

from consumers will increase. Such market and operating variables are not considered in current ETA generation systems.

[0005] There is thus a need to devise a novel method and system which take the indirect impact of ETA adjustments in shaping demand from consumers, operating variables and accuracy of ETA into consideration in generating an estimated time to fulfil a request for a service (delivery order).

[0006] Furthermore, other desirable features and characteristics will become apparent from the subsequent detailed description and the appended claims, taken in conjunction with the accompanying drawings and this background of the disclosure.

Summary

[0007] In a first aspect, the present disclosure provides a method for generating an estimated time to fulfil a request for a service, the service requiring a service provider to move from one location to another location, comprising: identifying an operating variable relating to a current request for a service and a performance metric, the performance metric comprising an accuracy metric in accurately estimating an actual time required to fulfil the previous request for the service; and generating an estimated time to fulfil the current request for the service to increase/reduce a number of further requests for the service reflecting a desired level of demand for the service based on the operating variable and the performance metric..

[0008] In a second aspect, the present disclosure provides a system for generating an estimated time to fulfil a request for a service, the service requiring a service provider to move from one location to another location, the system comprising: at least one processor; and at least one memory including computer program code; the at least one memory and the computer program code configured to, with at least one processor, cause the server at least to, comprising: identify an operating variable relating to a current request for a service and a performance metric, the performance metric comprising an accuracy metric in accurately estimating an actual time required to fulfil a previous request for the service; and generate an estimated time to fulfil the current request for the service to increase/reduce a number of further requests for the service reflecting a desired level of demand for the service based on the operating variable and the performance metric.

[0009] Additional benefits and advantages of the disclosed embodiments will become apparent from the specification and drawings. The benefits and/or advantages may be individually obtained by the various embodiments and features of the specification and

[0076] In step 302, the Variable And Metric Identification Module 202 is configured to identify an operating variable relating to a current service request and a performance metric. The performance metric which the Variable And Metric Identification Module 202 identifies comprises an accuracy metric in accurately estimating an actual time required to fulfil a previous request for the service. The performance metric may further comprise a conversion rate measure which measures a ratio of a number of previous requests for the service to a number of views for the service based on an initial ETA. The performance metric may further comprise a fulfilment rate measure which measures a number of previous requests for the service fulfilled by one or more service providers which are derived from one or more previous requests.

[0077] The operating variable comprises a number of current service requests (e.g., level of demand for the service), a number of available service providers to fulfil the service (e.g., number of available drivers), a real-time condition (e.g., a weather condition, a traffic condition), a real time (e.g., actual time of servicing a request, actual delivery/travel time), a region, a period of a day (e.g., peak hour, non-peak hour), a day of a week (e.g., weekday, weekend), a specific day of a year (e.g., school holiday, public holiday) and an allocation rate measure which measures a ratio of a number of previous requests for the service assigned to and to be fulfilled by one or more service providers to a number of previous requests.

[0078] In step 304, The Estimated Time Generation Module 204 generates an ETA to fulfil the current service request to provide a desired number of further service requests based on the operating variable and performance metric identified in step 302. In one implementation, the Estimated Time Generation Module 204 may be configured to generate an initial ETA and then further generate an adjustment to the initial ETA based on the operating variable and performance metric identified in step 302 and apply the adjustment to the ETA to generate the ETA. Such initial ETA generated by the Estimated Time Generation Module 204 may be based on at least one of the performance metric, the actual time required to fulfil the previous service request and a previous ETA generated for the previous service request. Such previous ETA is generated by the Estimated Time Generation Module 204 for the previous service request based on a previous operating variable relating to the previous service request and a previous performance metric at that time.

[0079] In one alternative embodiment, prior to generating the ETA, the Number Of Requests Determination Module 206 is configured to determine whether the desired number of further

CLAIMS

1. A method for generating an estimated time to fulfil a request for a service, the service requiring a service provider to move from one location to another location, comprising:

identifying an operating variable relating to a current request for a service and a performance metric, the performance metric comprising an accuracy metric in accurately estimating an actual time required to fulfil a previous request for the service; and

generating an estimated time to fulfil the current request for the service to increase/reduce a number of further requests for the service reflecting a desired level of demand for the service based on the operating variable and the performance metric.

2. The method of claim 1, further comprising:

generating an initial estimated time to fulfil the current request for the service to provide the desired number of further requests for the service reflecting the desired level of demand for the service based on the performance metric, the actual time required to fulfil the previous request for the service and/or a previous estimate time generated for the previous request for the service based on a previous operating variable relating to the previous request for the service and a previous performance metric.

3. The method of claim 2, wherein the generation of the estimated time to fulfil the current request for the service comprises:

generating an adjustment to the initial estimated time based on the operating variable and the performance metric; and

applying the adjustment to the initial estimated time to generate the estimated time.

4. The method of claim 2 or 3, wherein the performance metric further comprises a first measure of a number of previous requests for the service to a number of views for the service and/or a second measure of a number of previous requests for the service fulfilled by one or more service providers derived from one or more previous requests based on the initial estimated time generated for the current request.

5. The method of any one of claims 1-4, further comprising:

determining whether the desired number of further requests for the service or a desired performance metric can be provided by one or more previous estimated times generated for one or more previous requests based on the operating variable and the performance metric, wherein the generation of the estimated time to fulfil the current request for the service to provide the desired number of further requests for the service is further based on a result of the determination.

6. The method of claim 5, further comprising:

applying a first weightage to each of one or more variables of the operating variable and/or one or more measures of the performance metric, wherein the generation of the estimated time to fulfil the current request for the service to provide the desired number of further requests for the service is further based on the weighted one or more variables of the operating variable and/or one or more measures of the performance metric.

7. The method of claim 5, further comprising:

identifying a performance metric relating to each of the one or more previous estimated times of the one or more previous requests; and

applying a second weightage to the each of the one or more previous estimated time according to a time sequence, wherein the generation of the estimated time to fulfil the current request for the service to provide the desired number of further requests for the service is further based on the respective weighted performance metrics of the one or more previous estimated times.

8. The method of claim 6 or 7, further comprising:

adjusting the weightage based on the result of the determination.

9. The method of any one of claims 1-8, wherein the operating variable comprises at least one of a number of current requests for the service, a number of available service providers to fulfil the service, a weather condition, a real time, a real-time condition, a real-time signal, a region, a period of a day, a day of a week, a specific day of a year and a third measure of a

number of previous requests for the service assigned to and to be fulfilled by one or more service providers to a number of previous requests.

10. A system for adaptively generating an estimated time to fulfil a request for a service, the service requiring a service provider to move from one location to another location, comprising:

at least one processor; and

at least one memory including computer program code;

the at least one memory and the computer program code configured to, with at least one processor, cause the server at least to:

identify an operating variable relating to a current request for a service and a performance metric, the performance metric comprising an accuracy metric in accurately estimating an actual time required to fulfil a previous request for the service; and

generate an estimated time to fulfil the current request for the service to increase/reduce a number of further requests for the service reflecting a desired level of demand for the service based on the operating variable and the performance metric.

11. The system of claim 10, wherein the at least one memory and the computer program code configured to, with the at least one processor, cause the server at least to further:

generating an initial estimated time to fulfil the request for the service to provide the desired number of further requests for the service reflecting the desired level of demand for the service based on the performance metric and/or the actual time required to fulfil the previous request for the service and/or a previous estimate time generated for the previous request for the service based on a previous operating variable relating to the previous request for the service and a previous performance metric.

12. The system of claim 11, wherein the at least one memory and the computer program code configured to, with the at least one processor, cause the server at least to:

generate an adjustment to the initial estimated time based on the operating variable and the performance metric; and

apply the adjustment to the initial estimated time to generate the estimated time.

13. The system of claim 11 or 12, wherein the performance metric further comprises a first measure of a number of previous requests for the service to a number of views for the service and/or a second measure of a number of previous requests for the service fulfilled by one or more service providers derived from one or more previous requests based on the initial estimated time generated for the current request.

14. The system of any one of claims 10-13, wherein the at least one memory and the computer program code configured to, with the at least one processor, cause the server at least to further:

determine whether the desired number of further requests for the service or a desired performance metric can be provided by one or more previous estimated times generated for one or more previous requests based on the operating variable and the performance metric; and

generate the estimated time to fulfil the current request for the service to provide the desired number of further requests for the service further based on a result of the determination.

15. The system of claim 14, wherein the at least one memory and the computer program code configured to, with the at least one processor, cause the server at least to further:

apply a weightage to each of one or more variables of the operating variable and/or one or more measures of the performance metric; and

generate the estimated time to fulfil the current request for the service to provide the desired number of further requests for the service further based on the weighted one or more variables of the operating variable and/or one or more measures of the performance metric.

16. The system of claim 14, wherein the at least one memory and the computer program code configured to, with the at least one processor, cause the server at least to further:

identify a performance metric relating to each of the one or more previous estimated times of the one or more previous requests; and

apply a second weightage to the each of the one or more previous estimated time according to a time sequence, and

generate the estimated time to fulfil the current request for the service to provide the desired number of further requests for the service further based on the respective weighted performance metrics of the one or more previous estimated times.

17. The system of claim 15 or 16, wherein the at least one memory and the computer program code configured to, with the at least one processor, cause the server at least to further:

adjust the weightage to the each of one or more variables of the operating variable and/or one or more measures of the performance metric based on the result of the determination.

18. The system of any one of claims 10-17, wherein the operating variable comprises at least one of a number of current requests for the service, a number of available service providers to fulfil the service, a weather condition, a real time, a real-time condition, a real-time signal, a region, a period of a day, a day of a week, a specific day of a year and a third measure of a number of previous requests for the service assigned to and to be fulfilled by one or more service providers to a number of previous requests.