

Claims

1. A computerized system for automatic delivery worker assignment, comprising:
 - at least one processor; and
 - at least one non-transitory storage medium comprising instructions that, when executed by the at least one processor, cause the at least one processor to perform steps comprising:
 - receiving a number of units sold during a first time period;
 - receiving a first indication of a number of parcels received during a first period of time at a first camp, wherein the first indication includes a date and a timestamp relating to receipt of parcels or a user query requesting confirmation that the number of parcels were received;
 - determining a unit per parcel rate associated with the first camp based on the number of parcels received and the number of units sold during the first period of time at the first camp;
 - generating, based on the received number of units, the number of parcels received, and the unit per parcel rate, a forecast calculation for the first camp;
 - determining, based on the forecast calculation, a number of routes;
 - receiving a second indication of an available number of delivery workers displayed via a user interface;
 - and
 - assigning a plurality of the available delivery workers to the determined routes.
2. The system of claim 1, wherein the steps further comprise:
 - determining a deliverable number of parcels based on the number of units sold and the unit per parcel rate; and
 - determining the number of routes based on the deliverable number of parcels.

3. The system of claim 2, wherein determining the number of routes further comprises:
 - determining a historical percentage of parcels for third-party delivery;
 - excluding the historical percentage of parcels from the deliverable number of parcels; and
 - determining the number of routes based on the deliverable number of parcels minus the excluded parcels.
4. The system of claim 3, wherein the historical percentage is between 10 and 15 percent.
5. The system of claim 1, wherein:
 - the first camp is associated with a set of postal codes; and
 - the number of units sold comprises a number of units associated with a plurality of camps.
6. The system of claim 1, wherein the first camp is associated with a camp-level capacity.
7. The system of claim 6, wherein the forecast calculation for the first camp is further based on the camp-level capacity.
8. The system of claim 1, wherein assigning a plurality of the delivery workers to the determined routes comprises assigning the delivery workers based on individual target efficiency values for each delivery worker.
9. The system of claim 1, wherein the delivery workers comprise flex workers.
10. A computer-implemented method for automatic delivery worker assignment, the method comprising:
 - receiving a number of units sold during a first time period;
 - receiving a first indication of a number of parcels received during a first period of time at a first camp, wherein the first indication

includes a date and a timestamp relating to receipt of parcels or a user query requesting confirmation that the number of parcels were received;

determining a unit per parcel rate associated with the first camp based on the number of parcels received and the number of units sold during the first period of time at the first camp;

generating, based on the received number of units, the number of parcels received, and the unit per parcel rate, a forecast calculation for the first camp;

determining, based on the forecast calculation, a number of routes;

receiving a second indication of an available number of delivery workers displayed via a user interface; and

assigning a plurality of the available delivery workers to the determined routes.

11. The computer-implemented method of claim 10, the method further comprising:

determining a deliverable number of parcels based on the number of units sold and the unit per parcel rate; and

determining the number of routes based on the deliverable number of parcels.

12. The computer-implemented method of claim 11, the method further comprising:

determining a historical percentage of parcels for third-party delivery; excluding the historical percentage of parcels from the deliverable number of parcels; and

determining the number of routes based on the deliverable number of parcels minus the excluded parcels.

13. The computer-implemented method of claim 12, wherein the historical percentage is between 10 and 15 percent.

14. The computer-implemented method of claim 10, wherein

the first camp is associated with a set of postal codes; and
the number of units sold comprises a number of units associated with a
plurality of camps.

15. The computer-implemented method of claim 10, wherein the first camp is associated with a camp-level capacity.
16. The computer-implemented method of claim 15, wherein the forecast calculation for the first camp is further based on the camp-level capacity.
17. The computer-implemented method of claim 10, wherein assigning a plurality of the delivery workers to the determined routes comprises assigning the delivery workers based on individual target efficiency values for each delivery worker.
18. The computer-implemented method of claim 10, wherein the delivery workers comprise flex workers.
19. A system comprising:
 - a memory storing instructions; and
 - at least one processor configured to execute the instructions to perform operations comprising:
 - receiving a number of units sold during first and second time periods;
 - receiving a first indication of a first number of parcels received during a first period of time at a first camp, wherein the first indication includes a date and a timestamp relating to receipt of parcels or a user query requesting confirmation that the number of parcels were received;
 - receiving a second indication of a second number of parcels received during a second period of time at a second camp;
 - determining a first unit per parcel rate associated with the first camp based on the number of parcels received and the number of units sold during the first period of time at the first camp;

determining a second unit per parcel rate associated with the second camp based on the number of parcels received and the number of units sold during the second period of time at the second camp;

generating, based on the received number of units, the first and the second number of parcels received, and the first and second unit per parcel rate, a first forecast calculation for the first camp and a second forecast calculation for the second camp, wherein the first forecast calculation is different from the second forecast calculation;

determining, based on the first forecast calculation, a first number of routes;

determining, based on the second forecast calculation, a second number of routes;

receiving a third indication of an available number of delivery workers displayed via a user interface; and

assigning a plurality of the available delivery workers to the determined routes.

20. The system of claim 19, wherein the delivery workers comprise flex workers.