WHAT IS CLAIMED IS:

1. A delivery plan generation method comprising:

receiving a delivery route comprising delivery points that source delivery drivers sequentially visit to deliver delivery goods;

generating a route pattern associated with a delivery point included in common in at least a preset number of delivery routes; and

generating a delivery plan based on the route pattern, the delivery plan indicating an order in which a target delivery driver is to visit delivery points respectively corresponding to assigned delivery goods,

wherein the generating the delivery plan further comprises,

determining the delivery plan according to the route pattern and a delivery requirement to be considered when generating the delivery plan,

estimating a similarity between the delivery plan and the route pattern using a first penalty function determined by comparing the delivery plan and the route pattern,

estimating a degree which the delivery plan satisfies the delivery requirement using a second penalty function determined in accordance with the delivery requirement,

determining whether to change the delivery plan based on a weight corresponds to the delivery requirement, the degree which the delivery plan satisfies the delivery requirement and the similarity between the delivery pattern and the route pattern,

wherein the delivery requirement comprises whether the delivery plan of the target delivery driver intersects with a delivery plan of another delivery driver, and whether the delivery driver visit delivery points the another delivery driver visited.

2. The delivery plan generation method of claim 1, wherein the generating of the route pattern comprises analyzing the received delivery route and generating a route

pattern indicating a first delivery point that each of the source delivery drivers visits among delivery points included in a delivery region.

3. The delivery plan generation method of claim 1, wherein the generating of the route pattern comprises analyzing the received delivery route and generating a route pattern indicating a delivery order in which deliveries are performed in a plurality of delivery points.

4. The delivery plan generation method of claim 1, wherein the generating of the route pattern comprises analyzing the received delivery route and generating a route pattern indicating a delivery order in which deliveries are performed in a plurality of delivery points after current locations of the source delivery drivers.

5. The delivery plan generation method of claim 1, wherein the generating of the route pattern comprises generating a set of delivery points included in common in delivery routes, and generating a route pattern based on a similarity between delivery routes derived from the set.

6. The delivery plan generation method of claim 1, wherein the generating of the delivery plan comprises generating the delivery plan based on at least one of the route pattern, a delivery requirement or a delivery environment during a delivery, the delivery requirement being received from a delivery company server and being determined based on at least one of a delivery operation associated with delivery goods, the target delivery driver who performs the delivery operation or a delivery route associated with delivery points corresponding to delivery goods.

7. The delivery plan generation method of claim 6, wherein the generating of the delivery plan comprises generating the delivery plan along with a loading order in which the target delivery driver loads delivery goods into a delivery vehicle based on a delivery order of delivery points determined based on the delivery plan.

8. The delivery plan generation method of claim 6, wherein the generating of the delivery plan comprises evaluating the delivery plan based on whether the delivery plan is similar to the route pattern, and changing the delivery plan.

9. The delivery plan generation method of claim 1, further comprising:

transferring the generated delivery plan to the target delivery driver; and

updating the route pattern based on a delivery route of the target delivery driver who receives the delivery plan, when the delivery route of the target delivery driver is different from the delivery plan.

10. A delivery plan generation apparatus comprising:

a communicator configured to communicate with a delivery company server; and

a processor,

wherein the processor is configured to:

receive, from the delivery company server via the communicator, a delivery route comprising delivery points that source delivery drivers sequentially visit to deliver delivery goods; and

generate a delivery plan to be provided to target delivery driver based on the received delivery route and a delivery requirement to be considered when generating the delivery plan,

estimate a similarity between the delivery plan and the route pattern using a first penalty function determined by comparing the delivery plan and the route pattern,

estimate a degree which the delivery plan satisfies the delivery requirement using a second penalty function determined in accordance with the delivery requirement,

determine whether to change the delivery plan based on a weight corresponds to the delivery requirement, the degree which the delivery plan satisfies the delivery requirement and the similarity between the delivery pattern and the route pattern,

wherein the delivery requirement comprises whether the delivery plan of the target delivery driver intersects with a delivery plan of another delivery driver, and whether the delivery driver visit delivery points the another delivery driver visited.

11. The delivery plan generation apparatus of claim 10, wherein the communicator is further configured to transfer the generated delivery plan to the target delivery driver via the delivery company server.

12. The delivery plan generation apparatus of claim 10, further comprising:

a delivery history database (DB) configured to store the received delivery route.

13. The delivery plan generation apparatus of claim 10, wherein the processor is further configured to generate a route pattern associated with a delivery point included in common in at least a preset number of delivery routes, and to generate the delivery plan based on the route pattern.

14. The delivery plan generation apparatus of claim 13, wherein the processor is further configured to evaluate the delivery plan based on whether the delivery plan meets a

delivery requirement and whether the delivery plan is similar to the route pattern, and to change the delivery plan.

15. The delivery plan generation apparatus of claim 13, wherein the processor is further configured to update the route pattern based on a delivery route of the target delivery driver received via the communicator, when the delivery route of the target delivery driver is different from the delivery plan.

16. The delivery plan generation apparatus of claim 10, wherein the processor is further configured to analyze the received delivery route and to generate a route pattern indicating a first delivery point that each of the source delivery drivers visits among delivery points included in a delivery region.

17. The delivery plan generation apparatus of claim 10, wherein the processor is further configured to analyze the received delivery route and to generate a route pattern indicating a delivery order in which deliveries are performed in a plurality of delivery points.

18. The delivery plan generation apparatus of claim 10, wherein the processor is further configured to analyze the received delivery route and to generate a route pattern indicating a delivery order in which deliveries are performed in a plurality of delivery points after current locations of the source delivery drivers.

19. The delivery plan generation apparatus of claim 10, wherein the processor is further configured to generate a set of delivery points included in common in delivery routes, and to generate a route pattern based on a similarity between delivery routes derived from the set.

20. The delivery plan generation apparatus of claim 10, wherein the processor is further configured to generate the delivery plan along with a loading order in which the target delivery driver loads delivery goods into a delivery vehicle based on a delivery order of delivery points determined based on the delivery plan.