apparent from the subsequent detailed description and the appended claims, taken in conjunction with the accompanying drawings and this background of the disclosure.

[Summary] [0010]

In a first aspect, a method for adaptively managing a vehicle that is administered by a transport provider is provided, the method comprises : determining, by a processor, an area relating to the vehicle at a location at which the vehicle has arrived, the determined area being corresponding to an aisle in the vehicle; determining, by the processor, a number of individuals who are within the determined area; and predicting, by the processor, a time at which the vehicle departs the location in response to the determination of the number of individuals who are within the determined area.

[0011]

In an embodiment, the step of determining a number of individuals comprises: receiving an input relating to the number of individuals; the input being one that is sent from at least one of an image capturing device, a pressure sensor, a temperature sensor and a motion sensor, wherein the number of individuals is determined in response to the step of receiving the input.

[0012]

In an embodiment, the step of predicting the time at which the vehicle departs the location comprises: retrieving, by the processor, historical data relevant to the vehicle the historical data relating to a plurality of trips that have been done by at least one other vehicle; analyzing, by the processor, the retrieved historical data, wherein the time at which the vehicle departs the location is predicted in response to the step of analyzing the retrieved historical data.

[0013]

In an embodiment, the step of analyzing the retrieved historical data comprises: retrieving , by the processor, a corresponding arrival time of the at least one vehicle at the location;

retrieving, by the processor, a corresponding departure time of the at least one vehicle at the location; and

determining, by the processor, a period of time that the at least one other vehicle has stayed at the location in response to the retrieval of the corresponding arrival

[0020]

In a second aspect, an apparatus for adaptively managing a vehicle that is administered by a transport provider is provided, the apparatus comprising: means for determining an area relating to the vehicle at a location at which the vehicle has arrived, the determined area being corresponding to an aisle in the vehicle;means for determining a number of individuals who are within the determined area; and

means for predicting a time at which the vehicle departs the location in response to the determination of the number of individuals who are within the determined area.

[0021]

In an embodiment, the at least one memory and the computer program code is further configured with the at least one processor to:

receive an input relating to the number of individuals; the input being one that is sent from at least one of an image capturing device, a pressure sensor, a temperature sensor and a motion sensor, wherein the number of individuals is determined in response to the step of receiving the input.

[0022]

In an embodiment, the at least one memory and the computer program code is further configured with the at least one processor to:

retrieve historical data relevant to the vehicle, the historical data relating to a plurality of trips that have been done by at least one other vehicle;

analyze by the processor, the retrieved historical data,

wherein the time at which the vehicle departs the location is predicted in response to the step of analyzing the retrieved historical data.

[0023]

In an embodiment, the at least one memory and the computer program code is further configured with the at least one processor to:

retrieve a corresponding arrival time of the at least one vehicle at the location;

retrieve a corresponding departure time of the at least one vehicle at the location; and

determine a period of time that the at least one other vehicle has stayed at the

[CLAIMS]

1. A method for adaptively managing a vehicle that is administered by a transport provider, comprising:

determining, by a processor, an area relating to the vehicle at a location at which the vehicle has arrived, the determined area being corresponding to an aisle in the vehicle;

determining, by the processor, a number of individuals who are within the determined area; and

predicting, by the processor, a time at which the vehicle departs the location in response to the determination of the number of individuals who are within the determined area.

2. The method according to claim 1, wherein the step of determining a number of individuals comprises:

receiving an input relating to the number of individuals; the input being one that is sent from at least one of an image capturing device, a pressure sensor, a temperature sensor and a motion sensor, wherein the number of individuals is determined in response to the step of receiving the input.

3. The method according to claim 1or claim 2, wherein the step of predicting the time at which the vehicle departs the location comprises:

retrieving, by the processor, historical data relevant to the vehicle, the historical data relating to a plurality of trips that have been done by at least one other vehicle;

analyzing, by the processor, the retrieved historical data,

wherein the time at which the vehicle departs the location is predicted in response to the step of analyzing the retrieved historical data.

4. The method according to claim 3, wherein the step of analyzing the retrieved historical data comprises:

retrieving, by the processor, a corresponding arrival time of the at least one vehicle at the location;

retrieving, by the processor, a corresponding departure time of the at least

one vehicle at the location; and

determining, by the processor, a period of time that the at least one other vehicle has stayed at the location in response to the retrieval of the corresponding arrival time and the corresponding departure time.

5. The method according to claim 4, wherein the step of analyzing the retrieved historical data comprises:

retrieving, by the processor, historical transaction data relating to the individuals who have boarded the at least one other vehicle at the location.

6. The method according to claim 5, wherein the step of analyzing the retrieved historical data comprises:

determining, by the processor, a corresponding number of individuals who have boarded the at least one other vehicle at the location in response to the retrieval of the historical transaction data.

7. The method according to claim 6, wherein the time at which the vehicle departs the location is predicted in response to at least one of the determination of the corresponding number of individuals who have boarded the at least one other vehicle at the location and the determination of the period of time that the at least one other vehicle has stayed at the location.

8. The method according to any one of the preceding claims, wherein the step of determining, by a processor, the determined area relating to the vehicle at a location at which the vehicle has arrived comprises:

identifying, by the processor, an area on the vehicle, the area relating to one in which the individuals may board or alight the vehicle.

9. The method according to any one of the preceding claims, wherein the step of predicting, by the processor, the time at which the vehicle departs the location in response to the determination of the number of individuals who are within the determined area comprises:

determining, by the processor, a time period that the vehicle is predicted to stay at the location in response to an arrival time and the predicted time at which

the vehicle departs the location; and

determining, by the processor, whether or not the time period that the vehicle is predicted to stay at the location is above a threshold time period.

10. An apparatus for adaptively managing a vehicle that is administered by a transport provider, the apparatus comprising:

means for determining an area relating to the vehicle at a location at which the vehicle has arrived, the determined area being corresponding to an aisle in the vehicle;

means for determining a number of individuals who are within the determined area; and

means for predicting a time at which the vehicle departs the location in response to the determination of the number of individuals who are within the determined area.