 1 or more low-frequency items are running out or running low,

wherein the flow of process comprises:

in a first step, a guest requests an order of items to be delivered to a room through a concierge or a concierge system,

in a second step, the concierge or concierge system delivers the requested order to the robotic device,

in a third step, the stock control handler determines if the flow of process triggers a restock based on the ready availability of the items from the requested order of items,

in a fourth step, if the stock control handler determines the flow of process triggers a restock, to restock, and

in a fifth step, deliver the items from the requested order of items.

2. The autonomously navigating robotic device for distributing items in claim 1, wherein the fifth step of delivery of the items from the requested order of items comprises:

in a first delivery step, adding the delivery of items from the requested order of items to a queue,

in a second delivery step, navigating to the room when up in the queue,

in a third delivery step, notifying the guest of the robotic device arrival,

in a fourth delivery step, waiting no more than an allotted time for the guest to show up, and if the guest shows up,

in a fifth delivery step, verifying the recipient of the items from the requested order of items, as the guest in the room, by a recipient verification system, and

in a sixth delivery step, dispensing requested ordered items.

3. The autonomously navigating robotic device for distributing items in claim 1, wherein the staff member is responsible for at least one of appropriately restocking, refilling, cleaning, replacing, checking expiration dates of the items, and checking the quantity on hand of stored items in the plurality of storage compartments housed on the robotic device.

4. The autonomously navigating robotic device for distributing items in claim 1, wherein the stock control handler is further configured to help aid the staff member by keeping track of at least one of a quantity on hand, expiration dates, and times when cleaning must occur.

5. The autonomously navigating robotic device for distributing items in claim 1, wherein the trigger from tracking stock further can come from: an item running out or low, historical data indicating a good time to restock without loss of function for users, historical data indicating a surge in use by users in a short while, a set amount of time passing, and a set time passing.

6. The autonomously navigating robotic device for distributing items in claim 1, wherein in the third step, the stock control handler determining if the flow of process triggers a restock based on the ready availability of the items from the requested order of items

further comprises a requested ordered item not being available in the plurality of storage compartments.

7. The autonomously navigating robotic device for distributing items in claim 1, wherein the robotic device further comprises a recognition scanner.

8. The autonomously navigating robotic device for distributing items in claim 2, wherein the robotic device further comprises a recognition scanner and wherein the recipient verification system further comprises verifying the recipient with the recognition scanner that is operable to provide at least one of optical scans, magnetic codes, fingerprint scans, eye scans, and facial scans.

9. The autonomously navigating robotic device for distributing items in claim 7, wherein the robotic device identifies and verifies the staff member using the recognition scanner.