CLAIMS

What is claimed:

1. A demand notification device (110), comprising,

a determining unit (122) configured to determine a quantity of a demand of a transport service for a plurality of users (102, 104, 106) having a predetermined area as destination in a first time period, the quantity of the demand indicating how many users of the plurality of users are determined to desire to travel into the predetermined area; and

wherein the determining unit (122) is further configured to determine a real space service demand from a plurality of users (102, 104, 106) to be fulfilled in the predetermined area in a second time period, wherein the real space service is provided by a service provider (120);

an analysis unit (124) configured to determine a predicted real space service demand in a third time period for the predetermined area based on the quantity of users (102, 104, 106) in the predetermined area at the first time period and the demand of real space service in the predetermined area in the second time period and further configured to monitor the predicted real space service demand in the third time period in the predetermined area regarding a threshold value of service demand for the predetermined area at the third time; and

a notification unit (126) configured to submit a notification to the real space service provider (120) in case the predicted real space service demand is beyond the threshold value.

2. The demand notification device (110) of claim 1,
wherein the real space service comprises a delivery service.

3. The demand notification device (110) of claim 1 or 2,
wherein the predetermined area is a geohash code area, a postal code area or a radio cell area.

4. The demand notification device (110) of anyone of claims 1 to 3,
wherein the first, second and third time period have a period length in a range from 30 min to about 2 h.

5. The demand notification device (110) of anyone of claims 1 to 4, wherein the first, second and third time period have the same period length.

6. The demand notification device (110) of anyone of claims 1 to 5, wherein the first, the second and/or the third time period are adjustable.

7. The demand notification device (110) of anyone of claims 1 to 6, wherein the determination of the predicted real space service demand is based on a recommender system using the quantity of users (102, 104, 106) in the predetermined area at the first time period and the demand of real space service in the predetermined area in the second time period as input signals.

8. The demand notification device (110) of anyone of claims 1 to 7, wherein the third time period is later on the same day of the first time period.

9. The demand notification device (110) of anyone of claims 1 to 8, wherein the first time period and the second time period are on different days.

10. The demand notification device (110) of anyone of claims 1 to 9, wherein the first time period is later than the second time period.

11. A computing device (110), comprising:
one or more processors (128); and
a memory (130) having instructions stored therein, the instructions, when executed by the one or more processors (128), cause the one or more processors (128) to:
determine a quantity of users (102, 104, 106) in a predetermined area in a first time period based on personalized destinations of the users (102, 104, 106) using a transport service, wherein each of the personalized destinations is located within the predetermined area;
determine a real space service demand from a plurality of users (102, 104, 106) to be fulfilled in the predetermined area in a second time period, wherein the real space service is provided by a service provider (120);
determine a quantity of a demand of a transport service for a plurality of users (102, 104, 106) having a predetermined area as destination in a first time period, the quantity of the demand indicating how many users of the plurality of users are determined to desire to travel into the predetermined area;

monitor the predicted real space service demand in the third time period in the predetermined area to determine whether a threshold value of service demand for the predetermined area at the third time is reached; and
submit a notification to the real space service provider (120) in case the predicted real space service demand is beyond the threshold value and/or
flag the predetermined area for the third time period in the memory (130).

12. The computing device (110) of claim 11,
wherein the first, second and third time period have the same period length.

13. The computing device (110) of anyone of claims 11 or 12,
wherein the first, the second and/or the third time period are adjustable.

14. The computing device (110) of anyone of claims 11 to 13,
wherein the determination of the predicted real space service demand is based on a recommender system using the quantity of users (102, 104, 106) in the predetermined area at the first time period and the demand of real space service in the predetermined area in the second time period as input signals.

15. A demand notification method (400), comprising:
determine (410) a quantity of a demand of a transport service for a plurality of users (102, 104, 106) having a predetermined area as destination in a first time period, the quantity of the demand indicating how many users of the plurality of users are determined to desire to travel into the predetermined area;
wherein each of the personalized destinations is located within the predetermined area;
determine (420) a real space service demand from a plurality of users (102, 104, 106) to be fulfilled in the predetermined area in a second time period, wherein the real space service is provided by a service provider (120);
determine (430) a predicted real space service demand in a third time period in the predetermined area based on the quantity of users (102, 104, 106) in the predetermined area in the first time period and the demand of real space service in the predetermined area in the second time period;
monitor (440) the predicted real space service demand in the third time period in the predetermined area regarding a threshold value for the predetermined area at the third time; and

submit (450) a notification to the real space service provider (120) in case the predicted real space service demand is beyond the threshold value.