**Singular System And Method For Managing Manufacturing, Ordering And Distribution In A Supply Chain**

**Field Of Disclosure**

1. The present disclosure relates to the field of inventory management. More particularly, the present disclosure aims to describe a singular system for mapping sources and destinations of manufacturing, storing and logistics.

**Background of the disclosure**

1. The background description includes information that may be useful in understanding the present invention. It is not an admission that any of the information provided herein is prior art or relevant to the presently claimed invention, or that any publication specifically or implicitly referenced is prior art.
2. Electronic commerce, commonly known as e-commerce, involves the buying and selling of products or services over electronic systems such as the Internet. E-commerce draws on multiple technologies, including mobile commerce, electronic funds transfer, supply chain management, online marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems.
3. E-commerce is conducted through e-commerce websites using various business models. These models allow online sellers to list products on third-party websites in a manner that is largely transparent to consumers. For example, previously proprietary e-commerce websites owned by large retailers have opened their doors to third-party sellers. These types of websites are known as third-party marketplaces in the industry. Under this model, popular online retailers partner with sellers that are able to enhance consumer experience by bringing greater product selection to their e-commerce websites. Typically, the products of both the operator of the e-commerce website and the sellers selling on the website receive equal treatment in the search results. Third-party marketplaces are particularly advantageous to small and medium sized sellers that may not have the resources to operate an e-commerce website. Examples of large online retailers operating third-party marketplaces include Overstock.com, Amazon.com, Sears.com, Ebay.com, Walmart.com, and Buy.com. In addition, it is predicted that many more third-party marketplaces may be available in the near future.
4. Although third-party marketplaces have benefitted sellers and online retailers, some drawbacks still exist. For example, the existing model of business has listing of products. Due to multiple options available, the user is confused in terms of the selection of an authentic or trustworthy or reliable or best manufacturer or vendor to meet his demand. This shows that even though the web commerce portals have a clear idea on demand and supply they do not have a transparent supply chain due to lack of proper specification of the product. Also, in business-to-business, a system has to invest lot of time to find the supply chain, leaving out the individuals, SMEs. Further, the manufactures does not know the exact source (space, time) of the product, which leads to increased inventory expense, wasted labor expense, customer service, marketing executives expense, high risk credit. As same product is created by different supplier / manufacturer / trader in same system, finding a right product becomes tedious and time consuming process. Such limitation further demands for an expert interference to identify the right product in the system. Also, a problem in existence today is where individual organizations within a company work in “silos” or separate divisions and communications between organizations and external businesses, such as suppliers, are poor or do not exist.
5. In order to summaries the issues available in the above and existing systems, a scenario is provided as an example. Carborundum universal limited (CUL) produces Silicon Carbide, which is used as abrasive. The simplest manufacturing process is to combine silica sand and carbon in an Acheson graphite electric resistance furnace at a high temperature, between 1,600 °C (2,910 °F) and 2,500 °C (4,530 °F). Trickiest part here is process requires CAO (Calcium oxide) with minimum purity of 96%, which is just used to remove water content. CUL had expertise to procure silica and carbon, but they were importing calcium oxide overseas, which was available within India. Since CUL required CAO in small quantity they failed to build the expertise in procuring CAO. The cost they paid for that was unimaginable. CAO was available at 600 Rupees/ton, but they were paying 80000 Rupees/ton. Such data is called as an information void in the current system which can be rectified in our singular system.
6. Thus, in view of the above and after details technical survey of the existing systems and technologies available in the market today, below are some drawbacks and/or technical limitations observed by the inventors of this particular application:
7. For any particular destination there can be only one source specific to a space-time for manufacturing or producing or delivering.
8. Product or material gets manufactured in the space-time where it may not be suitable for maximum optimization say availability of raw materials, skilled labor, poor demand in the region, and demand for by-product in the system.
9. Product or material gets stocked in space-time where demand might not be consumed as expected. Today’s e-commerce does not try to solve this problem. Consumers play a role of listing products and listing suppliers. Consumer’s area of interest revolves in making a supplier more reliable by rating him based on the consumer feedback. Additionally, few B2B e-commerce also tries below listed problems:
   1. Ensure goods are consistently available at the right time and place – for higher sales
   2. Reduce inventory and increase working capital with deeper insight into your supply chain
   3. Improve demand planning and decrease safety stock levels to cut costs
   4. Use enhanced supplier intelligence to minimize out-of-stock situations
   5. Enable ERP to recommend specific actions that balance profitable service and inventory.
10. A need therefore exists for methods and systems for automation and/or an artificial intelligence and/or software for emulating a virtual world in future time which can integrate and achieve blueprints, thereby create goods at more reasonable cost there by streamlining and improving the process involved in manufacturing goods. Further, there also exists a need to provide a singular system for mapping sources and destinations of manufacturing, storing and logistics.
11. All publications herein are incorporated by reference to the same extent as if each individual publication or patent application were specifically and individually indicated to be incorporated by reference. Where a definition or use of a term in an incorporated reference is inconsistent or contrary to the definition of that term provided herein, the definition of that term provided herein applies and the definition of that term in the reference does not apply.
12. In some embodiments, the numbers expressing quantities or dimensions of items, and so forth, used to describe and claim certain embodiments of the invention are to be understood as being modified in some instances by the term “about.” Accordingly, in some embodiments, the numerical parameters set forth in the written description and attached claims are approximations that can vary depending upon the desired properties sought to be obtained by a particular embodiment. In some embodiments, the numerical parameters should be construed in light of the number of reported significant digits and by applying ordinary rounding techniques. Notwithstanding that the numerical ranges and parameters setting forth the broad scope of some embodiments of the invention are approximations, the numerical values set forth in the specific examples are reported as precisely as practicable. The numerical values presented in some embodiments of the invention may contain certain errors necessarily resulting from the standard deviation found in their respective testing measurements.
13. As used in the description herein and throughout the claims that follow, the meaning of “a,” “an,” and “the” includes plural reference unless the context clearly dictates otherwise. Also, as used in the description herein, the meaning of “in” includes “in” and “on” unless the context clearly dictates otherwise.
14. The recitation of ranges of values herein is merely intended to serve as a shorthand method of referring individually to each separate value falling within the range. Unless otherwise indicated herein, each individual value is incorporated into the specification as if it were individually recited herein. All methods described herein can be performed in any suitable order unless otherwise indicated herein or otherwise clearly contradicted by context. The use of any and all examples, or exemplary language (e.g. “such as”) provided with respect to certain embodiments herein is intended merely to better illuminate the invention and does not pose a limitation on the scope of the invention otherwise claimed. No language in the specification should be construed as indicating any non-claimed element essential to the practice of the invention.
15. Groupings of alternative elements or embodiments of the invention disclosed herein are not to be construed as limitations. Each group member can be referred to and claimed individually or in any combination with other members of the group or other elements found herein. One or more members of a group can be included in, or deleted from, a group for reasons of convenience and/or patentability.

**Summary Of The Invention**

1. The present disclosure relates to the field of inventory management. More particularly, the present disclosure aims to describe a singular system for mapping sources and destinations of manufacturing, storing and logistics.
2. Aspects of the present disclosure relate to methods and systems for automation and/or an artificial intelligence and/or software for emulating a virtual world in future time which can integrate and achieve blueprints, thereby create goods at more reasonable cost there by streamlining and improving the process involved in manufacturing goods. Further, the aspects of the present disclosure relates to a singular system for mapping sources and destinations of manufacturing, storing and logistics.
3. An aspect of the present disclosure relates to a singular computer system self-capable of mapping sources and destination in an automated supply chain ecosystem includes computable blueprints, rim material, rim products, piping mechanism called v-tubes process and source and destination mapping. The aspect of the present disclosure can reduce the number of intermediates in the system and improve efficiency by pre-planning the products to be manufactured. Such singular computer system can enable to create virtual blueprints and virtual pipeline (v-tubes) of rim orders to be executed. Rim material can be created unequivocally and can be replicated in other blueprints which can be re-modified from time to time till it reaches immutable state for manufacturing, logistics and storing.
4. An aspect of the present disclosure relates to a system for inventory management. The system includes an order creation module, a timeline estimation module, a source selection module, and a delivery module. The order creation module can create at least one virtual order based on one or more user requirements associated with the ordering of at least one product. The timeline estimation module can estimate a timeline for manufacturing of a real product based on the virtual order. The source selection module can select one or more sources for manufacturing of the real product based on the virtual order. The delivery module can deliver, upon manufacturing, the real product to the user.
5. In an aspect, the system can further include a receiving module, a blue print creation module, and a replication module. The receiving module can receive the user requirements associated with the ordering of product from a user. The blue print creation module can create a virtual blueprint of the user requirements and the order creation module can create at least one virtual order based on the virtual blueprint. The replication module can replicate the virtual blueprint of the user requirements if matching with new user requirements.
6. In an aspect, the system can further include a virtual product generation module that can generate at least one unique virtual product based on the user requirements received from the user.
7. In an aspect, the system can further include a classification module that can display a query completion template to the user for a category of information associated with the order, wherein the query completion template including an interactive field that is user editable; identify user interaction with the interactive field; and generate at least one unique virtual product based on the user interaction identified with the interactive field.
8. In an aspect, the virtual order created is stored in a queue for estimating the timeline for manufacturing of the real product and/or based on the current cost of materials required for manufacturing of the real product.
9. In an aspect, the system can further include a material estimation module adapted to estimate, based on the virtual order, the material required for the manufacturing of the real product.
10. In an aspect, the system can further include a void analysis module that can analyze the historical data associated with the real products delivered to the users; display a new user with options to select a product satisfying the new user requires from the historical data; and/or collect the vacancy or capacity of a queue adapted to store the virtual order.
11. In an aspect, the virtual order can be created by scanning presence of one or more ores or one or more material or one or more products that exist on the earth at any space time that may be required for the manufacturing of the real product.
12. In an aspect, the virtual order is created by scanning presence of one or more ores or one or more material or one or more products that exist on the earth at any space time that may be required for the manufacturing of the real product.
13. In an aspect, the order creation module can further fragment the virtual order into one or more sub-orders, the source selection module can further select the sources for manufacturing the real product based on the sub-orders and the acceptance of the sources for manufacturing the real product, and the delivery module can receive one or more manufactured sub-orders, aggregate the manufactured sub-orders to form the real product, and deliver the real product to the user.
14. An aspect of the present disclosure relates to a method for inventory management. The method can include the steps of creating at least one virtual order based on one or more user requirements associated with the ordering of at least one product, estimating a timeline for manufacturing of a real product based on the virtual order, selecting one or more sources for manufacturing the real product based on the virtual order, and delivering, upon manufacturing, the real product to the user.
15. In an aspect, the method can further include the steps of receiving the user requirements associated with the ordering of product from a user, generating at least one unique virtual product based on the user requirements received from the user; creating a virtual blueprint of the user requirements, and thereby creating at least one virtual order based on the virtual blueprint, replicating the virtual blueprint of the user requirements if matching with new user requirements, estimating, based on the virtual order, the material required for the manufacturing of the real product, and analyzing the historical data associated with the real products delivered to the users and displaying a new user with options to select a product satisfying the new user requires from the historical data.
16. In an aspect, the step of selecting the sources for manufacturing can automatically select the sources for manufacturing the real product based on the virtual order.
17. An aspect of the present disclosure relates to a system and a method to create a rim product (a product with unique ID) and voids (opportunities) in the system to enable pricing or trading of such product in system which would help in pre plan and pre program needs of that product.
18. cleardotAn aspect of the present disclosure relates to an automated supply chain management method, wherein the method can receive a request form a user demanding products. The method, upon receipt of the request, can automatically create a set of orders based on the request. The method can select one or more suppliers / manufacturers / traders from a set of suppliers / manufacturers / traders pre-stored or pre-configured. Upon the selection of the one or more suppliers / manufacturers / traders the method can communicate the set of orders to the one or more suppliers / manufacturers / traders selected. The method can enable the one or more suppliers / manufacturers / traders selected to decide if they can accept the order or not. The method provides a buffer time to accept order, reject order or to divert the order to other one or more suppliers / manufacturers / traders. If the suppliers / manufacturers / traders cancel’s the order before buffer time or after buffer time then depending on the reason the order buffer quantity will be increased to that suppliers / manufacturers / traders. Buffer quantity is the percentage of the order giving to that source and the user’s priority. If no one cancel’s the order then the order will be manufactured and shipped to the destiny by logistics.
19. In an aspect, the method utilizes a pre-stored / pre-configured source destination algorithm to select the right suppliers / manufacturers / traders for the order based on different factors.
20. In an aspect, the suppliers / manufacturers / traders can pre-book the orders and pre-booked suppliers / manufacturers / traders will get the order first. If no suppliers / manufacturers / traders are pre-booked then the source destination algorithm automatically choose the best suppliers / manufacturers / traders by some factors.
21. In an aspect, if the user cancel’s the order before buffer time then there exist some cancellation policies. If the user cancel’s the order after the buffer time then the cancellation policies for the user and the manufactured product for that destination will be pointed to other user based on the requirement.
22. In an aspect, the present disclosure relates to an automated supply chain management system. The system includes an interface, a receiving module, a creating module, a selecting module, a communication module, an accepting or re-directing module, and a sending module. In an aspect, the interface allows the user to place a request demanding the requirements. The receiving module can receives the request form a user demanding products. The creating module, upon receipt of the request, can automatically create a set of orders based on the request. The selecting module can select one or more suppliers / manufacturers / traders from a set of suppliers / manufacturers / traders pre-stored or pre-configured. Upon the selection of the one or more suppliers / manufacturers / traders the communication module can communicate the set of orders to the one or more suppliers / manufacturers / traders selected. The accepting or re-directing module can enable the one or more suppliers / manufacturers / traders selected to decide if they can accept the order or not. The system provides a buffer time to accept order, reject order or to divert the order to other one or more suppliers / manufacturers / traders. If the suppliers / manufacturers / traders cancelled the order before buffer time or after buffer time then depends on the reason the order buffer quantity will be increased to that suppliers / manufacturers / traders. Buffer quantity is the percentage of the order giving to that source and the user’s priority. If no one cancelled the order then the order will be manufactured and the sending module can ship to the destiny by logistics.
23. In an aspect, an integrated software or electronic system is provided which encapsulates source of a product, destination of a product, projects and internal business process (product design, product value determination, product life cycle, product order, cash back mechanism, trade, resale, insurance etc.) for pre-manufactured goods and services. Effect of such system can drastically improve pre-planning and pre-implementation which also gives a platform to blueprint the projects which would come to real world in future. Goods have various intangible and monetary values during its life cycle in the system. By utilizing the system and method of the present disclosure the demand and supply in the system or the real world can be accurately matched. Eventually the system and method generates artificially intelligence for super mass manufacturing.
24. Various objects, features, aspects and advantages of the present disclosure will become more apparent from the following detailed description of preferred embodiments, along with the accompanying drawing figures in which like numerals represent like features.

**Brief Description of Drawings**

1. The accompanying drawings are included to provide a further understanding of the present disclosure, and are incorporated in and constitute a part of this specification. The drawings illustrate exemplary embodiments of the present disclosure and, together with the description, serve to explain the principles of the present disclosure. The diagrams are for illustration only, which thus is not a limitation of the present disclosure, and wherein:
2. FIG. 1 illustrates an example for construction of bridge by using an automated supply chain management system in accordance in accordance with an example implementation.
3. FIG. 2 illustrates an exemplary design of an automated supply chain management system in accordance with an example implementation.
4. FIG. 3 illustrates an exemplary flow diagram for virtualgodown in accordance with an example implementation.
5. FIG. 4 illustrates an exemplary source destination algorithm to select best suppliers / manufacturers / traders in accordance with an example implementation.
6. FIG. 5 illustrates an exemplary v-tube (pipelining) process for an automated supply chain management system in accordance with an example implementation.
7. FIG. 6 illustrates an exemplary real simulator (RIM) cycle in accordance with an example implementation.
8. FIG. 7 illustrates an exemplary layered limited intelligent system with open option in accordance with an example implementation.
9. FIG. 8 illustrates an exemplary mechanism for the formation of RIM product in accordance with an example implementation.
10. FIG. 9 illustrates an exemplary RIM product cycle use case in accordance with an example implementation.
11. FIG. 10 illustrates an exemplary RIM product clipart in accordance with an example implementation.
12. FIG. 11 illustrates an exemplary flow diagram for g an automated supply chain management system in accordance with an example implementation
13. FIG. 12 illustrates an example computer system on which example embodiments may be implemented.
14. FIG. 13 illustrates an example scanning of the ore or material or product exists in the earth in accordance with an example implementation.
15. FIG. 14 illustrates an example V-tube process in accordance with an example implementation.
16. FIG. 15 illustrates an example virtualgodown process in accordance with an example implementation.
17. FIG. 16 illustrates an example s rim product summary in accordance with an example implementation.
18. FIG. 17 illustrates an example rim packages in accordance with an example implementation.
19. FIG. 18 illustrates an example rim trading in accordance with an example implementation.
20. FIG. 19 illustrates an example Rim-logistics in accordance with an example implementation.

**Detailed Description**

1. In the following description, numerous specific details are set forth in order to provide a thorough understanding of embodiments of the present invention. It will be apparent to one skilled in the art that embodiments of the present invention may be practiced without some of these specific details.
2. Embodiments of the present invention include various steps, which will be described below. The steps may be performed by hardware components or may be embodied in machine-executable instructions, which may be used to cause a general-purpose or special-purpose processor programmed with the instructions to perform the steps. Alternatively, steps may be performed by a combination of hardware, software, and firmware and/or by human operators.
3. Embodiments of the present invention may be provided as a computer program product, which may include a machine-readable storage medium tangibly embodying thereon instructions, which may be used to program a computer (or other electronic devices) to perform a process. The machine-readable medium may include, but is not limited to, fixed (hard) drives, magnetic tape, floppy diskettes, optical disks, compact disc read-only memories (CD-ROMs), and magneto-optical disks, semiconductor memories, such as ROMs, PROMs, random access memories (RAMs), programmable read-only memories (PROMs), erasable PROMs (EPROMs), electrically erasable PROMs (EEPROMs), flash memory, magnetic or optical cards, or other type of media/machine-readable medium suitable for storing electronic instructions (e.g., computer programming code, such as software or firmware).
4. Various methods described herein may be practiced by combining one or more machine-readable storage media containing the code according to the present invention with appropriate standard computer hardware to execute the code contained therein. An apparatus for practicing various embodiments of the present invention may involve one or more computers (or one or more processors within a single computer) and storage systems containing or having network access to computer program(s) coded in accordance with various methods described herein, and the method steps of the invention could be accomplished by modules, routines, subroutines, or subparts of a computer program product.
5. If the specification states a component or feature “may”, “can”, “could”, or “might” be included or have a characteristic, that particular component or feature is not required to be included or have the characteristic.
6. As used in the description herein and throughout the claims that follow, the meaning of “a,” “an,” and “the” includes plural reference unless the context clearly dictates otherwise. Also, as used in the description herein, the meaning of “in” includes “in” and “on” unless the context clearly dictates otherwise.
7. Exemplary embodiments will now be described more fully hereinafter with reference to the accompanying drawings, in which exemplary embodiments are shown. These exemplary embodiments are provided only for illustrative purposes and so that this disclosure will be thorough and complete and will fully convey the scope of the invention to those of ordinary skill in the art. The invention disclosed may, however, be embodied in many different forms and should not be construed as limited to the embodiments set forth herein. Various modifications will be readily apparent to persons skilled in the art. The general principles defined herein may be applied to other embodiments and applications without departing from the spirit and scope of the invention. Moreover, all statements herein reciting embodiments of the invention, as well as specific examples thereof, are intended to encompass both structural and functional equivalents thereof. Additionally, it is intended that such equivalents include both currently known equivalents as well as equivalents developed in the future (i.e., any elements developed that perform the same function, regardless of structure). Also, the terminology and phraseology used is for the purpose of describing exemplary embodiments and should not be considered limiting. Thus, the present invention is to be accorded the widest scope encompassing numerous alternatives, modifications and equivalents consistent with the principles and features disclosed. For purpose of clarity, details relating to technical material that is known in the technical fields related to the invention have not been described in detail so as not to unnecessarily obscure the present invention.
8. Thus, for example, it will be appreciated by those of ordinary skill in the art that the diagrams, schematics, illustrations, and the like represent conceptual views or processes illustrating systems and methods embodying this invention. The functions of the various elements shown in the figures may be provided through the use of dedicated hardware as well as hardware capable of executing associated software. Similarly, any switches shown in the figures are conceptual only. Their function may be carried out through the operation of program logic, through dedicated logic, through the interaction of program control and dedicated logic, or even manually, the particular technique being selectable by the entity implementing this invention. Those of ordinary skill in the art further understand that the exemplary hardware, software, processes, methods, and/or operating systems described herein are for illustrative purposes and, thus, are not intended to be limited to any particular named element.
9. Each of the appended claims defines a separate invention, which for infringement purposes is recognized as including equivalents to the various elements or limitations specified in the claims. Depending on the context, all references below to the "invention" may in some cases refer to certain specific embodiments only. In other cases it will be recognized that references to the "invention" will refer to subject matter recited in one or more, but not necessarily all, of the claims.
10. All methods described herein can be performed in any suitable order unless otherwise indicated herein or otherwise clearly contradicted by context. The use of any and all examples, or exemplary language (e.g., “such as”) provided with respect to certain embodiments herein is intended merely to better illuminate the invention and does not pose a limitation on the scope of the invention otherwise claimed. No language in the specification should be construed as indicating any non-claimed element essential to the practice of the invention.
11. Various terms as used herein are shown below. To the extent a term used in a claim is not defined below, it should be given the broadest definition persons in the pertinent art have given that term as reflected in printed publications and issued patents at the time of filing. However, some repeatedly used terms in the specification are provide below along with their definitions:
12. Sources- Possibly a manufacturer or miner or where material is available.
13. Destination- Space-time where product or material is consumed or presumed to be consumed, for example, the user who orders the product.
14. Intermediate - Space-time where product or material need not be stocked or manufactured, for example, V-tube process.
15. Rim material - Material or product outcome of rimulation which has a set of specification that can be utilized to create rim products.
16. Rimulation - A system or method to create rim material and voids in the system to enable pricing or trading of such product in system which would help in pre plan and pre program with an intent to make it available in the real world.
17. Rim product - It is nothing but a rim material which has space time and price.
18. V-tubes - Timeline to depict the rim material or rim product to come into existence.
19. Rim lifecycle - rim product has a course of changes happening in queuing algorithm from generation of rim order id to archival.
20. Rim Archival – Once the material is marked as consumed at its destination, the same is archived with its history.
21. The present disclosure relates to the field of location based reminders. More particularly, the present disclosure aims to describe methods and systems for configuring location based reminders, which enable a user to add a location based reminder for any object, service, activity, or place.
22. Demand chain management (DCM) is the management of relationships between suppliers and customers to deliver the best value to the customer at the least cost to the demand chain as a whole. Demand chain management is similar to supply chain management but with special regard to the customers. Demand chain management software tools bridge the gap between the customer relationship management and the supply chain management. The organization’s supply chain processes are managed to deliver best value according to the demand of the customers. DCM creates strategic assets for the firm in terms of the overall value creation as it enables the firm to implement and integrate marketing and supply chain management (SCM) strategies that improve its overall performance.
23. The present disclosure relates to the field of inventory management. More particularly, the present disclosure aims to describe a singular system for mapping sources and destinations of manufacturing, storing and logistics.
24. Aspects of the present disclosure relate to methods and systems for automation and/or an artificial intelligence and/or software for emulating a virtual world in future time which can integrate and achieve blueprints, thereby create goods at more reasonable cost there by streamlining and improving the process involved in manufacturing goods. Further, the aspects of the present disclosure relates to a singular system for mapping sources and destinations of manufacturing, storing and logistics.
25. An aspect of the present disclosure relates to a singular computer system self-capable of mapping sources and destination in an automated supply chain ecosystem includes computable blueprints, rim material, rim products, piping mechanism called v-tubes process and source and destination mapping. The aspect of the present disclosure can reduce the number of intermediates in the system and improve efficiency by pre-planning the products to be manufactured. Such singular computer system can enable to create virtual blueprints and virtual pipeline (v-tubes) of rim orders to be executed. Rim material can be created unequivocally and can be replicated in other blueprints which can be re-modified from time to time till it reaches immutable state for manufacturing, logistics and storing.
26. An aspect of the present disclosure relates to a system for inventory management. The system includes an order creation module, a timeline estimation module, a source selection module, and a delivery module. The order creation module can create at least one virtual order based on one or more user requirements associated with the ordering of at least one product. The timeline estimation module can estimate a timeline for manufacturing of a real product based on the virtual order. The source selection module can select one or more sources for manufacturing of the real product based on the virtual order. The delivery module can deliver, upon manufacturing, the real product to the user.
27. In an aspect, the system can further include a receiving module, a blue print creation module, and a replication module. The receiving module can receive the user requirements associated with the ordering of product from a user. The blue print creation module can create a virtual blueprint of the user requirements and the order creation module can create at least one virtual order based on the virtual blueprint. The replication module can replicate the virtual blueprint of the user requirements if matching with new user requirements.
28. In an aspect, the system can further include a virtual product generation module that can generate at least one unique virtual product based on the user requirements received from the user.
29. In an aspect, the system can further include a classification module that can display a query completion template to the user for a category of information associated with the order, wherein the query completion template including an interactive field that is user editable; identify user interaction with the interactive field; and generate at least one unique virtual product based on the user interaction identified with the interactive field.
30. In an aspect, the virtual order created is stored in a queue for estimating the timeline for manufacturing of the real product and/or based on the current cost of materials required for manufacturing of the real product.
31. In an aspect, the system can further include a material estimation module adapted to estimate, based on the virtual order, the material required for the manufacturing of the real product.
32. In an aspect, the system can further include a void analysis module that can analyze the historical data associated with the real products delivered to the users; display a new user with options to select a product satisfying the new user requires from the historical data; and/or collect the vacancy or capacity of a queue adapted to store the virtual order.
33. In an aspect, the virtual order can be created by scanning presence of one or more ores or one or more material or one or more products that exist on the earth at any space time that may be required for the manufacturing of the real product.
34. In an aspect, the virtual order is created by scanning presence of one or more ores or one or more material or one or more products that exist on the earth at any space time that may be required for the manufacturing of the real product.
35. In an aspect, the order creation module can further fragment the virtual order into one or more sub-orders, the source selection module can further select the sources for manufacturing the real product based on the sub-orders and the acceptance of the sources for manufacturing the real product, and the delivery module can receive one or more manufactured sub-orders, aggregate the manufactured sub-orders to form the real product, and deliver the real product to the user.
36. An aspect of the present disclosure relates to a method for inventory management. The method can include the steps of creating at least one virtual order based on one or more user requirements associated with the ordering of at least one product, estimating a timeline for manufacturing of a real product based on the virtual order, selecting one or more sources for manufacturing the real product based on the virtual order, and delivering, upon manufacturing, the real product to the user.
37. In an aspect, the method can further include the steps of receiving the user requirements associated with the ordering of product from a user, generating at least one unique virtual product based on the user requirements received from the user; creating a virtual blueprint of the user requirements, and thereby creating at least one virtual order based on the virtual blueprint, replicating the virtual blueprint of the user requirements if matching with new user requirements, estimating, based on the virtual order, the material required for the manufacturing of the real product, and analyzing the historical data associated with the real products delivered to the users and displaying a new user with options to select a product satisfying the new user requires from the historical data.
38. In an aspect, the step of selecting the sources for manufacturing can automatically select the sources for manufacturing the real product based on the virtual order.
39. An aspect of the present disclosure relates to a system and a method to create a rim product (a product with unique ID) and voids (opportunities) in the system to enable pricing or trading of such product in system which would help in pre plan and pre program needs of that product.
40. cleardotAn aspect of the present disclosure relates to an automated supply chain management method, wherein the method can receive a request form a user demanding products. The method, upon receipt of the request, can automatically create a set of orders based on the request. The method can select one or more suppliers / manufacturers / traders from a set of suppliers / manufacturers / traders pre-stored or pre-configured. Upon the selection of the one or more suppliers / manufacturers / traders the method can communicate the set of orders to the one or more suppliers / manufacturers / traders selected. The method can enable the one or more suppliers / manufacturers / traders selected to decide if they can accept the order or not. The method provides a buffer time to accept order, reject order or to divert the order to other one or more suppliers / manufacturers / traders. If the suppliers / manufacturers / traders cancel’s the order before buffer time or after buffer time then depending on the reason the order buffer quantity will be increased to that suppliers / manufacturers / traders. Buffer quantity is the percentage of the order giving to that source and the user’s priority. If no one cancel’s the order then the order will be manufactured and shipped to the destiny by logistics.
41. In an aspect, the method utilizes a pre-stored / pre-configured source destination algorithm to select the right suppliers / manufacturers / traders for the order based on different factors.
42. In an aspect, the suppliers / manufacturers / traders can pre-book the orders and pre-booked suppliers / manufacturers / traders will get the order first. If no suppliers / manufacturers / traders are pre-booked then the source destination algorithm automatically choose the best suppliers / manufacturers / traders by some factors.
43. In an aspect, if the user cancel’s the order before buffer time then there exist some cancellation policies. If the user cancel’s the order after the buffer time then the cancellation policies for the user and the manufactured product for that destination will be pointed to other user based on the requirement.
44. In an aspect, the present disclosure relates to an automated supply chain management system. The system includes an interface, a receiving module, a creating module, a selecting module, a communication module, an accepting or re-directing module, and a sending module. In an aspect, the interface allows the user to place a request demanding the requirements. The receiving module can receives the request form a user demanding products. The creating module, upon receipt of the request, can automatically create a set of orders based on the request. The selecting module can select one or more suppliers / manufacturers / traders from a set of suppliers / manufacturers / traders pre-stored or pre-configured. Upon the selection of the one or more suppliers / manufacturers / traders the communication module can communicate the set of orders to the one or more suppliers / manufacturers / traders selected. The accepting or re-directing module can enable the one or more suppliers / manufacturers / traders selected to decide if they can accept the order or not. The system provides a buffer time to accept order, reject order or to divert the order to other one or more suppliers / manufacturers / traders. If the suppliers / manufacturers / traders cancelled the order before buffer time or after buffer time then depends on the reason the order buffer quantity will be increased to that suppliers / manufacturers / traders. Buffer quantity is the percentage of the order giving to that source and the user’s priority. If no one cancelled the order then the order will be manufactured and the sending module can ship to the destiny by logistics.
45. In an aspect, an integrated software or electronic system is provided which encapsulates source of a product, destination of a product, projects and internal business process (product design, product value determination, product life cycle, product order, cash back mechanism, trade, resale, insurance etc.) for pre-manufactured goods and services. Effect of such system can drastically improve pre-planning and pre-implementation which also gives a platform to blueprint the projects which would come to real world in future. Goods have various intangible and monetary values during its life cycle in the system. By utilizing the system and method of the present disclosure the demand and supply in the system or the real world can be accurately matched. Eventually the system and method generates artificially intelligence for super mass manufacturing.
46. FIG. 1 illustrates an example for construction of bridge by using an automated supply chain management system in accordance in accordance with an example implementation. FIG. 1 shows an example describing the construction of bridge using an automated supply chain management system. In an example implementation, as shown in FIG. 1 100, the user 102 provides details of the materials needed, quantity and time, on the interface 204 provided on a device, based on which a blueprint 106 is created. The blueprint 106 can include the materials needed, quantity and time in a specified template or format. When it uploaded to a server 108 that may be residing in cloud 110, or at remote location, or the automated supply chain management system, it will create set of orders 112. The automated supply chain management system will automatically choose the best source ‘Manufacturer’ 114 and send them the requests. The sources 114 who first accept the request will get the order. The sources will get the necessary materials from ores 118. Then they will send the products to the destination 120 through logistics.
47. In a non-limiting embodiment, as shown in FIG. 1 a user 102 makes a request demanding products on the interface 104 provided on a device. The user can provide details of the materials needed, quantity and time at the time of making request based on which a blueprint 106 is created by the device. The blueprint 106 can be stored in the database 208 that may be present on cloud or remotely located 110. The blueprints 106 are then converted into a set of orders 112.
48. The automated supply chain management system can automatically choose the best source ‘manufacturer’ 114 and send them the set of orders 112. The sources 114 who first accept the request will get the order. The sources will get the necessary materials from ores 118. Each of the manufacturers 114 can be further connected to one or more sources 216 for providing the basic required materials for satisfying the user demands. For example, the manufacturers 114 can be connected to sources S11, S12….. S1N (hereafter referred to as S) 116, similarly, the other suppliers / manufacturers / traders can also be connected to the various other sources. Then the manufacturers 114 can send the products 120 as per the requirement to the destination through logistics.
49. FIG. 2 illustrates an exemplary design of a virtualgodown in accordance with an example implementation. In a non-limiting embodiment, the exemplary design of an automated supply chain management system includes a blueprint process, v-tube (pipelining) process, unique product creation process, and virtualgodown process and blue print lookup repository.
50. In a non-limiting embodiment, the blueprint process provides an interface to the user to submit their query in terms of materials needed, quantity and time. Based on the query received from the user, the blueprint process creates a set of orders.
51. In a non-limiting embodiment, the set of orders created by the blueprint process are fed to the v-tube (pipelining) process. The pipelining process involves buffering/queuing of the set of orders based on a set of parameters. The parameters can be cost of the order, time require or the delivery of the order, and the like.
52. When the order is selected for processing, the v-tube (pipelining) process utilizes the source destination algorithm to select the right source (suppliers / manufacturers / traders cancelled) for the destination based on different factors. The source can pre-book the orders and pre-booked sources will get the order first. If no sources pre-booked then our algorithm automatically choose the best source by some factors. The source can transfer or buy or sell the orders to other sources. There will be a buffer time for orders. If the Source cancelled the order before buffer time or after buffer time then depends on the reason the order buffer quantity will be increased to that source /on further if it happens source will be black listed. Buffer quantity is the percentage of the order giving to that source and the user’s priority. If the destination cancelled the order before buffer time then there exist some cancellation policies. If the destination cancelled the order after the buffer time then the cancellation policies for destination and the manufactured product for that destination will be pointed to other destination. If no one cancelled the order then the order will be manufactured and shipped to the destiny by logistics in virtualgodown process, where the user receives the delivery of the order.
53. In a non-limiting embodiment, the set of order while processing can also be utilized by capacity database for storage purposes thereby utilized for collecting the vacancy / capacity of the order. Such set of orders based on their unique characteristic may also be utilized by the unique product creation process when the user submits his query to the system for creating a new unique product in the database.
54. In a non-limiting embodiment, the blue print lookup repository can be used to track/record overall process of the demand supply chain form the receipt of the order to the delivery of the order.
55. FIG. 3 illustrates an exemplary flow diagram for the virtualgodown in accordance with an example implementation. As shown in FIG. 3, the user provides details of the materials needed, quantity and time based on which a blueprint is created. When it uploaded to the automated supply chain management system it will create set of orders 504 which may be stored in the buffer/ pipelining for processing. The automated supply chain management system will automatically choose the best source ‘Manufacturer’ 508 and send them the requests. The sources who first accept the request will get the order 510. The sources will get the necessary materials from ores. Then they will send the products to the destination through logistics upon processing.
56. FIG. 4 illustrates an exemplary source destination algorithm to select best suppliers / manufacturers / traders in accordance with an example implementation. The source destination algorithm is used to select the right source (suppliers / manufacturers / traders cancelled) for the destination based on different factors. The source can pre-book the orders and pre-booked sources will get the order first. If no sources pre-booked then our algorithm automatically choose the best source by some factors. The source can transfer or buy or sell the orders to other sources. There will be a buffer time for orders. If the Source cancelled the order before buffer time or after buffer time then depends on the reason the order buffer quantity will be increased to that source /on further if it happens source will be black listed. Buffer quantity is the percentage of the order giving to that source and the user’s priority. If the Destination cancelled the order before buffer time then there exist some cancellation policies. If the destination cancelled the order after the buffer time then the cancellation policies for destination and the manufactured product for that destination will be pointed to other destination. If no one cancelled the order then the order will be manufactured and shipped to the destiny by logistics.
57. As shown in the FIG. 4, the process takes place in v-tube / pipelining of the set of orders. The algorithm checks if the set of orders are pre-booked. If such order is not pre-booked the source destination algorithm is used to select the right source (suppliers / manufacturers / traders cancelled) for the destination based on different factors. The source who accepts the order first will get the order. If such order is pre-booked the orders are sending to the booked manufacturer for processing. The source can transfer or buy or sell the orders to other sources.
58. According to the present disclosure, a buffer time is provided to accept orders, reject orders or to divert the order to other one or more suppliers / manufacturers / traders, which enables the one or more suppliers / manufacturers / traders selected to decide if they can accept the order or not. If the suppliers / manufacturers / traders cancelled the order before buffer time or after buffer times then depends on the reason the order buffer quantity will be increased to that suppliers / manufacturers / traders. If no one cancelled the order then the order will be manufactured and shipped to the destiny by logistics. The overall processing of the order is recorded and stored in the archived.
59. FIG. 5 illustrates an exemplary v-tube (pipelining) process for an automated supply chain management system in accordance with an example implementation. In a non-limiting embodiment, upon receiving the order for the user, the v-tube (pipelining) process involves buffering/queuing of the set of orders based on a set of parameters. The parameters can be cost of the order, time require or the delivery of the order, and the like.
60. In an example implementation, the pipelining process may utilize a pre-stored / inbuilt algorithm to make orders based on the requirements submitted by the user. The algorithm may consider various parameters / factors while making the orders. In an example, the parameters / factors may include but are not limited to available order for the product already in queue, available supply for the same product in at the current time, available capacity for manufacturing that specific product, size of the order based on the source, capacity etc. Base on such parameters/factors, the order is confirmed.
61. In an example implementation once such order is confirmed, the order is fed to the source destination algorithm to select best suppliers / manufacturers / traders. The source destination algorithm is used to select the right source (suppliers / manufacturers / traders cancelled) for the destination based on different factors. The source can pre-book the orders and pre-booked sources will get the order first. If no sources pre-booked then our algorithm automatically choose the best source by some factors. The source can transfer or buy or sell the orders to other sources. There will be a buffer time for orders. If the Source cancelled the order before buffer time or after buffer time then depends on the reason the order buffer quantity will be increased to that source /on further if it happens source will be black listed. Buffer quantity is the percentage of the order giving to that source and the user’s priority. If the destination cancelled the order before buffer time then there exist some cancellation policies. If the destination cancelled the order after the buffer time then the cancellation policies for destination and the manufactured product for that destination will be pointed to other destination. If no one cancelled the order then the order will be manufactured and shipped to the destiny by logistics.
62. FIG. 6 illustrates an exemplary real simulator (RIM) cycle in accordance with an example implementation. The FIG. 6 shows an overall life cycle of the order in the automated supply chain management system. The blueprints created based on the requirements received from the user are added to the system for analysis (as discussed above). The blueprints received are provided with the unique id based on the receipt of the payments. The orders with the unique id are placed in the v-tube / pipeline (as discussed above). The payment is confirmed the suppliers / manufacturers / traders for processing the orders. Upon confirmation of the payments, the order is proceed using the source destination algorithm (as discussed above).
63. In an implementation, upon delivery of the order to the destination, the product is manufactured and delivered to the user. The overall processing of the order is tracked along with the timelines and then archived in the database for future references.
64. FIG. 7 illustrates an exemplary layered limited intelligent system with open option in accordance with an example implementation. As shown in FIG. 7, when any user interacts with the system of present disclosure, the user based on his input is queried with different set of questions based on machine learning. For example, when any user inputs the requirement as brick, the system queries the user if he/she is looking for brick made of cement or brick made on sand. Based on such querying and receiving response from the user a new product requirement is received from the user. Such new product requirement is considered as a RIM product according to the present disclosure and is always marked with a unique ID.
65. In a non-limiting embodiment, as shown in figure 7, when user enters his requirement to the system, the system may automatically provide various options to the user which are matching with the user requirements. Such options can be provided in the form of questions or in the form of blocks of different colors. For example, as shown in figure 7, the blocks 702, 704, 706, 708 and 710 shows different options or blocks showing different options. In case if the user needs to see more options the user may see the same by clicking the open option 710. When user selects a particular option/ block, say for example, 702 or 704 or 706 or 708, the user is further provided with the associated questions or blocks as shown in dotted box.
66. In a non-limiting embodiment, based on the inputs received from the users, a Vg factor for the user requirement or for the RIM product may be derived. The Vg factor may be provided along with the specification of the product as per the requirements of the user.
67. FIG. 8 illustrates an exemplary mechanism for the formation of RIM product in accordance with an example implementation. As shown in FIG. 8, the Vg factor derived, the specification derived from the user requirements, as discussed in details of FIG. 7, along with the factors/constraints defined by the user while inputting the query (if any) are fed to the RIM product preparation. The system according to the present disclosure can have a set of functions (F1, F2, F3,.. Fn) configured to receive fed information and thereby create a RIM product. For example, there can be dedicated functions for the dedicated block as discussed in the FIG. 7. So utilizing the functions of the block 702, 704, 706, 708 and 710 the system may generate different products requirements of the user.
68. FIG. 9 illustrates an exemplary RIM product cycle use case in accordance with an example implementation. As shown in FIG. 9, the system according to the present disclosure includes a RIM material database. The RIM material database can include the data associated with the all the materials that may be existing or available on the earth core. The database can store the data associated with the all the materials (ores) irrespective of the source, price, locating and the like data. When the user has certain requirements, the user utilizes the system and checks if the required product / material is available in the database on not. For example, when the user is looking for NaCl, the user may look into the database for the presence of NaCl. If such product/material is available in the database, the user may utilize the same depending on his requirement. In case if the product/material is not present in the database as per the requirement of the user, the system can create a new RIM product based on the requirement and/or constraints of the user associated with the product.
69. For example, if the database has Na material and Cl material stored in it, however, the user requires NaCl which is not available in the database. In such cases, the system forms a new RIM product along with a unique RIM ID and stores it in the database. The database is thereby upgraded / updated based on the new product formed. While the creation of such product and/or ID, the system may take into consideration the constraints of the user into account. The constraint in this case may be the quantity, source, locality etc.
70. In a non-limiting embodiment, the system may provide the stored information to various users across the globe when they use the system. If the user finds the product / material in the database that matches there requirement, the user my select the same and places the order. If the user does not find the matching product according to his constraints, the system forms a new RIM product again and updates the database. By this feature of the system, the product and the associated information may be present in the database before manufacturing itself and is accessible to the users across the globe.
71. In a non-limiting embodiment, the system may also analyze any voids in the product formations and deliveries. For example, the system may analyze the similar products/materials along with their variance in the cost, locality, and compositions. This will help the users to select the desired product/material in economical way from any location of the globe.
72. FIG. 10 illustrates an exemplary RIM product clipart in accordance with an example implementation. As shown in FIG. 10, the database on the system includes the materials from ore A and ore B, the three different users accessing the system requires a product made of same ores but in different permutation and combinations. Thus, as shown in FIG. 10, the system receives inputs (requirements, constraints and functions) from all the users and forms three different new products out of them. The tree new products are stored in the database for future references and also accessible for the new user if any of the requirements matches the stored data. The system also provides a void analysis data wherein the user may be provide with multiple options to select the most affordable and/or efficient product/material for satisfying his requirements.
73. FIG. 11 illustrates an exemplary flow diagram for an automated supply chain management system in accordance with an example implementation. This example process is merely illustrative, and therefore other processes may be substituted as would be understood by those skilled in the art. Further, this process may be modified, by adding, deleting or modifying operations, without departing from the scope of the inventive concept.
74. At step 1102, a request is received form a user demanding products
75. At step 1104, a set of orders is created based on the request received from the user.
76. At step 1106, one or more suppliers / manufacturers / traders are selected from a set of suppliers / manufacturers / traders pre-stored or pre-configured. In an example implementation, a pre-stored / pre-configured source destination algorithm can be utilized to select the right suppliers / manufacturers / traders for the order based on different factors.
77. At step 1108, the set of orders are communicated to the one or more suppliers / manufacturers / traders selected. In an example implementation, the suppliers / manufacturers / traders can pre-book the orders and pre-booked suppliers / manufacturers / traders will get the order first. If no suppliers / manufacturers / traders are pre-booked then the source destination algorithm automatically choose the best suppliers / manufacturers / traders by some factors.
78. At step 1110, the one or more suppliers / manufacturers / traders provide their acceptance or rejection or divert the order to other sources. In an example implementation, the buffer time is provided to accept order, reject order or to divert the order to other one or more suppliers / manufacturers / traders. If the suppliers / manufacturers / traders cancel’s the order before buffer time or after buffer time then depending on the reason the order buffer quantity will be increased to that suppliers / manufacturers / traders. Buffer quantity is the percentage of the order giving to that source and the user’s priority.
79. At step 1112, upon acceptance the order is processed and the requirements associated with the order are fulfilled. In an example implementation, if no one cancel’s the order then the order will be manufactured and shipped to the destiny by logistics. In an example implementation, if the user cancel’s the order before buffer time then there exist some cancellation policies. If the user cancel’s the order after the buffer time then the cancellation policies for the user and the manufactured product for that destination will be pointed to other user based on the requirement.
80. FIG. 12 illustrates an example computer system on which example embodiments may be implemented. This example system is merely illustrative, and other modules or functional partitioning may therefore be substituted as would be understood by those skilled in the art. Further, this system may be modified by adding, deleting, or modifying modules and operations without departing from the scope of the inventive concept.
81. In an aspect, computer system 1200 includes a server 1202 that may involve an I/O unit 1218, storage 1220, and a processor 1204 operable to execute one or more units as known to one skilled in the art. The term “computer-readable medium” as used herein refers to any medium that participates in providing instructions to processor 1204 for execution, which may come in the form of computer-readable storage mediums, such as, but not limited to optical disks, magnetic disks, read-only memories, random access memories, solid state devices and drives, or any other types of tangible media suitable for storing electronic information, or computer-readable signal mediums, which can include transitory media such as carrier waves. The I/O unit processes input from user interfaces 1216 and operator interfaces 1218 which may utilize input devices such as a keyboard, mouse, touch device, or verbal command
82. The server 1202 may also be connected to an external storage 1226, which can contain removable storage such as a portable hard drive, optical media (CD or DVD), disk media or any other medium from which a computer can read executable code. The server may also be connected an output device 1228, such as a display to output data and other information to a user, as well as request additional information from a user. The connections from the server 1202 to the user interface 1222, the operator interface 1224, the external storage 1226, and the output device 1228 may via wireless protocols, such as the 802.11 standards, Bluetooth® or cellular protocols, or via physical transmission media, such as cables or fiber optics. The output device 1228 may therefore further act as an input device for interacting with a user
83. The processor 1204 can include a receiving module 1206, a creating module 1208, a selecting module 1210, a communicating module 1212, an accepting or re-directing module 1214, and a sending module 1216. In an example implementation, the receiving module 1206 can receives the request form a user demanding products. The creating module 908, upon receipt of the request, can automatically create a set of orders based on the request. The selecting module 1210 can select one or more suppliers / manufacturers / traders from a set of suppliers / manufacturers / traders pre-stored or pre-configured. Upon the selection of the one or more suppliers / manufacturers / traders the communication module 1212 can communicate the set of orders to the one or more suppliers / manufacturers / traders selected. The accepting or re-directing module 1214 can enable the one or more suppliers / manufacturers / traders selected to decide if they can accept the order or not. The system provides a buffer time to accept order, reject order or to divert the order to other one or more suppliers / manufacturers / traders. If the suppliers / manufacturers / traders cancelled the order before buffer time or after buffer time then depends on the reason the order buffer quantity will be increased to that suppliers / manufacturers / traders. Buffer quantity is the percentage of the order giving to that source and the user’s priority. If no one cancelled the order then the order will be manufactured and the sending module 1216 can ship to the destiny by logistics.
84. In an example implementation, the selecting module utilizes a pre-stored / pre-configured source destination algorithm to select the right suppliers / manufacturers / traders for the order based on different factors.
85. In an example implementation, the suppliers / manufacturers / traders can pre-book the orders and pre-booked suppliers / manufacturers / traders will get the order first. If no suppliers / manufacturers / traders are pre-booked then the selecting module by means of the source destination algorithm automatically choose the best suppliers / manufacturers / traders by some factors.
86. In an example implementation, if the user cancel’s the order before buffer time then there exist some cancellation policies. If the user cancel’s the order after the buffer time then the cancellation policies for the user and the manufactured product for that destination will be pointed to other user based on the requirement.
87. In an embodiment, the present disclosure provides a system and a method which emulates a virtual world in future time which can integrate and achieve blueprints there by creating goods at more reasonable cost thereby streamlining, improving the process involved in manufacturing goods.
88. In an embodiment, an integrated software or electronic system is provided which encapsulates source of a product, destination of a product, projects and internal business process (product design, product value determination, product life cycle, product order, cash back mechanism, trade, resale, insurance etc.) for pre-manufactured goods and services. Effect of such system can drastically improve pre-planning and pre-implementation which also gives a platform to blueprint the projects which would come to real world in future. Goods have various intangible and monetary values during its life cycle in the system. By utilizing the system and method of the present disclosure the demand and supply in the system or the real world can be accurately matched. Eventually the system and method generates artificially intelligence for super mass manufacturing.
89. FIG. 13 illustrates an example scanning of the ore or material or product exists in the earth in accordance with an example implementation. In a non-limiting embodiment, the system according to the present disclosure is adapted to scan ores or material or product exists in the earth at any space time. In an implementation, the virtual order can be created by scanning presence of one or more ores or one or more material or one or more products that exist on the earth at any space time that may be required for the manufacturing of the real product.
90. FIG. 14 illustrates an example V-tube process in accordance with an example implementation. In an embodiment FIG. 14 shows the timeline to depict the material or product to come into existence. For example, if the product to be obtained is “NaCl”, at time “ymin” the “Na” is obtained from the ores or any source. At time “m+ymin” the “Cl” is obtained from the ores or any source. At time “n+ymin” the combination of “NaCl” is obtained / manufactured.
91. FIG. 15 illustrates an example virtualgodown process in accordance with an example implementation. The FIG. 15 shows a singular system, self capable of mapping source and destination by creating rimorders, brings order in commerce by tamper free digital transaction id, smart agreement, value for transaction in pre-manufactured product world.
92. FIG. 16 illustrates an example rim product summary in accordance with an example implementation. In an example, as shown in FIG. 16, the number “1” indicates the product /order required is available in stock, the number “2” indicates that the product /order is in transit, the number “3” indicates the product /order is in manufacturing stage, the number “4” indicates the product /order is in pre-manufacturing stage, and the number “5” indicates that the product /order is not confirmed.
93. FIG. 17 illustrates an example rim packages in accordance with an example implementation. In an example, as shown in FIG. 17, the product /order can be prepared or obtained in a carton, in boxes, in pieces, or in the smallest possible quantities such as grams.
94. FIG. 18 illustrates an example rim trading in accordance with an example implementation. In an example, the FIG. 18 shows tracking of the rim product based on the ID. The trading of material or products happens with rimorder id in pre-manufactured world.
95. FIG. 19 illustrates an example Rim-logistics in accordance with an example implementation. Overall processes of the rim order are traced or tracked by the system which can be essentially utilized to increase the logistic efficiency of the system.
96. Although the system has been elaborated as above to include all the main modules, it is completely possible that actual implementations may include only a part of the modules or a combination of those or a division of those into sub-modules in various combinations across multiple devices that can be operatively coupled with each other, including in the cloud. Further the modules can be configured in any sequence to achieve objectives elaborated. Also, it can be appreciated that system can be configured in a computing device or across a plurality of computing devices operatively connected with each other, wherein the computing devices can be any of a computer, a laptop, a smartphone, an Internet enabled mobile device and the like. All such modifications and embodiments are completely within the scope of the present disclosure.
97. As used herein, and unless the context dictates otherwise, the term “coupled to” is intended to include both direct coupling (in which two elements that are coupled to each other or in contact each other) and indirect coupling (in which at least one additional element is located between the two elements). Therefore, the terms “coupled to” and “coupled with” are used synonymously. Within the context of this document terms “coupled to” and “coupled with” are also used euphemistically to mean “communicatively coupled with” over a network, where two or more devices are able to exchange data with each other over the network, possibly via one or more intermediary device.
98. Moreover, in interpreting both the specification and the claims, all terms should be interpreted in the broadest possible manner consistent with the context. In particular, the terms “comprises” and “comprising” should be interpreted as referring to elements, components, or steps in a non-exclusive manner, indicating that the referenced elements, components, or steps may be present, or utilized, or combined with other elements, components, or steps that are not expressly referenced. Where the specification claims refers to at least one of something selected from the group consisting of A, B, C ….and N, the text should be interpreted as requiring only one element from the group, not A plus N, or B plus N, etc.
99. While some embodiments of the present disclosure have been illustrated and described, those are completely exemplary in nature. The disclosure is not limited to the embodiments as elaborated herein only and it would be apparent to those skilled in the art that numerous modifications besides those already described are possible without departing from the inventive concepts herein. All such modifications, changes, variations, substitutions, and equivalents are completely within the scope of the present disclosure. The inventive subject matter, therefore, is not to be restricted except in the spirit of the appended claims.

**Advantages of the Invention**

1. The present disclosure provides for a system and method that enables making of a product unique based on package s, specification, physical shape etc. i.e., to obtain a unique RIM product
2. The present disclosure provides for a system and method that enables making of an order (transaction) unique based on source, destination and time i.e., to obtain a unique RIM order.
3. The present disclosure provides for a system and method that enables designing of any product in rimulation which would come to existence in real world.
4. The present disclosure provides for a system and method that enables computing of the source, with respect to time, for the material required not only to complete a project but also to get the blueprint of the project or order.
5. The present disclosure provides for a system and method that enables computing the material flow required for manufacturing any product or material through a certain process.
6. The present disclosure provides for a system and method that enables computing intangible and monetary value of a rim order which is in pre-manufactured phase.
7. The present disclosure provides for a system and method that enables creating any index in the system e.g. Price surge, supply (in space time), and demand (space time).
8. The present disclosure provides for a system and method that enables determination of rim material availability with respect to space time i.e. geo-location.
9. The present disclosure provides for a system and method that enables generation of factors required for logical processing and decision making.
10. The present disclosure provides for a system and method that enables to provide in advance functionalities such as cash back or reduce cost and improve efficiency based on purchasing in advance.
11. The present disclosure provides for a system and method that enables creating virtual supply chains.
12. The present disclosure provides for a system and method that enables exchange of rim orders irrespective of location.
13. The present disclosure provides for a system and method that enables trading or tracking rim products during its life cycle.
14. The present disclosure provides for a system and method that enables creating layers of manufacturing process like downstream and upstream.
15. The present disclosure provides for a system and method that enables blueprinting in layers to have control on material flow.
16. The present disclosure provides for a system and method that enables creating resource database i.e., finding iron ores gold ores.
17. The present disclosure provides for a system and method that enables creating timeline predicting future requirements referred to as demand timeline.
18. The present disclosure provides for a system and method that enables analysis of procurement and giving solution for effective use of resources.
19. The present disclosure provides for a system and method that enables to provide a fool poor system which eliminates fraudulence.
20. The present disclosure provides for a system and method that enables providing information for logistics.
21. The present disclosure provides for a system and method that enables to obtain any design from rimulation.
22. The present disclosure provides for a system and method that enables to obtain any product aggregation.
23. The present disclosure provides for a system and method that enables to obtain any product distribution.
24. The present disclosure provides for a system and method that enables creation of a supply chain.
25. The present disclosure provides for a system and method that enables creation if partition for arranging in logistics.
26. The present disclosure provides for a system and method that enables creation of ids for products, orders, user(buyer, seller, manufacturer, packing, logistics etc.).
27. The present disclosure provides for a system and method that enables creation to maintain the status of rim product life cycle.
28. The present disclosure provides for a system and method that enables analysis of impact of replacing or termination of blueprints and resource redistribution.
29. The present disclosure provides for a system and method that to sustain the system, the source need not be closer to the destination i.e. in case source has procured the rim order even before it is created then that source owns the next immediate rim order however, that source has the right to exchange/sell the rim order.
30. The present disclosure provides for a system and method that enables certain percentage of manufacturing capacity of every/some source can be kept in hold/buffer to reduce the uncertainty in the system, thereby increasing the trustworthy of the system.
31. The present disclosure provides for a system and method that enables, in case source fails to complete the order, his buffer will increase gradually gets blacklisted if continues to dishonour the accepted order. However, on further honoring that source’s buffer gets reduced thereby increasing the trustworthy of the system.
32. The present disclosure provides for a system and method that enables, in case rim product is a 3d design, the owner of the owns the product.

**CLAIMS:**

We Claim:

1. A system for inventory management comprising:

an order creation module adapted to create at least one virtual order based on one or more user requirements associated with the ordering of at least one product;

a timeline estimation module adapted to estimate a timeline for manufacturing of a real product based on the virtual order;

a source selection module adapted to select one or more sources for manufacturing of the real product based on the virtual order;

a delivery module adapted to deliver, upon manufacturing, the real product to the user.

1. The system as claimed in claim 1, further comprising:

a receiving module adapted to receive the user requirements associated with the ordering of product from a user;

a blue print creation module adapted to create a virtual blueprint of the user requirements; and wherein the order creation module adapted to create at least one virtual order based on the virtual blueprint; and

a replication module adapted to replicate the virtual blueprint of the user requirements if matching with new user requirements.

1. The system as claimed in claim 2, further comprising: a virtual product generation module adapted to generate at least one unique virtual product based on the user requirements received from the user.
2. The system as claimed in claim 1, further comprising: a classification module adapted to:

display a query completion template to the user for a category of information associated with the order, the query completion template including an interactive field that is user editable;

identify user interaction with the interactive field; and

generate at least one unique virtual product based on the user interaction identified with the interactive field.

1. The system as claimed in claim 1, wherein the virtual order created is stored in a queue for estimating the timeline for manufacturing of the real product and/or based on the current cost of materials required for manufacturing of the real product.
2. The system as claimed in claim 1, further comprising: a material estimation module adapted to estimate, based on the virtual order, the material required for the manufacturing of the real product.
3. The system as claimed in claim 1, further comprising: a void analysis module adapted to:

analyze the historical data associated with the real products delivered to the users;

display a new user with options to select a product satisfying the new user requires from the historical data; and/or

collect the vacancy or capacity of a queue adapted to store the virtual order.

1. The system as claimed in claim 1, wherein the virtual order is created by scanning presence of one or more ores or one or more material or one or more products that exist on the earth at any space time that may be required for the manufacturing of the real product.
2. The system as claimed in claim 1, wherein the source selection module is further adapted to automatically select the sources for manufacturing the real product based on the virtual order.
3. The system as claimed in claim 1, wherein:

the order creation module is further adapted to fragment the virtual order into one or more sub-orders;

the source selection module is further adapted to select the sources for manufacturing the real product based on the sub-orders and the acceptance of the sources for manufacturing the real product; and

the delivery module is further adapted to:

receive one or more manufactured sub-orders;

aggregate the manufactured sub-orders to form the real product; and

deliver the real product to the user.

1. A method for inventory management, comprising;

creating at least one virtual order based on one or more user requirements associated with the ordering of at least one product;

estimating a timeline for manufacturing of a real product based on the virtual order;

selecting one or more sources for manufacturing the real product based on the virtual order; and

delivering, upon manufacturing, the real product to the user.

1. The method as claimed in claim 11, further comprising:

receiving the user requirements associated with the ordering of product from a user;

generating at least one unique virtual product based on the user requirements received from the user;

creating a virtual blueprint of the user requirements, and thereby creating at least one virtual order based on the virtual blueprint;

replicating the virtual blueprint of the user requirements if matching with new user requirements;

estimating, based on the virtual order, the material required for the manufacturing of the real product; and

analyzing the historical data associated with the real products delivered to the users and displaying a new user with options to select a product satisfying the new user requires from the historical data.

1. The method as claimed in claim 11, wherein the step of selecting the sources for manufacturing can automatically select the sources for manufacturing the real product based on the virtual order.

**Abstract**

**SINGULAR SYSTEM AND METHOD FOR MANAGING MANUFACTURING, ORDERING, AND DISTRIBUTION IN A SUPPLY CHAIN**

A singular computer system self-capable of mapping sources and destination in an automated supply chain ecosystem includes computable blueprints, rim material, rim products, piping mechanism called v-tubes process along with source and destination mapping. The system enables to reduce the number of intermediates in the system and improve efficiency by pre-planning the products to be manufactured. Such system enables to create virtual blueprints and virtual pipeline (v-tubes) of rimorders to be executed. Rim material can be created unequivocally and can be replicated in other blueprints which can be re-modified till it reaches immutable state for manufacturing, logistics and storing. Aspects of the present disclosure relate to methods and systems for automation and/or an artificial intelligence and/or software for emulating a virtual world in future time which can integrate and achieve blueprints, thereby create goods at reasonable cost thereby streamlining and improving the process involved in manufacturing goods.

FIG. 2 WILL BE THE REFERENCE FIGURE