CLAIMS

1. A method for providing an indicator of demand comprising the steps of:

determining a first efficiency measure between a first source and a second source, each source associated with at least one good or service;

determining a second efficiency measure between a first destination and a second destination;

associating the first destination with the first source to form a first order pair and the second destination with the second source to form a second order pair;

determining a first vector associated with the first order pair, and a second vector associated with the second order pair;

measuring an angle between the first vector and the second vector;

calculating the indicator of demand based on a function of the first efficiency measure, the second efficiency measure, and the angle; and

calculating a cosine of the angle to derive an indication of directional homogeneity between the first order pair and the second order pair.

2. The method of claim 1, wherein the first efficiency measure is a distance between the first source and the second source or a time taken to travel between the first source and the second source.

3. The method of claim 1 or 2, wherein the second efficiency measure is a distance between the first destination and the second destination or a time taken to travel between the first destination and the second destination.

4. The method of claim 1, wherein the indicator of demand (DD) is expressed mathematically as:

DD = w1 * first efficiency measure + w2 * second efficiency measure + w3 * cosine of the angle

wherein w1, w2 and w3 are weights and the summation of w1 + w2 + w3 = 1.

5. The method of claim 4, further comprising a step of normalizing the first efficiency measure and/or the second efficiency measure and plotting the DD against the first normalized efficiency measure and/or the second normalized efficiency measure over a pre-determined time period.

6. The method of claim 5, further comprising a step of determining a point of inflexion on the plot corresponding to the first efficiency measure at a value of 1.

7. The method of claim 5 or 6, further comprising the step of summing the DD values and averaging the summed DD value over a parameter to provide an indication of demand density.

8. The method of claim 7, wherein the parameter is selected from at least one of the following: a location, a merchant, a consumer, and a time period.

9. The method of claim 7 or 8, further comprising the step of estimating a batching efficiency based on the indication of demand density.

10. A system for determining an indicator of demand for a good or service comprising:

at least one location-based sensor for sensing the location of a first source, a second source, a first destination and/or a second destination;

a module arranged in data communication with the at least one location-based sensor, the module configured to:

determine a first efficiency measure between the first source and the second source, each source associated with at least one good or service;

determine a second efficiency measure between the first destination and the second destination;

associate the first destination with the first source to form a first order pair and the second destination with the second source to form a second order pair;

determine a first vector associated with the first order pair, and a second vector associated with the second order pair;

measure an angle between the first vector and the second vector; and

calculate the indicator of demand based on a function of the first efficiency measure, the second efficiency measure, and the angle; wherein the module is further configured to calculate a cosine of the angle to derive an indication of directional homogeneity between the first order pair and the second order pair.

11. The system of claim 10, wherein the first efficiency measure is a distance between the first source and the second source or a time taken to travel between the first source and the second source.

12. The system of claim 10 or 11, wherein the second efficiency measure is a distance between the first destination and the second destination or a time taken to travel between the first destination and the second destination.

13. The system of claim 10, wherein the indicator of demand (DD) is expressed mathematically as:

DD = w1 * first efficiency measure + w2 * second efficiency measure + w3 * cosine of the angle

wherein w1, w2 and w3 are weights and the summation of w1 + w2 + w3 = 1.

14. The system of any one of claims 10 to 13, wherein the location-based sensor is a GPS sensor in a vehicle.

15. The system of any one of claims 10 to 14, further forming part of an electronic delivery system or a vehicle-on demand platform.

16. The system of claim 10 and 11, wherein the module in arranged in data communication with a map service to obtain map data to determine the distance or time between the first source second source, first destination and second destination.

17. A non-transitory computer-readable storage medium comprising instructions, which, when executed by one or more processors, cause the execution of the method according to any one of claims 1-9.