databases for cosmetics retail displays to be responsive to retail store and customer requirements and increase performance of such systems.

[0003a] In a first aspect, the present disclosure provides a method for electronically managing display components for cosmetics products, the method comprising: at least one computer processor of a cosmetics retail displays management system receiving from a database via an automated application programming interface (API), data representing at least one planogram for a plurality of cosmetics products for each of a plurality of retail store locations; the at least one computer processor of the cosmetics retail displays management system receiving from a database via an automated API, data regarding a plurality of display components for the plurality cosmetics products, the data regarding the plurality of display components for the cosmetics products including data identifying the plurality of display components for the cosmetics products and current different retail store locations of the plurality of display components for the cosmetics products; the at least one computer processor of the cosmetics retail displays management system determining, based on the data representing at least one planogram for a plurality of cosmetics products and the data regarding the plurality of display components for the cosmetics products, whether there are sufficient display components for the plurality of cosmetics products located at each of the plurality of retail store locations to implement the at least one planogram for the plurality of cosmetics products for each of the plurality of retail store locations; and the at least one computer processor of the cosmetics retail displays management system initiating a machine to supply one or more display components for the plurality of cosmetics products to one or more of the plurality of retail store locations by initiating an electronic action via a project management component of the cosmetics retail displays management system to cause one or more suppliers systems to trigger an order, production and/or delivery of the one or more display components based on the determination whether there are sufficient display components for the plurality of cosmetics products located at each of the plurality of retail store locations to implement

the at least one planogram for the plurality of cosmetics products for each of the plurality of retail store locations.

[0003b] In a second aspect, the present disclosure provides a system for managing display components for cosmetics products, the system comprising: at least one processor; and at least one memory coupled to the at least one processor, the at least one memory having instructions thereon that, when executed by the at least one processor, cause the system for managing display components for cosmetics products to: receive data from a supplier system for display components for cosmetics products, a retailer system of display components for cosmetics products, a client system for display components for cosmetics products, a project manager system for display components for cosmetics products, an account manager system for display components for cosmetics products, a designer or developer system for display components for cosmetics products, and a finance system for display components for cosmetics products; and determine, based on the received data from one or more of the supplier system for display components for cosmetics products, the retailer system of display components for cosmetics products, the client system for display components for cosmetics products, the project manager system for display components for cosmetics products, the account manager system for display components for cosmetics products, the designer or developer system for display components for cosmetics products, and the finance system for display components for cosmetics products, whether to initiate services to supply one or more display components for a plurality of cosmetics products to one or more of a plurality of retail store locations; initiate a machine to supply one or more display components for the plurality of cosmetics products to one or more of the plurality of retail store locations by initiating an electronic action via a project management component of the system for managing display components for cosmetics products to cause one or more suppliers systems to trigger an order, production and/or delivery of the one or more display components based on the determination whether to initiate services.

[0003c] In a third aspect, the present disclosure provides a non-transitory computer-readable storage medium having computer-executable instructions stored thereon that, when executed, cause at least one processor to: receive sales data of cosmetics products that were displayed by at least one retail store location of a plurality of retail store locations according to a current planogram of the at least one retail store location; revise the current planogram of the at least one retail store location to generate a revised planogram; and initiate a machine to supply one or more display components for the plurality of cosmetics products to the at least one retail store location for implementing revised planogram by initiating an electronic action via a project management component of a cosmetics retail displays management system to cause one or more suppliers systems to trigger an order, production and/or delivery of the one or more display components based on the revised planogram.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

[0004] In the drawings, identical reference numbers identify similar elements or acts. The sizes and relative positions of elements in the drawings are not necessarily drawn to scale. For example, the shapes of various elements and angles are not drawn to scale, and some of these elements are arbitrarily enlarged and positioned to improve drawing legibility. Further, the particular shapes of the elements as drawn are not intended to convey any information regarding the actual shape of the particular elements, and have been solely selected for ease of recognition in the drawings.

[0005] Figure 1 is a system diagram of a processor-based networked environment, in which systems, devices and methods for improved operations of computer networks, graphical user interfaces and databases for cosmetics retail displays may be a part, or in which they may be implemented, according to various aspects of the present disclosure.

[0006] Figure 2 is a schematic diagram of an example computer system that may comprise or be included in the items in the networked environment of Figure 1, and which may be suitable for implementing systems, devices and methods for improved

operations of computer networks, graphical user interfaces and databases for cosmetics retail displays, according to various aspects of the present disclosure.

[0007] Figure 3 is block diagram showing an example of various communication and operational links between various system components of the items in Figure 1 and the components of the cosmetics retail displays management system operation manager of Figure 2 provided by the cosmetics retail displays management system, according to various aspects of the present disclosure.

[0008] Figure 4 is an example screen shot of an example graphical user interface screen of a components menu of the cosmetics retail displays management system,

CLAIMS

1. A method for electronically managing display components for cosmetics products, the method comprising:

at least one computer processor of a cosmetics retail displays management system receiving from a database via an automated application programming interface (API), data representing at least one planogram for a plurality of cosmetics products for each of a plurality of retail store locations;

the at least one computer processor of the cosmetics retail displays management system receiving from a database via an automated API, data regarding a plurality of display components for the plurality cosmetics products, the data regarding the plurality of display components for the cosmetics products including data identifying the plurality of display components for the cosmetics products and current different retail store locations of the plurality of display components for the cosmetics products;

the at least one computer processor of the cosmetics retail displays management system determining, based on the data representing at least one planogram for a plurality of cosmetics products and the data regarding the plurality of display components for the cosmetics products, whether there are sufficient display components for the plurality of cosmetics products located at each of the plurality of retail store locations to implement the at least one planogram for the plurality of cosmetics products for each of the plurality of retail store locations; and

the at least one computer processor of the cosmetics retail displays management system initiating a machine to supply one or more display components for the plurality of cosmetics products to one or more of the plurality of retail store locations by initiating an electronic action via a project management component of the cosmetics retail displays management system to cause one or more suppliers systems to trigger an order, production and/or delivery of the one or more display components based on the determination whether there are sufficient display components for the plurality of cosmetics products located at each of the plurality of retail store locations to implement

the at least one planogram for the plurality of cosmetics products for each of the plurality of retail store locations.

2. The method of claim 1 wherein the determining whether there are sufficient display components for the plurality of cosmetics products located at each of the plurality of retail store locations to implement the at least one planogram includes:

for each retail store location of the plurality of retail store locations:

comparing, by at least one computer processor, data representing a planogram for cosmetics products to be displayed at the retail store location with a current inventory of display components at the retail store location; and

determining whether there are sufficient display components currently located the retail store location to implement the planogram for cosmetics products to be displayed at the retail store location based on the comparison of data representing the planogram for cosmetics products to be displayed at the retail store location with the current inventory of display components at the retail store location.

3. The method of claim 1 further comprising:

for at least one retail store location of the plurality of retail store locations:

receiving, by at least one computer processor, sales data of cosmetics products that were displayed at the at least one retail store location according to a current planogram of the at least one retail store location;

revising the current planogram of the at least one retail store location to generate a revised planogram; and

initiating, by at least one computer processor, services to supply one or more display components for the plurality of cosmetics products to the at least one retail store location for implementing revised planogram.

4. The method of claim 3, further comprising:

for the at least one retail store location of the plurality of retail store locations, determining, by at least one computer processor, a revision to the current planogram of the at least one retail store location based on the sales data of cosmetics products that were displayed at the at least one retail store location according to the current planogram of the at least one retail store location, wherein the revising the current planogram of the at least one retail store location to generate the revised planogram is performed by the at least one computer processor and is based on the determination by the at least one computer processor of the revision to the current planogram.

5. The method of claim 4 wherein the determining the revision to the current planogram of the at least one retail store location based on the sales data includes:

determining, by at least one computer processor, a correlation between cosmetics products that are placed according to the current planogram and sales performance of the cosmetics products that are placed according to the current planogram; and

determining the revision to the current planogram of the at least one retail store location based on the determined correlation between the cosmetics products that are placed according to the current planogram and the sales performance of the cosmetics products that are placed according to the current planogram.

6. The method of claim 3, further comprising:

repeating the receiving sales data, the revising the current planogram and the initiating services to supply one or more display components for each retail store location of the plurality of retail store locations.

7. The method of claim 1, further comprising:

determining, by at least one computer processor, that there are not sufficient display components at a particular retail store location of the plurality of retail store locations to implement the at least one planogram for the plurality of cosmetics products at the particular retail store location;

determining, by at least one computer processor, that there exist at least some spare display components at one or more other retail store locations of the plurality of retail store locations that may be used to implement the at least one planogram for the plurality of cosmetics products at the particular retail store location; and

initiating, by at least one computer processor, services to supply the at least some spare display components at the one or more other retail store locations of the plurality of retail store locations to the particular retail store location based on the determination that there exist at least some spare display components at the one or more other retail store locations of the plurality of retail store locations that may be used to implement the at least one planogram for the plurality of cosmetics products at the particular retail store location.

8. The method of claim 1, further comprising:

sending, by at least one computer processor, information regarding the at least one planogram and the one or more display components for printing or artwork services that are needed associated with the at least one planogram and the one or more display components for the plurality of cosmetics products based on a determination there are additional display components needed for the plurality of cosmetics products located at each of the plurality of retail store locations to implement the at least one planogram for the plurality of cosmetics products for each of the plurality of retail store locations;

receiving, by at least one computer processor, estimates for printing or artwork services that are needed associated with the at least one planogram and the

one or more display components in response to the sending of the information regarding the at least one planogram and the one or more display components for printing or artwork services that are needed; and

initiating printing or artwork services that are needed associated with the at least one planogram and the one or more display components in response to the receiving the estimates for printing or artwork services that are needed associated with the at least one planogram and the one or more display components.

9. The method of claim 1, further comprising:

receiving, by at least one computer processor, a revision to the at least one planogram for a plurality of cosmetics products for each of a plurality of retail store locations;

determining, by at least one computer processor, based on the data representing at least one planogram for a plurality of cosmetics products and the data regarding the plurality of display components for the cosmetics products, whether there are sufficient display components for the plurality of cosmetics products located at each of the plurality of retail store locations to implement the revision to the at least one planogram for a plurality of cosmetics products for each of a plurality of retail store locations; and

initiating, by at least one computer processor, services to supply one or more display components for the plurality of cosmetics products to one or more of the plurality of retail store locations based on the determination whether there are sufficient display components for the plurality of cosmetics products located at each of the plurality of retail store locations to implement the revision to the at least one planogram.

10. The method of claim 1 wherein the display components are one or more of stands, displays, shelves and racks for display of cosmetics products at one or more retail store locations of the plurality of retail store locations.

11. The method of claim 1, further comprising:

communicating, by at least one computer processor, with supplier systems for the plurality cosmetics products and for display components for the plurality cosmetics products; retailer systems for the plurality cosmetics products and for display components for the plurality cosmetics products; client systems for the plurality cosmetics products and for display components for the plurality cosmetics products; project manager systems for the plurality cosmetics products and for display components for the plurality cosmetics products; account manager systems for the plurality cosmetics products and for display components for the plurality cosmetics products; design or development systems for the plurality cosmetics products and for display components for the plurality cosmetics products; and finance systems for the plurality cosmetics products and for display components for the plurality cosmetics products, to facilitate providing services to supply one or more display components for the plurality of cosmetics products to one or more of the plurality of retail store locations.

12. The method of claim 11 further comprising:

for each retail store location of the plurality of retail store locations:

determining, by at least one computer processor, a revision to a current planogram of the retail store location based on information received from a plurality of the supplier systems, the retailer systems, the client systems, the project manager systems, the account manager systems, the design or development systems, and the finance systems; and

revising, by at least one computer processor, the current planogram of the retail store location to generate the revised planogram based on the determination by the at least one computer processor of the revision to the current planogram.

13. The method of claim 12, further comprising:

for each retail store location of the plurality of retail store locations:

determining, by at least one computer processor, based on the revised planogram for the retail store location, whether there are sufficient display components located at the retail store location to implement the revised planogram; and

initiating, by at least one computer processor, services to supply one or more display components for the plurality of cosmetics products to the retail store location based on the determination whether there are sufficient display components located at the retail store location to implement the revised planogram.

14. The method of claim 1 wherein the initiating services to supply one or more display components for the plurality of cosmetics products to one or more of the plurality of retail store locations includes initiating delivery of one or more display components for the plurality of cosmetics products to one or more of the plurality of retail store locations.

15. The method of claim 1 wherein the initiating services to supply one or more display components for the plurality of cosmetics products to one or more of the plurality of retail store locations includes initiating one or more of printing, artwork and production services for producing one or more display components for the plurality of cosmetics products.

16. A system for managing display components for cosmetics products, the system comprising:

at least one processor; and

at least one memory coupled to the at least one processor, the at least one memory having instructions thereon that, when executed by the at least one processor, cause the system for managing display components for cosmetics products to:

receive data from a supplier system for display components for cosmetics products, a retailer system of display components for cosmetics products, a

client system for display components for cosmetics products, a project manager system for display components for cosmetics products, an account manager system for display components for cosmetics products, a designer or developer system for display components for cosmetics products, and a finance system for display components for cosmetics products; and

determine, based on the received data from one or more of the supplier system for display components for cosmetics products, the retailer system of display components for cosmetics products, the client system for display components for cosmetics products, the project manager system for display components for cosmetics products, the account manager system for display components for cosmetics products, the designer or developer system for display components for cosmetics products, and the finance system for display components for cosmetics products, whether to initiate services to supply one or more display components for a plurality of cosmetics products to one or more of a plurality of retail store locations;

initiate a machine to supply one or more display components for the plurality of cosmetics products to one or more of the plurality of retail store locations by initiating an electronic action via a project management component of the system for managing display components for cosmetics products to cause one or more suppliers systems to trigger an order, production and/or delivery of the one or more display components based on the determination whether to initiate services.

17. The system of claim 16, wherein the determining whether to initiate services to supply one or more display components for the plurality of cosmetics products to one or more of the plurality of retail store locations includes one or more of:

determining whether to initiate delivery of one or more display components for the plurality of cosmetics products to one or more of the plurality of retail store locations and determining whether to initiate printing, artwork or production services for producing one or more display components for the plurality of cosmetics products.

18. The system of claim 17, wherein the instructions, when executed by the at least one processor, further cause the system for managing display components for cosmetics products to:

initiate services to supply one or more display components for the plurality of cosmetics products to one or more of the plurality of retail store locations by initiating one or more of delivery of one or more display components for the plurality of cosmetics products to one or more of the plurality of retail store locations and initiating printing, artwork or production services for producing one or more display components for the plurality of cosmetics products.

19. A non-transitory computer-readable storage medium having computer-executable instructions stored thereon that, when executed, cause at least one processor to:

receive sales data of cosmetics products that were displayed by at least one retail store location of a plurality of retail store locations according to a current planogram of the at least one retail store location;

revise the current planogram of the at least one retail store location to generate a revised planogram; and

initiate a machine to supply one or more display components for the plurality of cosmetics products to the at least one retail store location for implementing revised planogram by initiating an electronic action via a project management component of a cosmetics retail displays management system to cause one or more suppliers systems to trigger an order, production and/or delivery of the one or more display components based on the revised planogram.

20. The non-transitory computer-readable storage medium of claim 19 wherein the instructions, when executed by the at least one processor, further cause the at least one processor to:

for the at least one retail store location, determine a revision to the current planogram of the at least one retail store location based on the sales data of cosmetics products that were displayed by the at least one retail store location according to the current planogram of the at least one retail store location, wherein the revising the current planogram of the at least one retail store location to generate the revised planogram is based on the determination by the at least one computer processor of the revision to the current planogram.

21. The non-transitory computer-readable storage medium of claim 20 wherein the determining the revision to the current planogram of the at least one retail store location based on the sales data includes:

determining a correlation between cosmetics products that are placed according to the current planogram and sales performance of the cosmetics products that are placed according to the current planogram; and

determining the revision to the current planogram of the at least one retail store location based on the determined correlation between the cosmetics products that are placed according to the current planogram and the sales performance of the cosmetics products that are placed according to the current planogram.