



US012387250B2

(12) **United States Patent**
Killoran, Jr.

(10) **Patent No.:** **US 12,387,250 B2**

(45) **Date of Patent:** **Aug. 12, 2025**

(54) **USER INITIATED MONITORING OF
E-COMMERCE WEBSITES AND EMAIL
OFFERS**

(58) **Field of Classification Search**

CPC G06Q 30/0601-0645; G06Q 30/01-08
See application file for complete search history.

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(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 314 days.

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(21) Appl. No.: **17/086,665**

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(22) Filed: **Nov. 2, 2020**

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(65) **Prior Publication Data**

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ABSTRACT

A system and method for creating a watchlist of products relating to any type of item/service/event for which any type of purchase may be made by a user. The system permits a user to access a website and identify items of the website that are of interest and other users (or friends) and associate one or more users with one or more items in the watchlist. The system stores the identified items and friends in a watchlist for later retrieval, review, transmission or action by the user. The system may periodically inform the user of any changes to the items of interest or any changes in purchases made by the user's friends to items in the watchlist. Items may alternatively be added from multiple websites, multiple emails or automatically by the system.

Related U.S. Application Data

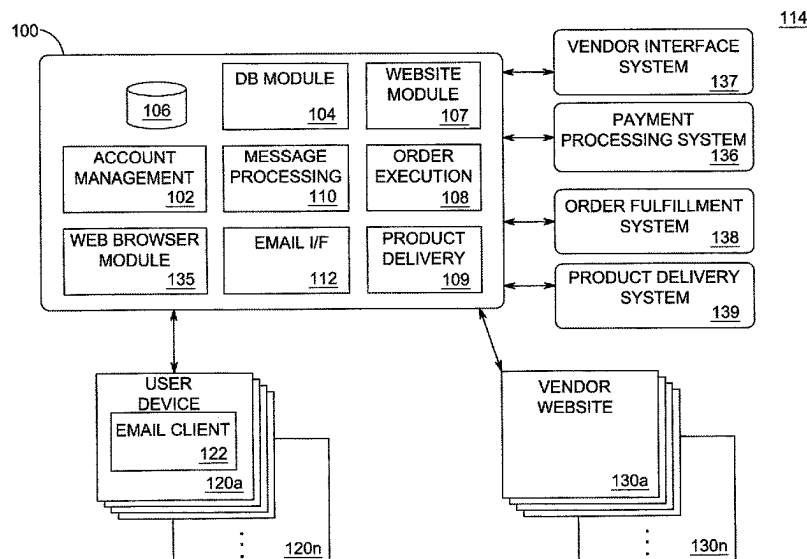
(63) Continuation of application No. 16/232,696, filed on Dec. 26, 2018, now abandoned, which is a continuation of application No. 15/675,247, filed on Aug. 11, 2017, now Pat. No. 10,169,805, which is a continuation of application No. 13/457,073, filed on Apr. 26, 2012, now Pat. No. 9,734,530.

(60) Provisional application No. 61/524,898, filed on Aug. 18, 2011.

(51) **Int. Cl.**
G06Q 30/0601 (2023.01)

(52) **U.S. Cl.**
CPC **G06Q 30/0631** (2013.01); **G06Q 30/0621**
(2013.01)

12 Claims, 10 Drawing Sheets



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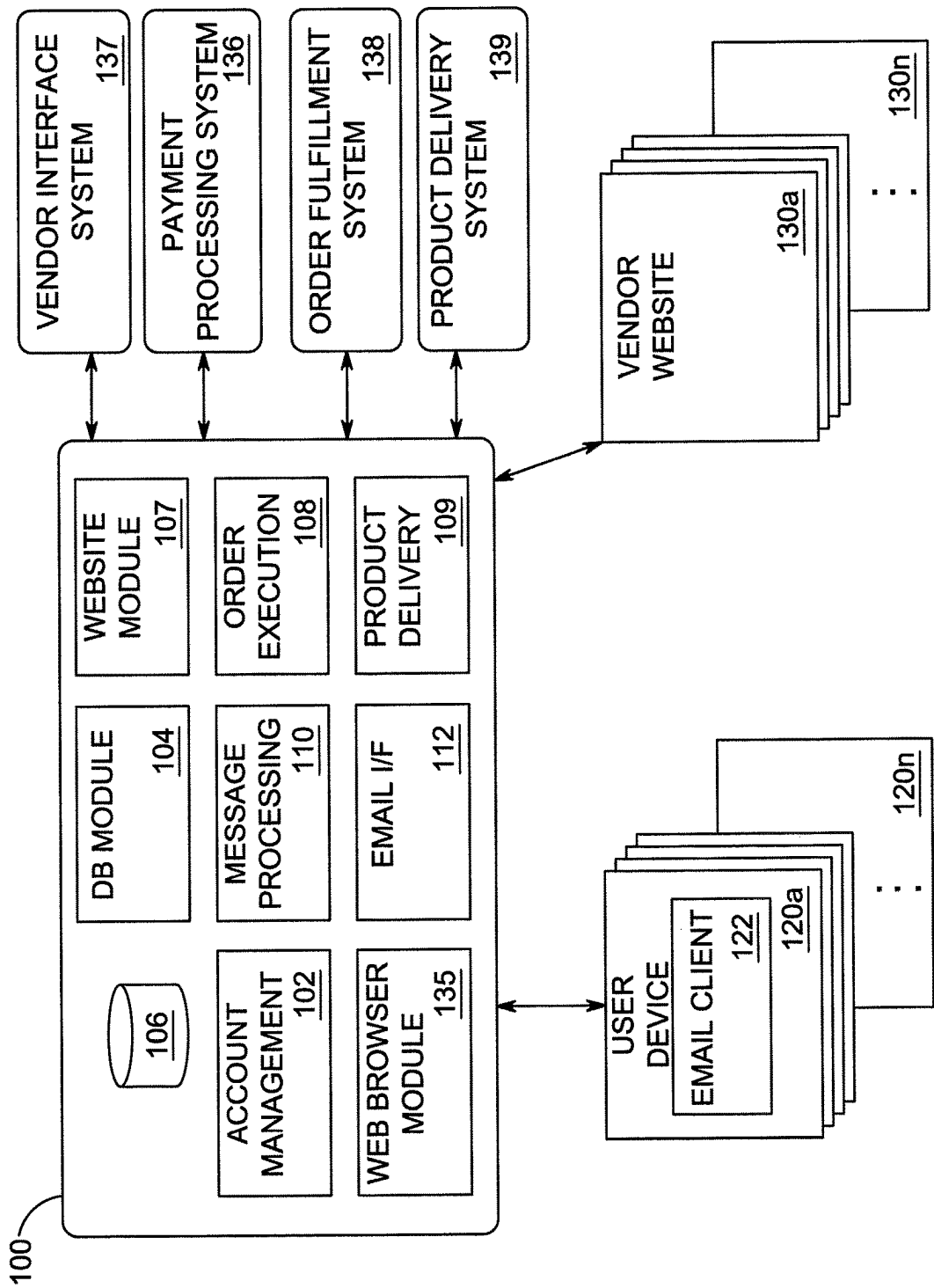


FIG. 1

MOVIE A	SELECT	SPA SERVICE B	SELECT	THEATRE EVENT C	SELECT	CRUISE D	SELECT
SPORTING EVENT 1	SELECT	CONCERT Z	SELECT	AIRLINE TICKETS I	SELECT	HOTEL/ DINING RESER- VATIONS X	SELECT

FIG. 2

ShareThis

New

THE
HUNGER
GAMES

LOCATION : LOEWS CHERRY HILL
DATE: APRIL 12, 2012
TIME : 12:00 pm

Qty:

1

USER REVIEWS

☆☆☆☆☆ RATING


☆☆☆☆☆
THIS MOVIE ROCKS!! ... [READ MORE]

Save for Later

PURCHASE

WATCH

FIG. 3

WATCHLIST					
WEBSITE	ITEM	PRICE	ADD DATE	CHANGES	
	LOEWS CHERRY HILL	\$12.00	4/12/12	-	<div>BUY</div> <div>DELETE</div>
	<div>MOVIE</div> <div>THE HUNGER GAMES</div>				

EXIT WEBSITE

RESUME SHOPPING

FIG. 4





WATCHLIST						
WEBSITE	ITEM		PRICE	ADD DATE	CHANGES	
	<div>MOVIE</div> <div>THE HUNGER GAMES</div>	<div>Retailer Name</div>	\$12.00	12/22/12	-	<div>BUY</div> <div>DELETE</div>
	BRUCE SPRINGSTEEN CONCERT	<div>Retailer Name</div>	\$120	3/7/12	-	<div>BUY</div> <div>DELETE</div>
	CRUISE TO ALASKA	<div>Retailer Name</div>	\$12,000	2/26/12	-	<div>BUY</div> <div>DELETE</div>
	: :	: :	: :	: :		
						<div>EXIT WEBSITE</div> <div>RESUME SHOPPING</div>

FIG. 5

WATCHLIST PARAMETERS

EMAIL TO

WATCHLIST NAME

ACTIVATION TIME:

AUTO SEARCH ?

AUTO ADD ?

FRIENDS: JAY

602

604

☐ DAILY ☐ WEEKLY ☐ MONTHLY ☐ UPON CHANGES ☐ OTHER

☐ YES ☐ NO

☐ YES ☐ NO

LIMIT ?

JOHN

DAVID

606

608

610

609

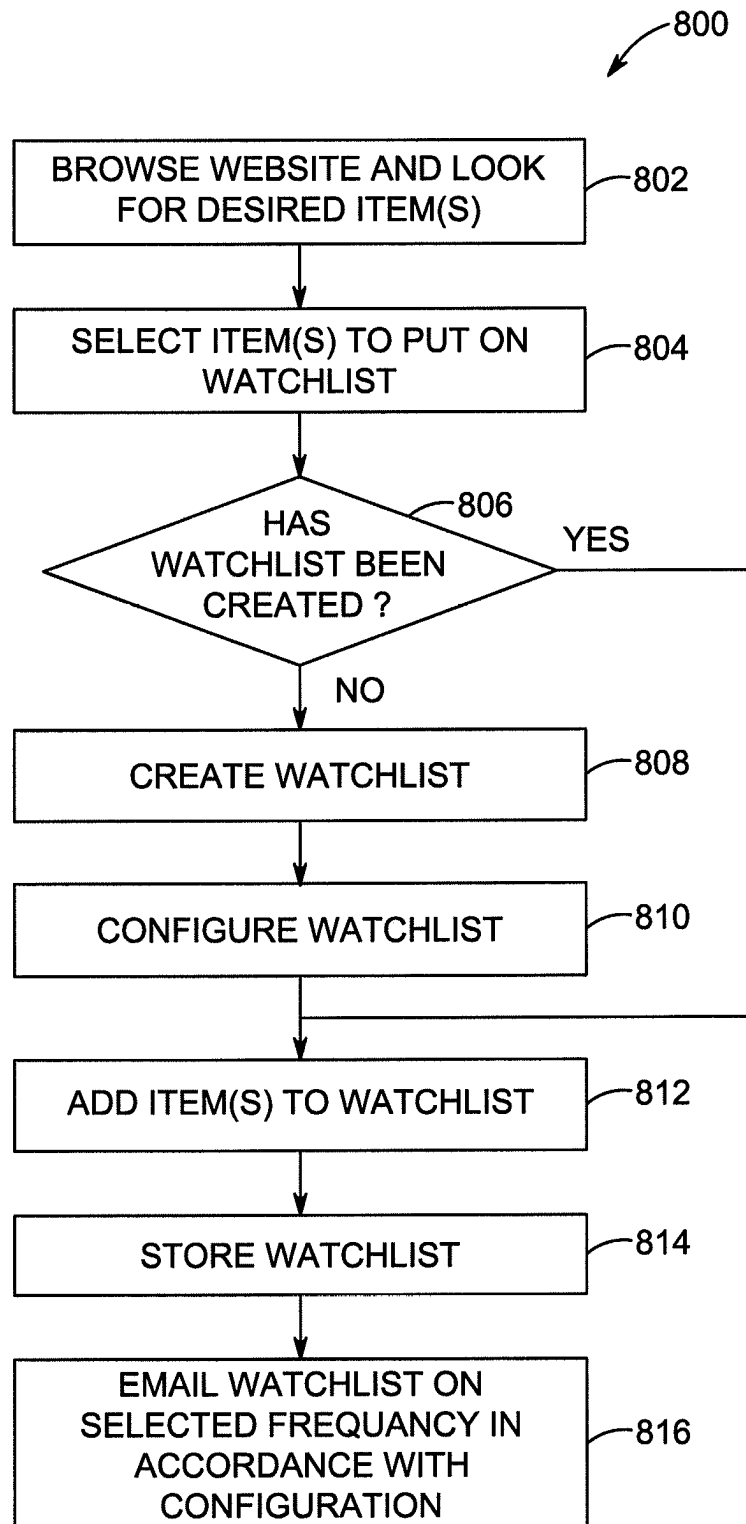
600

FIG. 6

706

WATCHLIST						
WEBSITE	ITEM		PRICE	ADD DATE	CHANGES	
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FIG. 7

**FIG. 8**

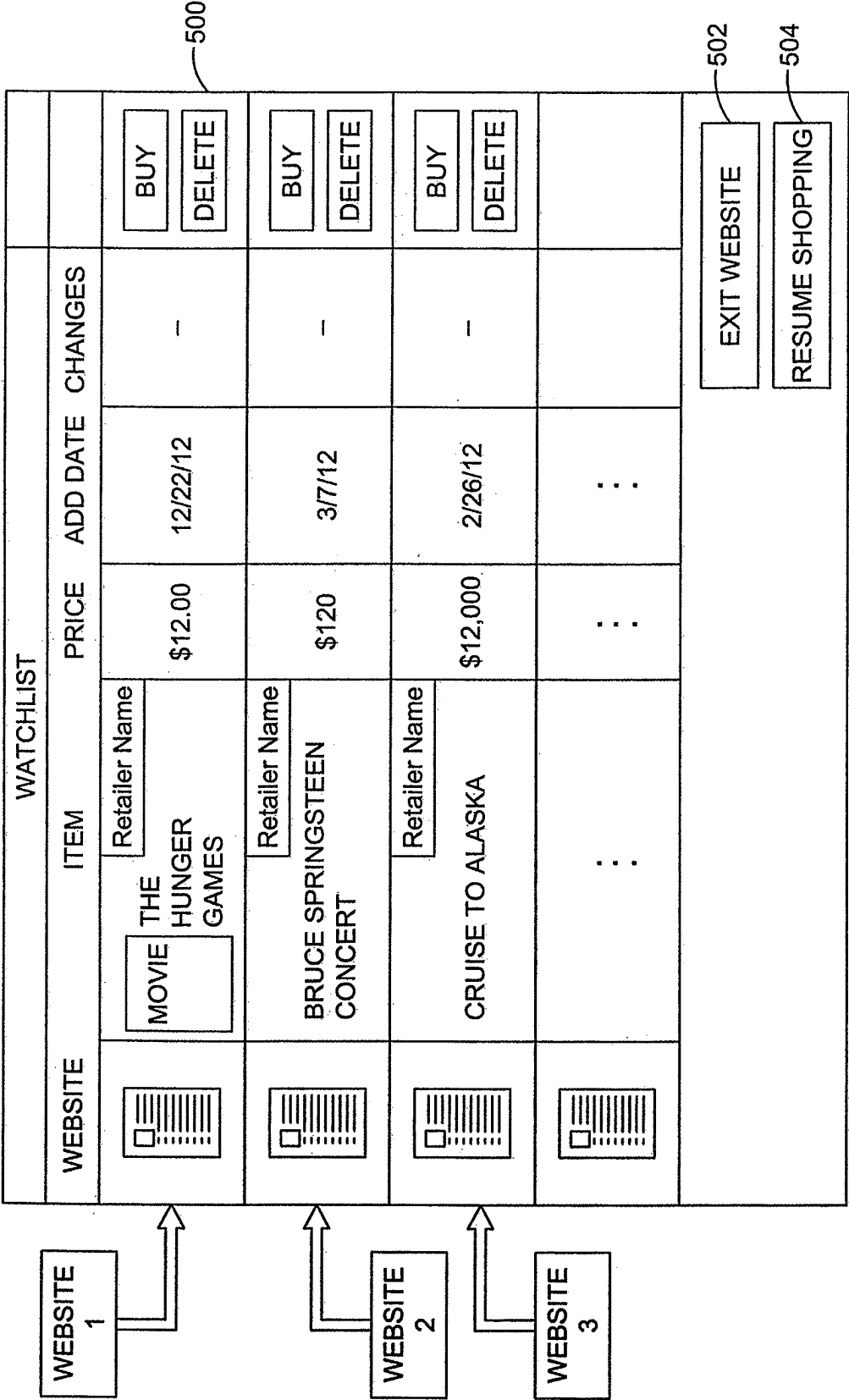
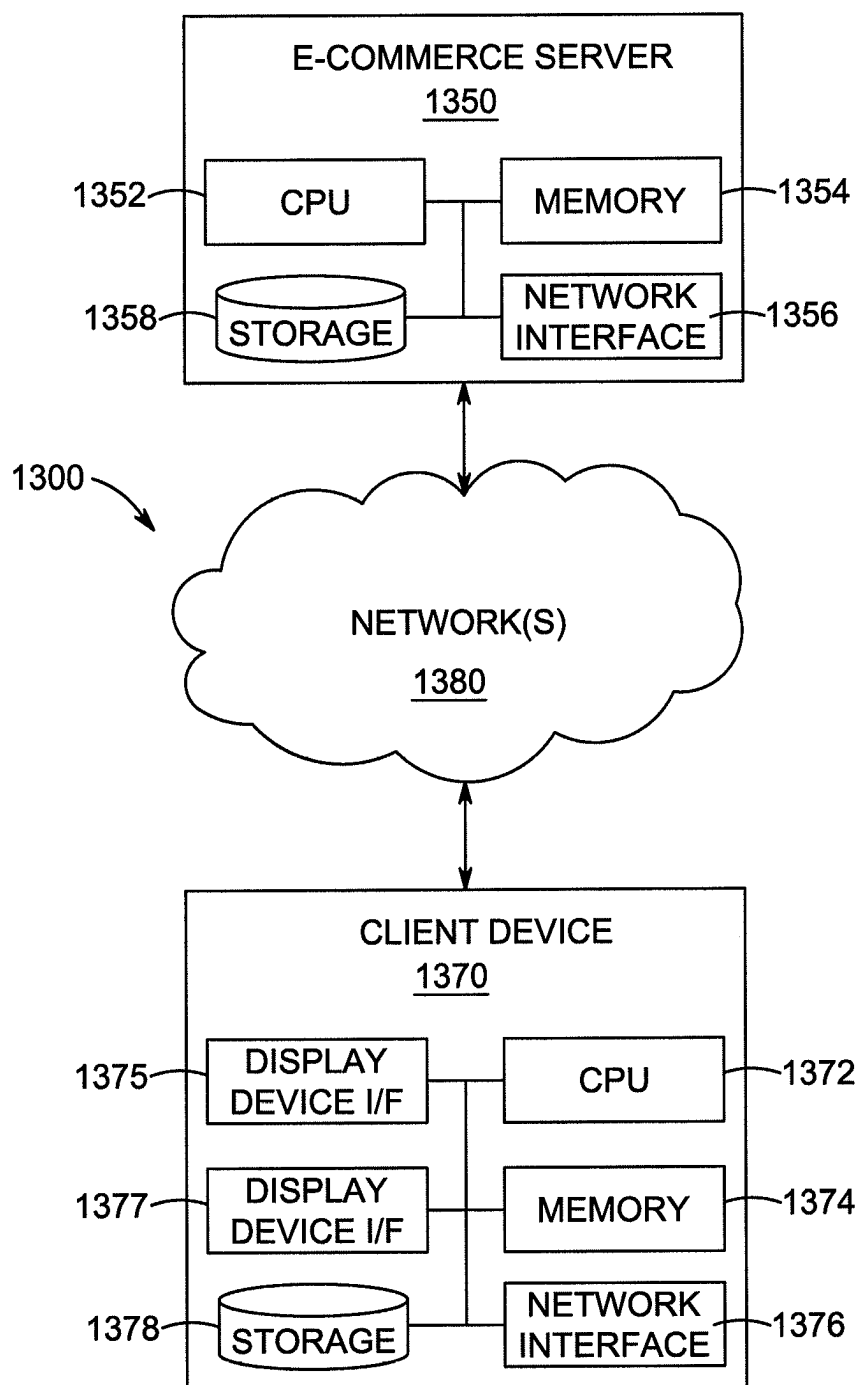


FIG. 9

**FIG. 10**

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USER INITIATED MONITORING OF E-COMMERCE WEBSITES AND EMAIL OFFERS

CROSS REFERENCE TO RELATED APPLICATION

This application is a continuation of U.S. patent application Ser. No. 16/232,696, filed Dec. 26, 2018, which is a continuation of U.S. patent application Ser. No. 15/675,247 filed Aug. 11, 2017, which issued on Jan. 1, 2019 as U.S. Pat. No. 10,169,805, which is a continuation of U.S. patent application Ser. No. 13/457,073 filed on Apr. 26, 2012, which issued on Aug. 15, 2017 as U.S. Pat. No. 9,734,530, which claims the benefit of U.S. Provisional Application No. 61/524,898 filed on Aug. 18, 2011, which are incorporated by reference as if fully set forth.

BACKGROUND

The internet has brought unprecedented amounts of information to the fingertips of potential consumers across the globe. As the quality of search engine algorithms has continued to improve, it has been easier for consumers to receive search results that are closer to their expectations. Accordingly, access to large volumes of information has provided many benefits to consumers who make purchases via the internet, such as providing a more solid foundation upon which consumers may base purchasing decisions.

There has been no greater effect by the internet on preexisting businesses than that on retail sales and their business models. Consumers were once relegated to searching physical stores within the vicinity of their homes. Consumers now have access to retail and virtual stores around the globe, and can compare and contrast products, prices and information regarding all manner of products and services from those retailers. This has given shoppers unparalleled power to shop for the best price and the specific product for which they are looking.

However, there has been a downside to this proliferation of information. There are now so many retail websites, with so much information on each website, that the shopping experience has begun lead to information overload and shopping fatigue. It becomes difficult for consumers to keep track of which website(s) on which they have found a particular item, or which items on a particular website they have been interested. The consumer has become frustrated, and the shopping experience is greatly diminished as a result.

The designers of retail websites understand this frustration and have instituted measures to help consumers in this regard. Most retail websites now allow a user to put things in a "shopping cart" for later purchase, or even permit consumers to create a list of items in which they are interested, a consumer has to establish the shopping cart or list for each website. This typically includes logging in to each website and entering personal information. This process is inconvenient and time-consuming for the consumers and becomes yet another source of frustration. Additionally, certain items, such as tickets to events such as a concert, play or movie may not be currently available when the consumer happens to be shopping or a consumer may not be ready to buy while at the website and between the time they decide to make the purchase and log back on to the website the item of interest may be sold out.

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A method and apparatus for providing items such as tickets to various types of events without the limitations of the prior art is greatly needed.

SUMMARY

A system and method for creating a watchlist of products relating to any type of item/service/event for which any type of purchase may be made by a user. The system permits a user to access a website and identify items of the website that are of interest and other users (or friends) and associate one or more users with one or more items in the watchlist. The system stores the identified items and friends in a watchlist for later retrieval, review, transmission or action by the user. The system may periodically inform the user of any changes to the items of interest or any changes in purchases made by the user's friends to items in the watchlist. Items may alternatively be added from multiple websites, multiple emails or automatically by the system.

BRIEF DESCRIPTION OF THE DRAWINGS

A more detailed understanding may be had from the following description, given by way of example in conjunction with the accompanying drawings wherein:

FIG. 1 shows a block diagram of a system architecture for creating a watchlist in accordance with the present invention;

FIG. 2 shows a plurality of events for which tickets may be purchased on a retail website;

FIG. 3 shows one of the plurality of events for which tickets may be purchased on the retail website with a button permitting the user to add the item to a watchlist;

FIG. 4 shows an item as added to a watchlist;

FIG. 5 shows a plurality of items added to the watchlist of FIG. 4;

FIG. 6 shows a watchlist parameter configuration screen;

FIG. 7 shows an updated watchlist of FIG. 4 as transmitted to a user showing any updates that were made since the last transmission of the watchlist;

FIG. 8 is a flow diagram of a method in accordance with the present invention;

FIG. 9 shows a second embodiment for adding items to a watchlist from a plurality of websites

FIG. 10 shows an example system that may be used to implement features described herein with reference to FIGS. 1-9.

DETAILED DESCRIPTION

FIG. 1 shows an example logical architecture 114 for email-based e-commerce. The example architecture 114 includes an e-commerce system 100, a payment processing system 136, a vendor interface system 137, a vendor order fulfillment system 138, and a product delivery system 139, and may interface with a plurality of user devices 120a-120n and a plurality of vendor websites 130a-130n.

The e-commerce system 100 may include an account management module 102, a database module 104, an e-commerce database 106, a website module 107, an order execution module 108, a product delivery module 109, a message processing module 110, a web browser module 135 and an email interface module 112.

Although not explicitly shown in FIG. 1 for simplicity, these modules may be functionally linked together. As those of skill in the art would appreciate, the modules may be embodied as physical units that are physically linked

together via one or more electronic bus structures, may be functional units that are functionally linked together via one or more communication protocols, or there may be a combination of physical or functional units. They may be programmed via software or firmware in a plurality of physically separate units, or may be incorporated into a single programmable unit. Accordingly, although the present invention may be described herein as distinct and specific units or modules, (such as, for example the vendor interface system 137, the payment processing system 136, the order fulfillment system 138 and the product delivery system 139), this is for convenience of explanation, and these modules, systems or units may be variously combined into one or a plurality of units without departing from the spirit and scope of the present invention. Additionally, the various functionality described herein relating to watchlists may be implemented using any one or more of the components mentioned as part of the e-commerce system 100 or using any type of processor or processors, any type of single programmable unit/processor, or any type of module and may be configured as a component of the e-commerce system 100 or as a component in communication with the e-commerce system 100.

As will be described in further detail hereinafter, the e-commerce system 100 and user devices 120a-120n may communicate to initiate and manage transactions such as the searching, processing, tracking and purchase of various items. As will also be described in further detail hereinafter, the e-commerce system 100 may communicate with the payment processing system 136, the vendor interface system 137, the vendor order fulfillment system 138 and the product delivery system 139 to execute the transactions.

The account management module 102 may manage data related to accounts for users and vendors that participate in commerce via the e-commerce system 100. The account management module 102 may be or include, for example, a web application.

Vendors may interact with the account management module 102 via the vendor interface system 137, which may comprise a web browser or a proprietary closed system. As one example, a vendor may provide information via the vendor interface system 137 to the account management module 102 such as: product and pricing information to be used for email advertisements to be sent to users in email campaigns; periodic and/or aperiodic updates regarding product and pricing information to be sent to users as selected by the users; email formatting information for email advertisements to be sent to users; financial information related to bank accounts and/or other types of financial accounts (such as e-payment accounts such as PayPal accounts) for receiving payments from users of the e-commerce system 100, such as account numbers and/or other identifying information; and/or other information. The vendors may include any type or number of vendors involved in the offering for sale items such as movie tickets, spa services, theatre events, cruises, sporting events, concerts, airline tickets, hotel reservations, etc. to name a few purely by way of example. The vendors may offer any type of item/service/event for which any type of advance purchase may be made by a user.

Users may interact with the account management module 102 via the web browser module 135. The web browser module 135 provides functionality for user access to the e-commerce system 100. Users may register with the e-commerce system 100 by interacting with the web browser module via their web browser. The web browser module 135, in turn, interfaces with the account management mod-

ule 102. This permits the account management module 102 and the web browser module 135 to support individualized functionality for each user. It should be noted that the web browser module 135 and the vendor interface system may comprise a single module.

As will be described in detail hereinafter, the account management module 102 may track the shopping trends or statistics of the user including items browsed, items put on a watch list and/or items that were eventually purchased either for the user or as gifts for other people. Where a user is a travel agent professional, for example, the user may configure the account management module to track shopping trends or statistics on a customer-by-customer basis. The trends or statistics may include length of time that a user spends on an item or certain category of items, the number of "clicks" on an item or certain category of items, (such as reviewing other user reviews, comparing several items or the like), the amount of time spent on viewing the item or type of item, or the number of times a user "returns" to an item or type of item during one or more shopping experiences. This allows the tracking and statistical determination of the likes and dislikes of each user. The account management module 102 may retain certain information regarding each user that the user directly inputs; for example, in response to one, or a series of website product questionnaires or surveys. All of this user-specific information is collected and stored.

A user of the user client device 120 may provide information to the account management module 102 via the web browser module 135 such as: an email address associated with the user; financial information associated with the user, such as a credit card information (such as a credit card number and expiration date), and/or other information related to bank accounts and/or other types of financial accounts (such as e-payment accounts) that may be used to make payments to vendors via the e-commerce system 100; shipping address information; billing address information; preferences regarding which vendors the user would like to receive email advertisements from; and/or other information.

In a separate embodiment, the financial information of a user, such as credit card information, may be supplied to the account management module 102 for analysis of user preferences. This permits the account management module 102 to analyze all of the information for user preferences and to suggest items in which the user may be interested. These suggestions may be emailed to the user for adding to a watchlist as will be described in detail hereinafter.

The account management module 102 may, via the database module 104, store information received from the user device 120 and/or the vendor website 130a-130n in the e-commerce database 106. The account management module 102 may also add information to the e-commerce database 106 when users and vendors register with the e-commerce system 100. This information may include as user identifiers, vendor identifiers, and other identifying information.

The message processing module 110, (in conjunction with the email interface module 112), may generate advertisement or product update email messages for users that are registered with the e-commerce system 100, such as the users of the user devices 120a-120n. The advertisement or product update email messages may be HyperText Markup Language (HTML) email messages, Rich Text Format (RTF) email messages, and/or may be defined according to any other appropriate format. The advertisement or product update email messages may include Uniform Resource Identifiers (URIs) or hyperlinks that are defined according to

the mailto URI scheme. Each mailto URI or hyperlink may describe an email message that may be generated by an email client module (such as the email client module 122) when that URI or hyperlink is selected.

The generated message may include a number of parameters that indicate, for example, an item that was advertised in the advertisement email that the user wishes to purchase or reserve for future purchase when the item becomes available. In the context of movie tickets, for example, the generated message may include an advertisement indicating that a particular movie is coming to theaters in a few weeks and that tickets are going on sale today. The generated message may alternatively include a number of parameters that indicate, for example, updated information regarding a product that a user has been tracking for possible future purchase. The generated message may then be sent from the e-commerce system 100 to users from the email interface module 112. By way of further example, again in the context of movie tickets, the email may include information indicating that the available number of tickets for a movie at a particular location, date, and/or time are becoming low and providing the option to purchase immediately.

The email interface module 112 may be configured to use one or more email accounts that are associated with the e-commerce system 100, and to send and receive messages associated with the one or more email accounts. The email interface module 112 and/or the email client module 122 in the user client device 120 may communicate email messages using technologies such as Simple Mail Transfer Protocol (SMTP), Post Office Protocol (POP) technology, Internet Message Access Protocol (IMAP), Remote Procedure Call (RPC) technology, HyperText Transfer Protocol (HTTP), and/or other appropriate technologies. The interface module 112 and/or the email client module 122 may use these technologies to transmit and/or receive email messages via one or more email servers (not depicted).

The email client module 122 may be, or include, an email client such as Microsoft Outlook, Thunderbird, a web browser application, or any other client application for the communication of email messages. In an instance where the email client module 122 is or includes a web browser application, the email client module 122 may be the same web browser described above that may be used to communicate with the account management module 102; alternatively, the email client module 122 and the web browser described above that may be used to communicate with the account management module 102 may be different. As will be described in detail hereinafter, the user, through the email client 122 on the user device 120a, may take one or more actions, such as replying to the email, selecting one or more reply-to links in the email, adding one or more items from the email to a watchlist or the like.

The payment processing system 136 handles financial transactions associated with the purchase of an item or service, or a donation. The payment processing system 136 may be, as one example, a payment gateway operated by a financial institution. In an instance where the payment processing system 136 is a payment gateway, the payment processing system 136 may have a connection to one or more banking networks (not depicted) that it may use to process payments. The order execution module 108 may communicate with the payment processing system 136 using technology such as Transport Layer Security (TLS) or Secure Sockets Layer (SSL) technology. The vendor order fulfillment system 138 may be an order management system (OMS), Enterprise Resource Planning (ERP), supply chain

management, electronic purchasing system, inventory control system, or any other appropriate system for fulfilling orders.

The e-commerce database 106 may store information such as information that describes and/or comprises email campaigns, email advertisements that may be sent to users, user information, vendor information, product information, product information updates and history, product availability information, order status information, and/or other information. Further, the e-commerce database 106 may store information that indicates correspondences between different email campaigns, advertisements, users, vendors, products, information related to order statuses, and/or other information. For each email campaign, the e-commerce database 106 may store information that include an identifier of the vendor associated with the campaign, identifiers of the products associated with the campaign, and/or other information. For each order that is placed with the e-commerce system 100, the e-commerce database 106 may store information such as an identifier of the user that placed the order, when the order was placed, an identifier of the vendor associated with the order, and/or other information.

For each product described in the e-commerce database 106, the e-commerce database 106 may store information that includes an identifier of the product, a description of the product, a title of the product, an identifier of the vendor associated with the product, a cost of the product, an available number of tickets for the user to avail themselves of the product, potential upgrades/downgrades to the product (e.g. in the airline ticket context first class and coach class pricing options may be provided, a date on which the product is available (e.g. concert tickets at this price are for attending the concert between date X and Y), a date on which tickets for a particular product are available for purchase, a date on which tickets for a particular product are available to be reserved, and/or other information.

The e-commerce database 106 may be spread across one or any number of computer-readable storage media (not depicted). For example, a portion of the e-commerce database may reside on a vendor's website and may be accessed through the vendor interface system 137. The e-commerce database 106 may be or include, for example, a relational database, a hierarchical database, an object-oriented database, a flat file, a spreadsheet, or a structured file. The database module 104 may interface with a database management system (not depicted) in order to add data to, modify data in, or obtain data from the e-commerce database 106. Alternatively or additionally, the database module 104 may perform database driver and/or database client functionality to interact with the database management system. The database management system may be based on a technology such as Microsoft SQL Server, Microsoft Access, MySQL, PostgreSQL, Oracle Relational Database Management System (RDBMS), Not Only SQL (NoSQL), or any other appropriate technology.

The website module 107 provides all of the functionality to support a working website. These functions include displaying a plurality of web pages to a user and providing the standard functionality of a webpage such as graphics and video, links to different parts of the website, user login and authentication, support for purchases, security features and an interface to user support. The website module 107 provides the graphical interface and user experience to the web user, and supports the functionality as will be described in detail hereinafter.

FIG. 2 shows a website displaying a plurality of example products for which tickets may be purchased. The products

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shown by example in the website of FIG. 2 are not at all limiting as the products may be any type of item/service/event for which any type of purchase may be made by a user. Each product is associated with a plurality of attributes, (which are not shown in FIG. 2). The attributes may any type of data related to a particular product. For example, the attributes may include one or more words, numbers or other identifiers that may be used to describe, or may be associated with, the item. In one example, in the context of a sporting event, the attributes may include stadium location, identities of the participating teams and/or individuals competing in the sporting event, identification of seat location, date/time of the sporting event, price, etc. As those of skill in the art would understand, there may also be many attributes associated with each consumer item that are not intended for the users to utilize, but rather they are for the website proprietor or vendors to utilize. Any, or all, of these attributes may be used for tracking and evaluation.

For example, a "program" attribute may be used by a vendor to track the success of a vendor's current promotional effort to sell out a particular concert, or movie showing or sporting event. Such information may be used to measure the vendor's success with the same products offered in different cities (i.e. Chicago versus Philadelphia) and/or as measured against different vendors selling the same products.

By further example, a "linking" attribute may be used by the website proprietor to track the success of their effort to "upsell" to the user, for example from a less expensive option (e.g. back row seating) to a more expensive item (e.g. front row seating), or to have the user buy accessories to the item that the user has selected (e.g. users attending a Bruce Springsteen concert may be offered various types of memorabilia). These attributes will be described in greater detail hereinafter.

Referring back to FIG. 2, the user may browse through the items, comparing features among different items. Having looked at all of the attributes, the user may view a particular item and, concluding that this item is the item they were looking for, select the item, (such as hotel reservations in San Diego at the Grand Hyatt). They may select the item as indicated by placing the cursor over the picture of the item or the select button and clicking on it. The selection chosen for purposes of describing this example is a movie entitled The Hunger Games.

This selection brings the user to another web page with more detailed information regarding the item as shown in FIG. 3. For example, the user may read other user reviews, see the current price, and review the location, date and times that are available. However, the user may not yet be ready to commit to location, date and/or time or the currently available locations, dates, and/or times may not work within the user's schedule. Accordingly, instead of putting the item into their shopping basket and proceeding through to purchase, the user may select the watch list button, indicated in FIG. 3 as "Watch".

Selection to put the item on the watch list opens the user's watch list, which is shown in FIG. 4. The watchlist keeps track of the item and all of the relevant associated information at the time of selection by the user. It should be noted that the amount and type of information that is displayed on the watchlist is configurable by the user. Therefore, more or less information as desired by the user may be displayed or stored. In the example shown in FIG. 4, the picture, the manufacturer, the type, the price and the watchlist add date are all stored. The user may create a more extensive watch list by repeating the method described with reference to

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FIGS. 2-4 and adding more items. This more extensive watch list is shown in FIG. 5 by way of example.

Referring to FIG. 5 additional items are shown that the user has put on the watchlist, including a Bruce Springsteen concert and a cruise to Alaska. All of these items and their associated information are stored for later use by the user or the vendor as will be described in detail hereinafter. The user may exit the website by selecting the "Exit Website" button, or may resume shopping by selecting the "Resume Shopping" button.

In another embodiment, the first time that a user creates a watch list, they may be taken to a "watchlist parameter" screen as shown in FIG. 6. This screen permits the user to configure the features of the watchlist to suit their needs. The user must first enter the email address to which they want the watchlist to be sent. Alternatively, the system 100 may "remember" the user's website, and autofill that particular email address (and the remainder of this information to be described herein with reference to FIG. 6). Next, the user selects the frequency that they want to watchlist to be emailed, for example hourly, daily, weekly monthly or upon changes. Once a watch list is generated, for example the one shown is FIG. 5, it may be stored in the e-commerce database 106. As will be discussed in greater detail hereinafter, the system 100 uses the watch list, and optionally the user's preferences, to generate an active watch list.

Still referring to FIG. 6, the e-commerce system 100 may also be configured to enable a user or the system operator to configure a user watchlist to include a list of friends 609 of the user who also are associated with the e-commerce system 100 or who otherwise have granted permission to enable themselves to be added to the users list of friends. As also described below, this functionality enables an email to be generated and delivered to the user on a condition that one of the user's friends 609 has purchased tickets to a product included in the user's watchlist.

If the user selects hourly, (for example, in the case of an auction), daily, weekly, or monthly, the watchlist is emailed to them on the selected periodic basis. In contrast, the "upon changes" selection permits the user to receive an emailed watchlist when some aspect of the watchlist has changed, as is shown in FIG. 7. The "other" option permits the user to select when they want to be notified, including a specific periodicity, selected dates, or specific times or occasions.

Referring to FIG. 7, the watchlist as shown is emailed in response to the "upon changes" selection, and the watchlist indicates two changes: a change to the price of the first item (ticket to the movie The Hunger Games), and an additional available upgrade of the second item (e.g. backstage passes to the Bruce Springsteen concert). The user may take action by buying one of the items on the watchlist or deleting one of the items, or may take no action.

It should be noted that the user may create a plurality of different watchlists. For example, the user may create a movie watchlist comprising a plurality of movies, a travel watchlist comprising various hotel reservations, cruises, flights, etc., a dining watchlist with various dining reservations, and/or a relaxation watchlist with various spa services, etc. All of these watchlists may be independently created, configured and emailed to the user.

The auto search feature shown in FIG. 6 permits the system 100 to automatically search the website for items that are similar to the items that the user selects for placing on their watchlist. The user may be notified separately of these additional items via email or via a separate section of the

watchlist. The system **100** suggests other similar alternatives to the user and asks the user for permission to add these items on their watchlist.

The auto add feature shown in FIG. 6 goes one step further than the auto search feature, in that it automatically adds the similar items to the website without prior authorization from the user. As would be understood by those of skill in the art, additional limitations may be set in place as shown in FIG. 6 to ensure that too many additional items may not be added. By way of illustration, a limitation of 2 additional similar items per selected item, or 5 additional items overall may be set by the user. The list of friends **609** also described above in connection with FIG. 6 enables a user to receive emails notifying the user when one of his/her friends purchases tickets to a product included in the user's watchlist. The list of friends **609** may be configured such that certain friends are associated with certain products within the user's watchlist. For example, the user may wish to know if Jay purchases tickets to a sporting event but not a movie.

The method of this embodiment is shown with reference to FIG. 8. The user browses the selected website and searches for desired items (**802**). The user selects the desired item(s) to put on their watchlist (**804**). A determination is made to see if a watchlist was already previously created (**806**). If a watchlist has not been created, a watchlist is created, the user configures the watchlist in accordance with their preferences, and the item(s) are put on the watchlist (**808, 810, 812**). It should be noted that step **806** may be optional in that default setting may be used to create a watchlist. Therefore, in this alternative embodiment, the watchlist is automatically created by the e-commerce system **100** when a first watchlist item is added.

If the watchlist was already created, the method skips to the step of putting items on the watchlist (**812**). The watchlist is then stored (**814**). The watchlist is then emailed to the user on the frequency selected during the user's configuration of their watchlist, or on a default frequency or setting (**816**).

It should be understood by those of skill in the art that the present e-commerce system **100** is flexible to utilize in a variety of different manners. In one example, a user may put one or more items that have a limited quantity or limited availability duration. If a website provides quantity or availability duration information along with the other information provided about an item, the user may also put such an item on their watchlist for tracking. One such example may be movie tickets for a particular movie at a particular time. The user may put such an item on their watchlist, and as either the movie time approaches, or the tickets are within a predetermined number of tickets from becoming sold out, the user may be notified by receiving the transmitted watchlist with the updated information. In another embodiment, the user may be notified regarding how fast (or slow) tickets are being sold for an event on their watchlist. For example, where an available amount of tickets reduces from say for example 90% to 30% in say for example 30 minutes, the system is able to be configured either by the system operator or by the user to generate and send an email informing the user of this fact. Similarly, the system may be configured by either the system operator or the user to trigger an email alert when an available amount of tickets drops to say 20% (or any percentage). Furthermore, either the system operator or the user may configure the system to combine these two features together. For example, the system may be configured by either the system operator or the user to generate an email to the user when the amount of available tickets drops to say 20% with an override wherein an email will also be

generated in the event that the tickets are selling particularly fast. The override may be triggered in any appropriate manner such as dropping from one percentage of availability to another within a predetermined time frame or, for example, a rate of tickets sold per time (e.g. **5000** tickets sold in first hour of availability or over the course of some predetermined time frame). As described above, the watchlist may also be configured to include links to friends such that an alert may be provided on a condition that one of the user's friends has purchased tickets to an event on the user's watchlist.

Likewise, a user may put items on their watchlist that are not yet available, such as show, concert or sporting event tickets. Once these tickets become available the user may be notified via the parameters set forth on their watchlist.

Referring to FIG. 9, a second embodiment is shown. This embodiment is similar to the aforescribed embodiment of FIGS. 1-7, except that the watchlist of this embodiment may be generated from items on a plurality of websites. Each of the watchlist items may be from different websites as is graphically illustrated in FIG. 9. The user may browse a plurality of websites wherein as the user browses the websites, and selects one or more items, these items are placed in their one or more watchlists.

This functionality provides the user with exceptional convenience in tracking a plurality of items over a plurality of websites in a single, central location, while receiving updates regarding those items in a manner in which the user has selected.

There are at least two alternatives for permitting items from multiple websites to be added to a watchlist; a first alternative captures the information of an item that the user wants to place on their watchlist from the particular website, and stores this information in the e-commerce system **100**; and the second alternative utilizes functionality (called WOW, for "widget on a website") at each website to communicate with the e-commerce system **100** and transmit this information and any updated information to the e-commerce system **100**. These two alternatives will be explained in detail hereinafter.

In the first alternative, the user browses one or more websites, and when they have identified an item that they want to add to their watchlist, they perform a "screen capture", on the particular item. This information must be saved, and then later pasted into an email or a screen of the e-commerce system **100**. The screen is scrubbed for all relevant information and added to the watchlist. The e-commerce system **100** may then periodically send out one or more web crawlers to update this information on a basis as set forth by the user. One of skill in the art would appreciate that this alternative may meet with mixed results depending upon the information that is available on each website.

In the second alternative, the WOW functionality is included on each "participating" website. A participating website is a website that has incorporated WOW functionality, that will automatically transmit the desired information directly to the e-commerce system **100**. This permits the information for adding to the watchlist to be seamlessly added and also seamlessly updated as selected by the user.

Although features and elements are described above in particular combinations, one of ordinary skill in the art will appreciate that each feature or element can be used alone or in any combination with the other features and elements. In addition, the methods described herein may be implemented in a computer program, software, or firmware incorporated in a computer-readable medium for execution by a computer or processor. Examples of computer-readable media include

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electronic signals (transmitted over wired or wireless connections) and computer-readable storage media. Examples of computer-readable storage media include, but are not limited to, a read only memory (ROM), a random access memory (RAM), a register, cache memory, semiconductor memory devices, magnetic media such as internal hard disks and removable disks, magneto-optical media, and optical media such as CD-ROM disks, and digital versatile disks (DVDs). A processor in association with software may be used to implement a radio frequency transceiver for use in a WTRU, UE, terminal, base station, RNC, or any host computer.

FIG. 10 shows an example system 1300 that may be used to implement features described above with respect to FIGS. 1-9. The example system 1300 includes an e-commerce server 1350, a client device 1370, and one or more networks 1380.

The e-commerce server 1350 may include at least one processor 1352, memory device 1354, network interface 1356, and storage device 1358. The client device 1370 may include at least one processor 1372, memory device 1374, network interface 1376, input device interface 1375, display device interface 1377, and storage device 1378.

The e-commerce server 1350 may be configured to perform any feature or combination of features described above with reference to FIGS. 1-9 as performed by the account management module 102, database module 104, order execution module 108, message processing module 110, and/or email interface module 112. The client device 1370 may be configured to perform any feature or combination of features described above with reference to FIGS. 1-9 as performed by the email client module 122 and/or the web browser module in the customer client device 120. The client device 1370 may be, for example, a desktop computer, a laptop computer, a netbook, a tablet computer, a personal digital assistant (PDA), a cellular phone, or any other appropriate device.

Each or any of the memory devices 1354, 1374 may be or include a device such as a Dynamic Random Access Memory (D-RAM), Static RAM (S-RAM), or other RAM or a flash memory. Each or any of the storage devices 1358, 1378 may be or include a hard disk, a magneto-optical medium, an optical medium such as a CD-ROM, a digital versatile disk (DVDs), or Blu-Ray disc (BD), or other type of device for electronic data storage. The storage device 1358 in the e-commerce server 1350 may store the information or any subset of the information described above with reference to FIGS. 1-9 as stored in the e-commerce database 106.

Each or any of the network interfaces 1356, 1376 may be, for example, a communications port, a wired transceiver, or a wireless transceiver. Each or any of the network interfaces 1356, 1376 may be capable of communicating using technologies such as Ethernet, fiber optics, microwave, xDSL (Digital Subscriber Line), Wireless Local Area Network (WLAN) technology, wireless cellular technology, and/or any other appropriate technology. The network interfaces 1356, 1376 may be used by the e-commerce server 1350 and/or the client device 1370 to communicate via the one or more networks 1380. The network interface in the e-commerce server 1350 may be configured to communicate any of the messages and/or other information described above with reference to FIGS. 1-9 as communicated by the account management module 102, database module 104, order execution module 108, message processing module 110, and/or email interface module 112. The network interface 1376 in the client device 1370 may be configured to com-

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municate any of the messages and/or other information described above with reference to FIGS. 1-10 as communicated by the email client module 122 and/or by the web browser module in the customer client device 120 used for communicating with the account management module 102.

The one or more networks 1380 may include one or more private networks and/or one or more public networks such as the Internet. The one or more networks 1380 may be based on wired and/or wireless networking technologies.

The input device interface 1375 in the client device 1370 may be an interface configured to receive input from an input device such as a keyboard, a mouse, a trackball, a scanner, a touch screen, a touch pad, a stylus pad, and/or other device. The input device interface 1375 may operate using a technology such as Universal Serial Bus (USB), PS/2, Bluetooth, infrared, and/or other appropriate technology. The input device interface 1375 may be configured to receive any or any combination of the user input described above with reference to FIGS. 1-9 as received by the email client module 122 and/or by the web browser module in the customer client device 120 used for communicating with the account management module 102.

The display device interface 1377 may be an interface configured to communicate data to a display device (not depicted). The display device interface 1377 may operate using technology such as Video Graphics Array (VGA), Super VGA (S-VGA), Digital Visual Interface (DVI), High-Definition Multimedia Interface (HDMI), or other appropriate technology. The client device 1370 may include or be connected to a display device (not depicted) via the display device interface 1377. The display device may be, for example, a monitor or television display, a plasma display, a liquid crystal display (LCD), and/or a display based on a technology such as front or rear projection, light emitting diodes (LEDs), organic light-emitting diodes (OLEDs), or Digital Light Processing (DLP). The display device may be configured to display, based on data received via the display device interface 1377, any display elements described above with reference to FIGS. 1-9 as displayed by the email client module 122 and/or by the web browser module in the customer client device.

The memory device 1354 and/or the storage device 1358 of the e-commerce server 1350 may store instructions which, when executed by the at least one processor 1352, cause the at least one processor 1352 to perform any feature or combination of features described above with reference to FIGS. 1-9 as performed by the account management module 102, database module 104, order execution module 108, message processing module 110, and/or email interface module 112. The memory device 1374 and/or the storage device 1378 of the client device 1370 may store instructions which, when executed by the at least one processor 1372, cause the at least one processor 1372 to perform any feature or combination of features described above with reference to FIGS. 1-9 as performed by the email client module 122 and/or by the web browser module in the customer client device 120 used for communicating with the account management module 102.

Although FIG. 10 shows a single e-commerce server 1350 and a single client device 1370, the functionality described above with reference to FIG. 10 as performed by the e-commerce server 1350 and/or the client device 1370 may be distributed across any number of devices that possess similar characteristics and/or that include similar components 1352, 1354, 1356, 1358, 1372, 1374, 1375, 1376, 1377 as the e-commerce server 1350 and/or the client device 1370.

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While examples are provided above with respect to the Figures which includes the use of email communications, the features described above with respect to the Figures may also be implemented using different types of communications technology. For example, the features described above with reference to the Figures may also be implemented, mutatis mutandis, using technologies that include any one or any combination of: email; instant messaging; enterprise messaging; Short Message Service (SMS); Multimedia Messaging Service (MMS); and/or any other appropriate technology for the electronic communication of data.

As used herein, the term “vendor” broadly refers to and is not limited to a business, a non-profit organization, any other type of organization, and/or an individual person. One example of a business is an online retailer. Examples of non-profit organizations include charitable organizations, educational institutions such as schools and universities, arts organizations, and recreational organizations. Examples of recreational organizations include historical or preservation societies, local recreational sports leagues.

As used herein, the term “processor” broadly refers to and is not limited to a single- or multi-core general purpose processor, a special purpose processor, a conventional processor, a digital signal processor (DSP), a plurality of microprocessors, one or more microprocessors in association with a DSP core, a controller, a microcontroller, one or more Application Specific Integrated Circuits (ASICs), one or more Field Programmable Gate Array (FPGA) circuits, any other type of integrated circuit (IC), a system-on-a-chip (SOC), and/or a state machine.

As used to herein, the term “computer-readable storage medium” broadly refers to and is not limited to a register, a cache memory, a ROM, a semiconductor memory device (such as a D-RAM, S-RAM, or other RAM), a magnetic medium such as a flash memory, a hard disk, a magneto-optical medium, an optical medium such as a CD-ROM, a DVDs, or BD, or other type of device for electronic data storage.

Although features and elements are described above in particular combinations, each feature or element can be used alone or in any combination with or without the other features and elements. For example, each feature or element as described above with reference to the Figures may be used alone without the other features and elements or in various combinations with or without other features and elements. Sub-elements of the methods and features described above with reference to the Figures may be performed in any arbitrary order (including concurrently), in any combination or sub-combination.

What is claimed is:

1. A system that improves e-commerce transactions performed across a plurality of different e-commerce websites, the system comprising:

a communication interface that is communicatively coupled to a user device and the plurality of different e-commerce websites via a network, wherein the plurality of different e-commerce websites includes a first e-commerce website and a second e-commerce website;

a memory;

a processor that is communicatively coupled to the communication interface and the memory, wherein the processor:

receives, using the communication interface, a selection of a new item from a user via the first e-commerce website,

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automatically adds the new item to a watchlist of the user, wherein the watchlist contains items from the plurality of different e-commerce websites and is periodically updated based on external transaction data,

identifies, using the memory, an additional user that is among a list of friends designated by the user,

detects, in real-time, that the additional user has purchased, from the second e-commerce website, at least one item included in the watchlist, wherein the purchase is identified by analyzing transaction confirmation signals received from external vendor platforms; and

generates and sends, using the communication interface, an email message to an email address of the user in response to detecting that the additional user has purchased the at least one item included in the watchlist, wherein the email message includes a dynamically generated purchase link that provides direct access to the second e-commerce website for immediate purchase of the at least one item at a currently available price.

2. The system of claim 1, wherein the new item is selected by the user via a link on the first e-commerce website.

3. The system of claim 1, wherein the new item is selected by the user via an initial email sent to the user.

4. The system of claim 1, wherein the processor further: determines an additional item to add to the watchlist based on the new item and preferences of the user stored in the memory.

5. A method that improves e-commerce transactions performed across a plurality of different e-commerce websites, the method comprising:

receiving, by a processor, a selection of a new item from a user from a first e-commerce website among the plurality of different e-commerce websites, wherein the first e-commerce website is selected from the plurality of different e-commerce websites;

automatically adding, by the processor, the new item to a watchlist of the user, wherein the watchlist contains items from the plurality of different e-commerce websites and is periodically updated based on external transaction data;

identifying, by the processor, an additional user that is among a list of friends designated by the user,

detecting, by the processor, that the additional user has made a purchase of at least one item included in the watchlist from a second e-commerce website in real-time, wherein the second e-commerce website is among the plurality of different e-commerce websites and the purchase is identified by analyzing transaction confirmation signals received from external vendor platforms; and

generating and sending, by the processor, an email message to an email address of the user in response to detecting that the additional user has purchased the at least one item included in the watchlist, wherein the email message includes a dynamically generated purchase link that provides direct access to the second e-commerce website for immediate purchase of the at least one item at a currently available price.

6. The method of claim 5, wherein the new item is selected by the user via a link on the first e-commerce website.

7. The method of claim 5, wherein the new item is selected by the user via an initial email sent to the user.

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8. The method of claim 5, further comprising:
determining, by the processor, an additional item to add to
the watchlist based on the new item and preferences of
the user.

9. A non-transitory computer readable storage medium 5
storing instructions for improving e-commerce transactions
performed across a plurality of different e-commerce web-
sites, the instructions when executed by a processor of a
computer system, cause the processor to execute a method 10
that comprises:

receiving, by the processor, a selection of a new item from
a user via a first e-commerce website, wherein the first
e-commerce website is from among the plurality of
different e-commerce websites;

automatically adding, by the processor, the new item to a 15
watchlist of the user, wherein the watchlist contains
items from the plurality of different e-commerce web-
sites;

identifying, by the processor, an additional user that is
among a list of friends designated by the user;

detecting, by the processor, that the additional user has
made a purchased of at least one item included in the
watchlist from a second e-commerce website in real-
time, wherein the second e-commerce website is

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among the plurality of different e-commerce websites
and the purchase is identified by analyzing transaction
confirmation signals received from external vendor
platforms; and

generating and sending, by the processor, an email mes-
sage to an email address of the user in response to
detecting that the additional user has purchased the at
least one item included in the watchlist, wherein the
email message includes a dynamically generated pur-
chase link that provides direct access to the second
e-commerce website for immediate purchase of the at
least one item at a currently available price.

10. The non-transitory computer readable storage medium
of claim 9, wherein the new item is selected by the user via
a link on the first e-commerce website.

11. The non-transitory computer readable storage medium
of claim 9, wherein the new item is selected by the user via
an initial email sent to the user.

12. The non-transitory computer readable storage medium
of claim 9, wherein the method further comprises:
determining, by the processor, an additional item to add to
the watchlist based on the new item and preferences of
the user.

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