

PROCUREMENT ENGINE

The present invention relates to a method and apparatus for providing goods in an on-line environment, in one
5 aspect in the form of an electronic marketplace and procurement engine.

Existing procurement engines are modelled essentially on traditionally wholesaling/retailing models, wherein a
10 customer is separated from a manufacturer by a series of intermediaries in the form of, typically, retailers and distributors. There may additionally be third parties responsible for billing and payment collection.

15 As a result, the ultimate price of the goods is raised as each intermediary or provider of ancillary services adds their charges to the initial manufacturers' or wholesalers' price.

20 It is an object of the present invention, therefore, to provide a method and apparatus for facilitating the procurement of goods, involving at least the reduction of the required intermediaries.

25 The present invention provides a method of providing one or more goods to a customer from a supplier in an on-line environment, comprising:

said supplier consigning said goods to an order fulfillment agent;

30 said customer placing an order for at least one of said goods on-line; and

said order fulfillment agent fulfilling said order.

Thus, there need be no intermediary between the
35 manufacturer or wholesaler and the order fulfillment agent.

The fulfillment agent could be an organisation with nationwide offices or - alternatively - district level third party logistic service providers. Indeed, a retail shop could provide this service by establishing a suitable agreement with the manufacturer or wholesaler, and/or with an electronic marketplace.

The supplier may be, for example, a manufacturer or a wholesaler. Preferably the method includes the supplier replenishing stock at a premises of the order fulfillment agent either when a stock level drops to a reorder quantity, or periodically based on consumer buying behaviour.

Preferably said order is placed by means of an electronic marketplace. Preferably the method includes billing said customer via said electronic marketplace, and more preferably the method includes either the supplier or the fulfillment agent billing said electronic marketplace and said electronic marketplace billing, respectively, the fulfillment agent or the customer. Alternatively, said supplier bills said fulfillment agent or said electronic marketplace when said goods are delivered to said fulfillment agent.

In one embodiment said fulfillment agent is responsible for payment collection from said customer.

In one embodiment, the supplier bills either the fulfillment agent or an electronic marketplace when said goods are delivered to said fulfillment agent, whereby said goods are returnable and any payment refundable within a certain period of time if the goods remain unsold.

The supplier or the fulfillment agent may each be one of a plurality of, respectively, such suppliers or such

fulfillment agents.

The present invention also provides a procurement engine for facilitating the provision of one or more goods to a customer from a supplier in an on-line environment, comprising:

computing means having communication means for communicating with said customer, with supplier and with a order fulfillment agent;

wherein said computing means is configured to accept an order from said customer for at least one of said goods on-line, to communicate said order to said supplier and to said fulfillment agent, and to accept a bill from said supplier for providing said goods.

In one embodiment, said procurement engine (typically an on-line server) is configured to forward said bill to said fulfillment agent and to accept payment of said bill from said fulfillment agent.

Preferably the procurement engine is configured to maintain order records and to notify said supplier when said records indicate that stocks of any particular good or goods held by the order fulfillment agent require replenishing. Alternatively, the procurement engine may be configured to maintain order records and to provide estimate of a frequency with which held by the order fulfillment agent should be replenished according to consumer buying behaviour.

In one embodiment said fulfillment agent is responsible for payment collection from said customer.

The supplier or the fulfillment agent may each be one of a plurality of, respectively, such suppliers or such fulfillment agents.

In order that the present invention may be more clearly ascertained, preferred embodiments will now be described, by way of example, with reference to the accompanying drawings, in which:

5 Figure 1 is a schematic illustration of an order fulfillment method according to the present invention;

 Figure 2 is a schematic illustration of a further order fulfillment method according to the present invention.

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Figure 1 schematically illustrates an order fulfillment method 10 according to a preferred embodiment of the present invention. The participants in the method are suppliers 12, order fulfillment agents 14 and customers 15 16. These parties interact by means of electronic marketplace 18 residing on a server refers to as an electronic procurement engine 20.

The suppliers 12 may comprise first wholesaler 22, first 20 manufacturer 24, second wholesaler 26, etc, while the fulfillment agents may include District One retailer 30, District Two third party logistic service provider 32, District Three retailer 34, etc. The customers 16 include individual customers 38, 40, 42, etc. According to this 25 method, customers 16 place orders for goods offered by suppliers 12 by means of electronic marketplace 18. Two way communication 46 is provided between the customer 16 and the electronic marketplace 18 so that they can ascertain the availability of the goods of suppliers 12 and place orders. Similarly, two way communication 48 30 between suppliers 12 and the electronic marketplace 18 allows suppliers 12 to provide product information and receive orders, as well as to transmit information concerning ordered goods to the fulfillment agents 14 by 35 communication link 50.

Upon receiving a valid order, the relevant supplier (such

as first wholesaler 22) consigns 52 the ordered good or goods to the appropriate fulfillment agent (such as District One retailer 30) depending on the location of the customer. The supplier (in this example first wholesaler 22) bills 54 the electronic marketplace 18, which bills 56 the appropriate fulfillment agent, here District One retailer 30. District One retailer 30 pays 58 the electronic marketplace 18, while electronic marketplace 18 pays 60 first wholesaler 22.

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Finally, District One retailer 30 delivers 62 the goods to whichever of customer 16 placed the order, who pays 64 District One retailer 30 accordingly.

15 The consignment 52 of goods from first wholesaler 22 to District One retailer 30 may be done on an ongoing basis rather than in response to a particular order, so that stocks of the first wholesaler's goods held by District One retailer 30 are maintained at a desired level.

20 Alternatively, the level of orders being placed for particular goods and to particular wholesalers 12 can be monitored by the electronic marketplace 18, which can thereby inform each of the suppliers 12 when particular goods held by particular fulfillment agents 14 require
25 replenishment.

In an alternative embodiment illustrated schematically in figure 2, depending on the terms established between the suppliers 12, the fulfillment agents 14 and the electronic marketplace 18, the suppliers 12 can either bill 66 the fulfillment agents 14 or bill 54 the electronic marketplace (and receive corresponding 68 or 60 respectively) as and when goods are delivered to a respective fulfillment agent, on the basis that such goods
30 are returnable and the payment 68 or 60 refundable within
35 a certain period of time if the goods remain unsold.

Further modifications within the spirit and scope of the invention may readily be effected by persons skilled in the art. It is to be understood, therefore, that this invention is not limited to the particular embodiments
5 described by way of example hereinabove.



THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. A method of providing one or more goods to a customer from a supplier in an on-line environment, comprising:
 - 5 said supplier consigning said goods to an order fulfillment agent;
 - said customer placing an order for at least one of said goods on-line; and
 - said order fulfillment agent fulfilling said order.
- 10 2. A method as claimed in claim 1, including said supplier replenishing stock at a premises of the order fulfillment agent either when a stock level drops to a reorder quantity.
- 15 3. A method as claimed in claim 1, including said supplier replenishing stock at a premises of the order fulfillment agent periodically based on consumer buying behaviour.
- 20 4. A method as claimed in any one of the preceding claims, wherein said order is placed by means of an electronic marketplace.
- 25 5. A method as claimed in claim 4, including billing said customer via said electronic marketplace.
- 30 6. A method as claimed in claim 4, including either the supplier or the fulfillment agent billing said electronic marketplace and said electronic marketplace billing, respectively, the fulfillment agent or the customer.
- 35 7. A method as claimed in claim 4, wherein said supplier bills said fulfillment agent or said electronic marketplace when said goods are delivered to said fulfillment agent.



8. A method as claimed in any one of the preceding claims, including holding said fulfillment agent responsible for payment collection from said customer.

5 9. A method as claimed in any one of the preceding claims, wherein said supplier bills either the fulfillment agent or an electronic marketplace when said goods are delivered to said fulfillment agent, whereby said goods are returnable and any payment refundable within a certain
10 period of time if the goods remain unsold.

10. A method as claimed in any one of the preceding claims, wherein said supplier is one of a plurality of such suppliers.

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11. A method as claimed in any one of the preceding claims, wherein said fulfillment agent is one of a plurality of such fulfillment agents.

20 12. A procurement engine for facilitating the provision of one or more goods to a customer from a supplier in an on-line environment, comprising:

computing means having communication means for communicating with said customer, with supplier and with a
25 order fulfillment agent;

wherein said computing means is configured to accept an order from said customer for at least one of said goods on-line, to communicate said order to said supplier and to said fulfillment agent, and to accept a bill from said
30 supplier for providing said goods.

In one embodiment, said procurement engine (typically an on-line server) is configured to forward said bill to said fulfillment agent and to accept payment of said bill from
35 said fulfillment agent.

13. A procurement engine as claimed in claim 12, wherein



said procurement engine is configured to maintain order records and to notify said supplier when said records indicate that stocks of a particular good held by the order fulfillment agent require replenishing.

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14. A procurement engine as claimed in claim 12, wherein said procurement engine is configured to maintain order records and to provide estimate of a frequency with which held by the order fulfillment agent should be replenished according to consumer buying behaviour.

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15. A procurement engine as claimed in any one of claims 12 to 14, wherein said fulfillment agent is responsible for payment collection from said customer.

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16. A procurement engine as claimed in any one of claims 12 to 15, wherein said supplier is one of a plurality of such suppliers.

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17. A procurement engine as claimed in any one of claims 12 to 16, wherein said fulfillment agent is one of a plurality of such fulfillment agents.