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Ghadialy et al.(10) **Pub. No.: US 2014/0278979 A1**(43) **Pub. Date: Sep. 18, 2014**(54) **APPARATUS AND METHOD FOR
PROVIDING A MARKETING SERVICE**(60) Provisional application No. 60/749,256, filed on Dec.
8, 2005.(71) Applicant: **MyBuys, Inc.**, San Mateo, CA (US)**Publication Classification**(72) Inventors: **Majeed Ghadialy**, Foster City, CA
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Burlingame, CA (US)(51) **Int. Cl.**
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CPC **G06Q 30/0255** (2013.01); **G06Q 30/0258**
(2013.01)
USPC **705/14.53**(73) Assignee: **MyBuys, Inc.**, San Mateo, CA (US)(21) Appl. No.: **14/290,667**(57) **ABSTRACT**(22) Filed: **May 29, 2014**

Apparatus and method for providing a marketing service are described. In one embodiment, a computer-readable storage medium includes: (1) a preferences module that is configured to collect a set of preferences of a user; (2) a monitoring module that is configured to monitor a web site based on the set of preferences so as to identify relevant content; and (3) a notification module that is configured to generate a message alerting the user of the relevant content.

Related U.S. Application Data(63) Continuation of application No. 13/539,202, filed on
Jun. 29, 2012, now Pat. No. 8,744,928, which is a
continuation of application No. 11/608,678, filed on
Dec. 8, 2006, now Pat. No. 8,234,375.

400

1 Item No. 79525

Please alert me about new wines:

vine type Cabernet Sauvignon	region Napa Valley, California
points 0 to 100	price \$ 0 to \$ 25

402

add search criteria to your alert listing (optional)

enter a winery name, year, or even a tasting description
example: Franciscan
example: "red berry" 2004

Send my wine.com alerts to:

☐ ☒ name@example.com [Privacy Policy](#)

Verify: name@example.com

☐ MY YAHOO! Home Page (What is this?)

☐ MY MSN Home Page (What is this?)

☐ ☒ RSS Reader (What is this?)

404

Powered by
RubiconSoft

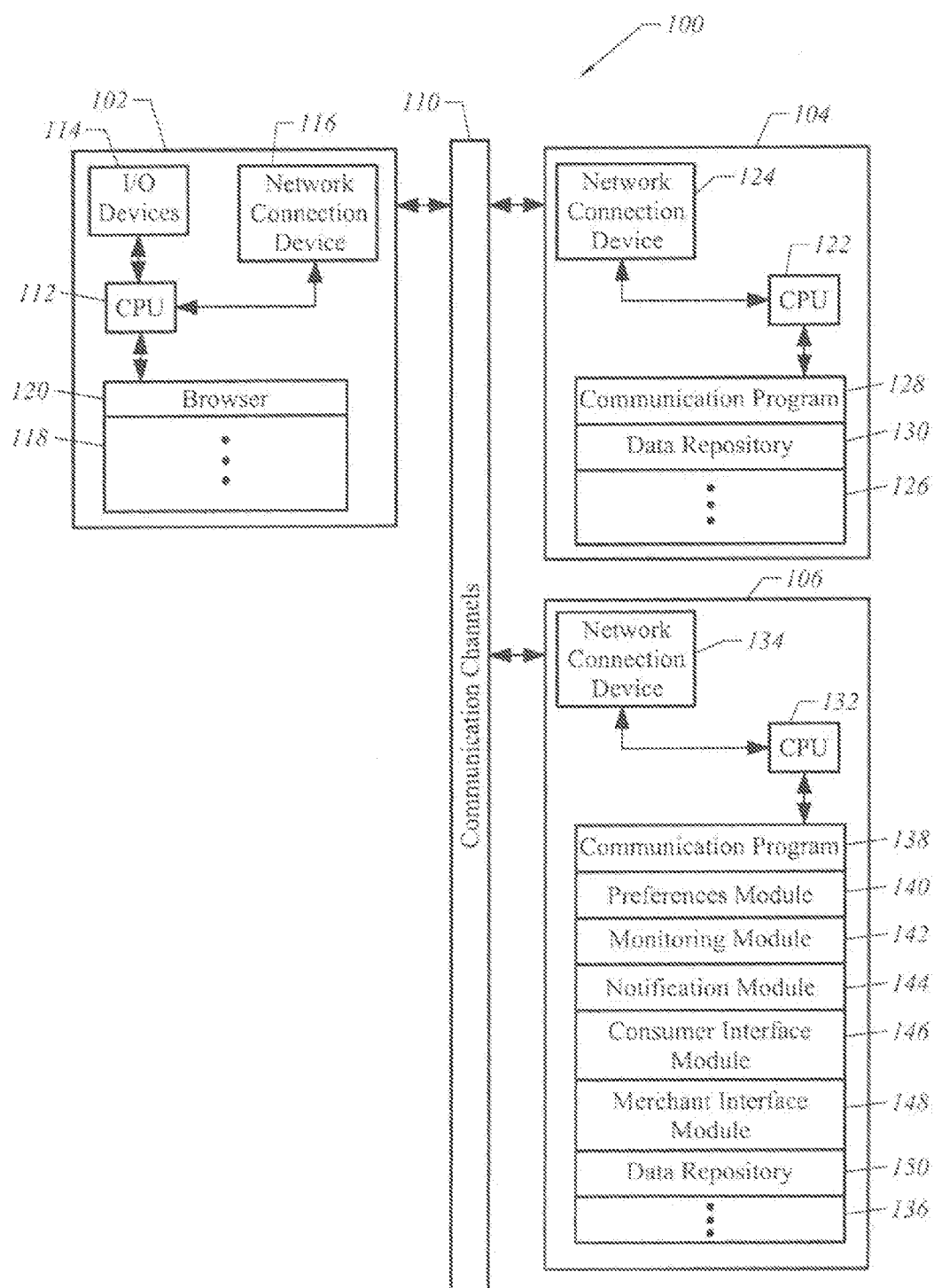


FIG. 1

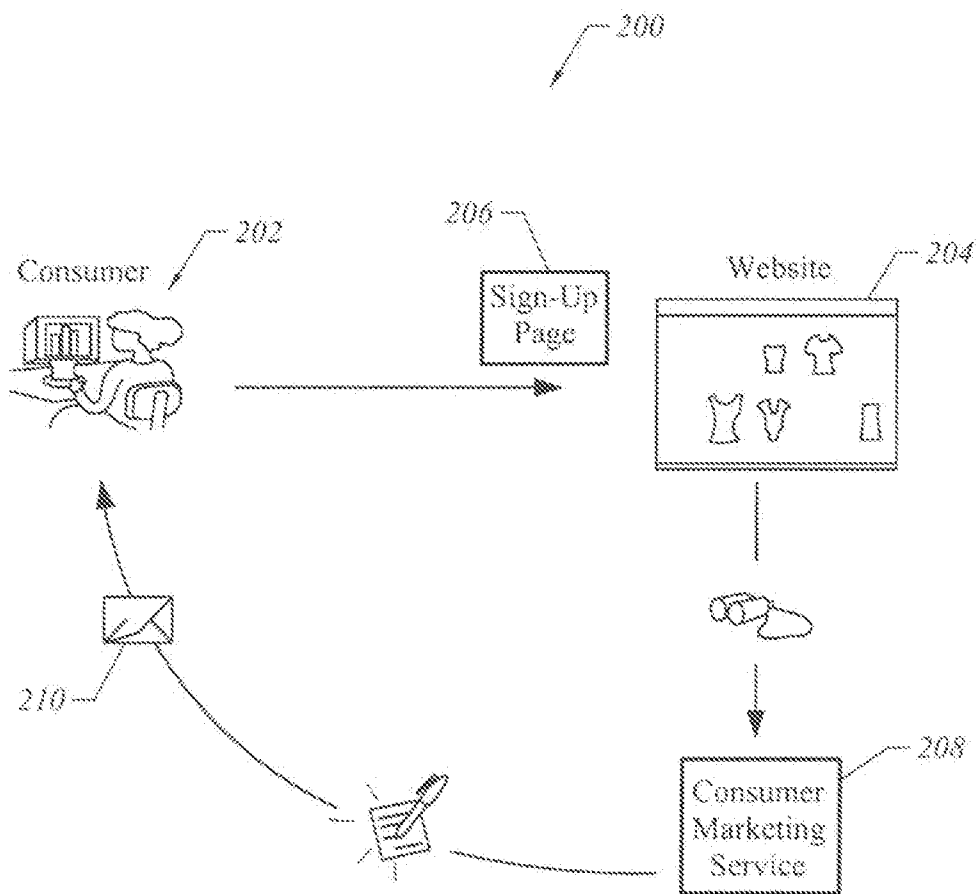
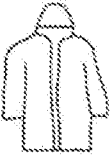


FIG. 2

300

Inventory Alert

Unavailable



Men's Regular GORE-TEX Slicker
Size: L. Item # 9377AF4

Were sorry, this item is temporarily unavailable. You may be interested in a similar item or sign up for a back-in-stock reminder below:

☒ Notify me when back in stock online

☐ Notify me when back in stock in a store near zip:

OK

FIG. 3


400

1

▼

add to cart

Item No. 79525

 alert me about wines like this

▼

Please alert me about new wines:

<div style="border: 1px solid black; padding: 2px;">vine type</div> <div style="border: 1px solid black; padding: 2px;">Cabernet Sauvignon</div> <div style="text-align: right;">▼</div>	<div style="border: 1px solid black; padding: 2px;">region</div> <div style="border: 1px solid black; padding: 2px;">Napa Valley, California</div> <div style="text-align: right;">▼</div>
--	--

402

<div style="border: 1px solid black; padding: 2px;">points</div> <div style="border: 1px solid black; padding: 2px;">0</div> <div style="text-align: center;">to</div> <div style="border: 1px solid black; padding: 2px;">100</div>	<div style="border: 1px solid black; padding: 2px;">price</div> <div style="border: 1px solid black; padding: 2px;">\$ 0</div> <div style="text-align: center;">to \$</div> <div style="border: 1px solid black; padding: 2px;">25</div>
--	--

add search criteria to your alert listing (optional)

enter a winery name, year, or even a tasting description
example: Fransiscan
example: "red berry" 2004

Send my wine.com alerts to:

☒ ☒

name@example.com

[Privacy Policy](#)

Verify: name@example.com

☐ MY YAHOO! Home Page ([What is this?](#))

☐ MY MSN Home Page ([What is this?](#))


☐

RSS

 Reader ([What is this?](#))

Cancel

OK

 Powered by
RubiconSoft

404

FIG. 4

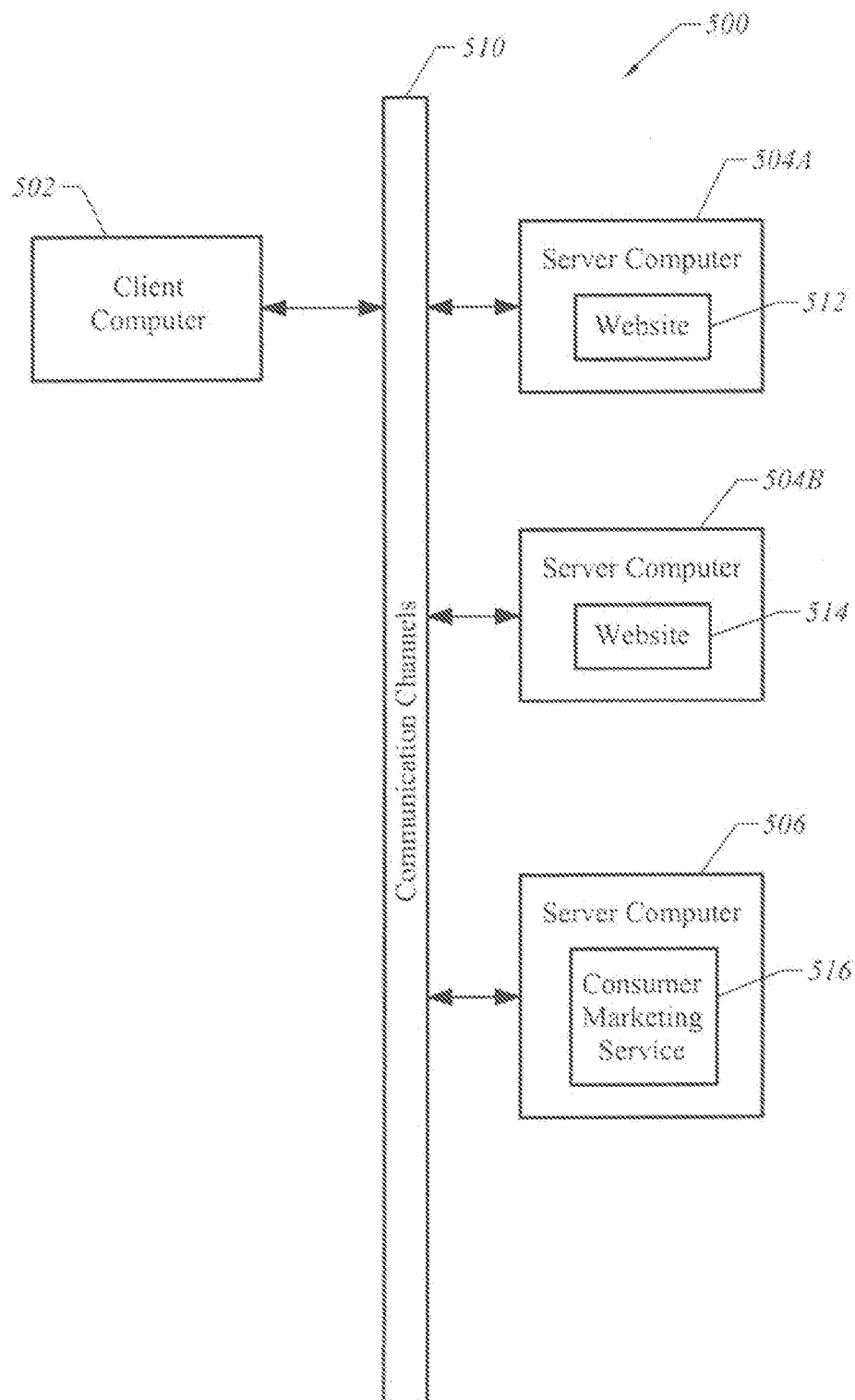


FIG. 5

APPARATUS AND METHOD FOR PROVIDING A MARKETING SERVICE

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application is a continuation of U.S. Nonprovisional patent application Ser. No. 13/539,202, filed on Jun. 29, 2012, entitled “Apparatus and Method for Providing a Marketing Service” which is a continuation of U.S. Nonprovisional patent application Ser. No. 11/608,678, filed on Dec. 8, 2006, entitled “Apparatus and Method for Providing a Marketing Service” which claims the benefit of U.S. Provisional Patent Application Ser. No. 60/749,256, filed on Dec. 8, 2005, entitled “Apparatus, System, and Method for Providing On-Demand Consumer Marketing Service” the disclosures of which are incorporated herein by reference in their entirety.

BRIEF DESCRIPTION OF THE INVENTION

[0002] The invention relates generally to marketing. More particularly, the invention relates to an apparatus and method for providing a marketing service.

BACKGROUND OF THE INVENTION

[0003] The Internet is a large collection of computers operated using a client-server computer network model. In a client-server computer network, a client computer requests information from a server computer. In response, the server computer provides the requested information to the client computer. In some instances, the server computer can be operated as a web site, and can provide the requested information in the form of web pages. Server computers are often operated by large organizations, such as commercial organizations, governmental units, and educational organizations, while client computers are often operated by individuals.

[0004] With the increasing popularity of the Internet, merchants have set up web sites for selling products, which can include tangible products in the form of goods as well as intangible products in the form of services. By accessing these web sites, consumers can view information regarding various products, and can place purchase orders for particular products of interest. In an effort to enhance sales and promote customer satisfaction and loyalty, merchants operating web sites have implemented marketing campaigns to reach out to existing or potential customers. Unfortunately, the design and execution of traditional marketing campaigns can be time-consuming, and can divert limited resources of the merchants from other productive tasks. Moreover, traditional marketing campaigns can be unsuccessful in achieving their goals particularly when measured relative to the amount of time and other resources devoted to these marketing campaigns. While this lack of success results from a number of factors, the lack of personalization or tailoring of advertising material is sometimes a key factor. In particular, traditional marketing campaigns often involve sending standardized advertising material to a group of consumers, such as via mass Electronic-Mail (“E-Mail”). Unfortunately, different consumers can have widely varying preferences in terms of topics of interest, and, thus, many consumers receiving this standardized advertising material may not be interested in its contents.

[0005] It is against this background that a need arose to develop the apparatus and method described herein.

SUMMARY OF THE INVENTION

[0006] In one aspect, the invention relates to a computer-readable storage medium. In one embodiment, the computer-readable storage medium includes: (1) a preferences module that is configured to collect a set of preferences of a user; (2) a monitoring module that is configured to monitor a web site based on the set of preferences so as to identify relevant content; and (3) a notification module that is configured to generate a message alerting the user of the relevant content.

[0007] In another embodiment, the computer-readable storage medium includes executable instructions to: (1) identify a set of product preferences of a user; (2) collect product information related to a merchant; (3) analyze the product information so as to match the set of product preferences with a set of products offered by the merchant; and (4) alert the user of the set of products.

[0008] Other aspects and embodiments of the invention are also contemplated. The foregoing summary and the following detailed description are not meant to restrict the invention to any particular embodiment but are merely meant to describe some embodiments of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] For a better understanding of the nature and objects of the invention, reference should be made to the following detailed description taken in conjunction with the accompanying drawings, in which:

[0010] FIG. 1 illustrates a computer system that is implemented in accordance with an embodiment of the invention;

[0011] FIG. 2 illustrates an operational scenario according to an embodiment of the invention;

[0012] FIGS. 3 and 4 illustrate examples of user interface screens that can be provided in accordance with an embodiment of the invention; and

[0013] FIG. 5 illustrates a computer system that is implemented in accordance with another embodiment of the invention.

DETAILED DESCRIPTION

[0014] FIG. 1 illustrates a computer system **100** that is implemented in accordance with an embodiment of the invention. In the illustrated embodiment, the computer system **100** is a client-server computer network that includes at least one client computer **102** and multiple server computers, including server computers **104** and **106**. The client computer **102** and the server computers **104** and **106** are connected by a set of one or more communication channels **110**, which can include any wire or wireless communication channel. In the illustrated embodiment, the communication channels **110** allow transmission of information via any of a number of delivery options, such as Hypertext Transfer Protocol (“HTTP”), E-Mail, Instant Messaging (“IM”), Really Simple Syndication or Rich Site Summary (“RSS”), and Short Message Service (“SMS”).

[0015] As illustrated in FIG. 1, the client computer **102** is operated a user who wishes to obtain information regarding products, events, sales, or any other topics of interest. For example, the user may wish to obtain information regarding products having characteristics that match the user’s individual preferences, and, based on such information, the user may wish to purchase particular products of interest. The client computer **102** can be, for example, a desktop computer, a laptop computer, a palm-sized computer, a personal digital

assistant, or a cellular telephone. As illustrated in FIG. 1, the client computer 102 includes conventional client computer components, including a Central Processing Unit (“CPU”) 112 that is connected to a set of input/output devices 114, a network connection device 116, and a memory 118. The memory 118 stores a number of computer programs, including a browser 120. The browser 120 operates to establish conventional network communications with the server computers 104 and 106 via the network connection device 116. In addition, the browser 120 operates to visually present information received from the server computers 104 and 106. The browser 120 can be, for example, a web browser or a reader. While a single client computer 102 is illustrated in FIG. 1, it should be recognized that the operations described herein can be extended to multiple client computers operated by multiple users.

[0016] In the illustrated embodiment, the server computer 104 is operated by a merchant as a web site for selling products. As illustrated in FIG. 1, the server computer 104 includes conventional server computer components, including a CPU 122 that is connected to a network connection device 124 and a memory 126. The memory 126 stores a number of computer programs, including a communication program 128. The communication program 128 operates to establish conventional network communications with the client computer 102 and the server computer 106 via the network connection device 124. As illustrated in FIG. 1, the memory 126 also stores a data repository 130, which organizes information regarding products, events, sales, or any other topics related to activities of the merchant. At least some of this information is organized as web pages that form the web site.

[0017] As illustrated in FIG. 1, the server computer 106 is operated to facilitate the design and execution of marketing campaigns to reach out to existing or potential customers of the merchant. Similar to the server computer 104, the server computer 106 includes conventional server computer components, including a CPU 132 that is connected to a network connection device 134 and a memory 136. The memory 136 stores a number of computer programs, including a communication program 138. The communication program 138 operates to establish conventional network communications with the client computer 102 and the server computer 104 via the network connection device 134. In the illustrated embodiment, the memory 136 also stores a set of computer programs implementing the operations described herein. In particular, the memory 136 stores a preferences module 140, a monitoring module 142, a notification module 144, a consumer interface module 146, and a merchant interface module 148. The various modules 140, 142, 144, 146, and 148 operate in conjunction with a data repository 150, which organizes information related to the design and execution of marketing campaigns.

[0018] Advantageously, the various modules 140, 142, 144, 146, and 148 operate to provide an improved consumer marketing service that allows personalized or tailored advertising material to be sent to consumers. This personalization or tailoring of advertising material is accomplished through a higher level of insight into consumers’ needs or wants. In particular, the consumer marketing service obtains this higher level of insight by identifying individual preferences of consumers, such as by collecting those individual preferences while the consumers are visiting the merchant’s web site. Next, the consumer marketing service monitors information related to the merchant so as to identify relevant content that matches those individual preferences. Upon identifying relevant content that matches individual preferences of a particular consumer, the consumer marketing service alerts or notifies the consumer of the relevant content. In such manner, the consumer marketing service delivers highly relevant communication targeted at appropriate consumers, thereby resulting in enhanced sales as well as enhanced customer satisfaction and loyalty. Moreover, the consumer marketing service performs various operations on behalf of the merchant in an automated and integrated manner, thereby reducing the amount of time and other resources that the merchant has to devote to a marketing campaign.

[0019] As illustrated in FIG. 1, the preferences module 140 operates to collect a set of individual preferences of the user operating the client computer 102. Individual preferences can include those regarding products, events, sales, or any other topics of interest to the user. In addition, the individual preferences can include those regarding a desired message format, a desired delivery option, a desired message frequency, or any other characteristics of messages to be sent to the user. In such manner, the consumer marketing service can not only deliver relevant content but can also deliver such content via a desired communication medium. Collection of individual preferences can be explicitly captured, inferred, or both. The individual preferences can be maintained in a preference profile that is stored in the data repository 150.

[0020] For example, the preferences module 140 can collect individual preferences of the user by providing a set of user interfaces to allow the user to specify those individual preferences. In particular, as the user is visiting the merchant’s web site, the user can be allowed to sign-up for messages at different points. These points can be strategically placed along the web site, and can correspond to preference capture points at which the user can sign-up for or request messages for various topics of interest. By way of example, if the user is interested in purchasing a particular product that is currently out-of-stock, the user can be prompted to sign-up for a “Back-in-Stock” notification. Table 1 below provides other examples of sign-up options for topics in different categories.

TABLE 1

CATEGORY	TOPIC
Product-related	New size/color/style available for a current product
Product-related	Usage tips
Product-related	Pre-arrival notification
Product-related	New arrivals in a particular product category
Product-related	Featured products in a particular product category
Product-related	Top-selling products in a particular product category
Product-related	Back-in-stock notification
Product-related	Complementary products/cross-sell/similar products

TABLE 1-continued

CATEGORY	TOPIC
Product/sale/event-related	Online sale in a particular product category
Product/sale/event-related	Products in a user's wish-list that go on sale
Product/sale/event-related	Products in a user's gift-registry that go on sale
Product/sale/event-related	Products in a user's shopping cart that go on sale
Product/sale/event-related	Store sale in a particular product category
Sale/event-related	Pre-sale days in a store near a particular zip-code
Sale/event-related	General events in a particular neighborhood
Sale/event-related	Reminder to register for sweepstakes (e.g., daily, weekly, and so forth)
Transaction-related	Notification when someone reviews a user's wish-list/gift-registry or buys a product specified in the wish-list/gift-registry
Transaction-related	Notification when someone adds a product to a wish-list/gift-registry
Transaction-related	A user's loyalty points are about to hit a next tier
Transaction-related	Online purchase (e.g., notification when products are ready for pickup at a local store)
Time-based reminders	Refill reminders
Time-based reminders	Reminder about a product in a particular number of days/weeks
Time-based reminders	Reminder about a shopping cart in a particular number of days/weeks
Time-based reminders	Reminder before a holiday (e.g. Mother's day)
Time-based reminders	Reminder on a particular date (e.g. before someone's birthday)
Search-related	Notification when products related to a previous null search result become available
Search-related	Saved search

[0021] To allow faster and easier integration with the merchant's web site, an appropriate Hypertext Markup Language ("HTML") tag can be incorporated in a source web page that forms the web site. When the user clicks a navigation link or a button related to the HTML tag, the user can be navigated to a "sign-up" page or a "my-alerts" page, which can be provided by the preferences module 140 as a separate window. It is also contemplated that the "sign-up" page can be incorporated within the source web page, such as via iframe. By using appropriate HTML reference information, the preferences module 140 can identify the source web page as well as any other relevant information on the source web page for populating the "sign-up" page. In addition, the preferences module 140 can use a set of HTTP cookies to track the identity of the user for subsequent processing.

[0022] Alternatively, or in conjunction, the preferences module 140 can collect individual preferences of the user by monitoring browsing behavior of the user. In particular, as the user is visiting the merchant's web site, the preferences module 140 can monitor browsing behavior of the user so as to infer individual preferences in a seamless fashion and without requiring the user to explicitly specify those individual preferences. By way of example, the individual preferences can be inferred based on one or more of the following: (a) the user visits a product detail page multiple times or a particular number of times at or above a threshold; (b) the user visits a product category page multiple times or a particular number of times at or above a threshold; (c) the user adds a product to a shopping cart; and (d) the user completes an on-line purchase. Monitoring of browsing behavior can be performed using an appropriate Web beacon, such as a 1 by 1 pixel element sometimes referred to as a "dart," which is incorporated in one or more source web pages that form the merchant's web site. In some instances, a collaborative filtering technique can be used to infer individual preferences of the user based on browsing behavior or other activities of the user. To obviate any privacy concerns, monitoring of browsing behavior can be performed upon obtaining prior consent from the user.

[0023] As discussed above, the preferences module 140 can also collect individual preferences regarding characteristics of messages to be sent to the user. For example, the individual preferences can include one or more of the following: (a) a desired message format, such as a particular layout design (e.g., related to a long-form message, a short-form message, a headline, or an individual product message), a particular level of detail, or a particular length (e.g., a restriction on the number of recommended products per message); (b) a desired delivery option such as via E-Mail, IM, RSS, SMS, or a Web portal; and (c) a desired message frequency, such as a particular number of messages per day, a particular number of messages per week, a particular number of messages per month, any number of messages but restricted to particular days of a week, or any number of messages with no restrictions. Individual preferences regarding messages can be explicitly captured, such as via a "sign-up" page or a "my-alerts" page as discussed above. Alternatively, or in conjunction, the individual preferences can be inferred, such as by monitoring behavior of the user in response to previously sent messages. For example, the preferences module 140 can monitor a rate at which the user opens previously sent messages, such as by using an appropriate Web beacon that is incorporated in one or more of those messages. Next, the preferences module 140 can compare this rate with respect to an average or typical rate to infer whether characteristics of those messages are desirable.

[0024] Subsequent to collection of individual preferences of the user, the preferences module 140 can provide a set of options to allow the user to modify those individual preferences or to specify additional individual preferences. In addition, the preferences module 140 can provide a set of options to allow the user to opt out of receiving further messages. These options can be provided at different points, such as in a "sign-up" page or a "my-alerts" page, in a confirmation or welcome message after sign-up, in any subsequent message regarding a recommended product, or in a Web portal.

[0025] Still referring to FIG. 1, the monitoring module 142 operates to collect information regarding products, events, sales, or any other topics related to activities of the merchant. Collection of information can be performed based on a particular time schedule, such as on a periodic or non-periodic basis, and can be performed by monitoring the merchant's web site. For example, the monitoring module 142 can crawl the web site using an appropriate Web crawler so as to collect information from the web site. Alternatively, or in conjunction, the monitoring module 142 can collect information via a data feed from the server computer 104 or from another data source.

[0026] Once information has been collected the monitoring module 142 operates to analyze the information based on individual preferences of the user so as to identify relevant content that matches those individual preferences. This relevant content can include a set of images, text, or other content derived from the merchant's web site or from a data feed. For example, if the user has expressed interest in purchasing a particular product that was previously out-of-stock, the monitoring module 142 can analyze information related to the merchant so as to identify relevant content regarding whether or when the product will be back-in-stock. If the product does not become available within a particular time period, the monitoring module 142 can identify relevant content regarding an alternative or similar set of products. These alternative products can be selected by the merchant or can be dynamically selected by the monitoring module 142 based on a set of configurable rules.

[0027] In some instances, the monitoring module 142 can analyze information related to the merchant so as to identify a set of recommended products for the user. The recommended products can be tracked in a pool of recommendations that is stored in the data repository 150. To reduce storage requirements and to enhance processing efficiency, the monitoring module 142 can efficiently manage the pool of recommendations, such as by selecting additions to the pool of recommendations as well as controlling a size of the pool of recommendations. For example, the pool of recommendations can correspond to a reduced product catalog that is generated based on individual preferences of the user. The monitoring module 142 can implement a collaborative filtering technique to generate an initial set of results, and the monitoring module 142 can then refine or re-prioritize those results based on individual preferences of the user so as to manage the pool of recommendations. Also, the monitoring module 142 can update the pool of recommendations as individual preferences of the user are modified or as additional individual preferences are collected. In addition, the monitoring module 142 can update the pool of recommendations as particular recommendations expire or become stale. Various recommendations can expire or become stale based on different timing criteria. For example, a recommendation regarding a product that is on sale can expire after one particular time period, such as after one week, while a recommendation regarding a new product can expire after another time period, such as after one month.

[0028] As illustrated in FIG. 1, the notification module 144 operates to alert or notify the user of relevant content that has been identified by the monitoring module 142. For example, if the user has expressed interest in purchasing a particular product that was previously out-of-stock, the notification module 144 can alert the user of relevant content regarding whether or when the product will be back-in-stock. If the

product does not become available within a particular time period, the notification module 144 can alert the user of relevant content regarding an alternative or similar set of products.

[0029] Alerting the user can be performed by generating a set of messages and transmitting the messages to the user. For example, the notification module 144 can dynamically generate a message by incorporating relevant content into a message template. This message template can be selected by the merchant or can be dynamically selected by the notification module 144 based on a set of configurable rules. In addition, the notification module 144 can incorporate a navigation link into the message, such that, when the user clicks on the navigation link, the user can be navigated to the merchant's web site.

[0030] Generation and transmission of messages can be performed based on individual preferences of the user regarding characteristics of those messages, such as a desired message format, a desired delivery option, and a desired message frequency. Alternatively, or in conjunction, generation and transmission of the messages can be performed based on a set of configurable rules, which can be used to specify default values regarding characteristics of those messages. The notification module 144 can dynamically adjust characteristics of messages as individual preferences of the user are modified, as additional individual preferences are collected, or as default values are modified. For example, as discussed previously, the preferences module 140 can monitor a rate at which the user opens previously sent messages, and can compare this rate with respect to an average or typical rate. If the user opens the previously sent messages at a lower rate than the average rate, the notification module 144 can throttle back a frequency at which subsequent messages are sent to the user. This throttling back can be performed in a series of incremental stages until a desired message frequency is obtained. Alternatively, or in conjunction, the notification module 144 can dynamically change either of, or both, a message format and a delivery option for subsequent messages that are sent to the user.

[0031] In some instances, the notification module 144 can determine that the user is eligible to receive multiple messages, and the notification module 144 can generate and transmit all of the messages or a selected subset of the messages. Selection of which particular subset of the messages to be sent can be performed based on individual preferences of the user. Alternatively, or in conjunction, selection of a particular subset of the messages can be performed based on a set of configurable rules, which can be used to specify a set of priorities or rankings in accordance with the merchant's promotional activities and goals, the merchant's profit margins, the merchant's inventory, and other factors. For example, the user may have expressed a preference to receive a "New Arrivals" notification for jeans as well as a preference to receive a "Back-In-Stock" notification for athletic shoes. If the desired jeans and the desired athletic shoes become available during the same week, the notification module 144 can determine whether to alert the user regarding the jeans, the athletic shoes, or both. If the user has expressed a preference to receive all relevant content, the notification module 144 can send one message alerting the user regarding the jeans and another message alerting the user regarding the athletic shoes. However, if the user has expressed a preference to receive no

more than one message per week, the notification module **144** can send a single message alerting the user regarding the athletic shoes.

[0032] In other instances, the notification module **144** can determine that there are multiple recommendations in the user's pool of recommendations, and the notification module **144** can alert the user regarding all of the recommendations or a selected subset of the recommendations. Selection of which particular subset of the recommendations can be performed based on individual preferences of the user. Alternatively, or in conjunction, selection of a particular subset of the recommendations can be performed based on a set of configurable rules. The configurable rules can be used to specify a set of priorities or rankings based on one or more of the following: (a) a higher priority for products similarly priced as those previously purchased; (b) a higher priority for products that are on sale if previous behavior of the user indicates price sensitivity; (c) a higher priority for new products if previous behavior of the user indicates a preference for new arrivals; and (d) a higher priority for cross-selling products if indicated by previous behavior of the user. The notification module **144** can select the number of recommendations per message based on individual preferences of the user, based on a set of configurable rules, or both.

[0033] Alerting the user can also be performed substantially in real-time, such as while the user is visiting the merchant's web site. For example, the notification module **144** can present a set of recommendations in a separate window or within a source web page that forms the web site. These recommendations can be presented to the user at strategically placed points along the web site, such as: (a) after or during checkout; (b) after or while adding a product to a shopping cart; (c) when the user visits a product detail page multiple times or a particular number of times at or above a threshold; and (d) when the user visits a product category page multiple times or a particular number of times at or above a threshold.

[0034] As illustrated in FIG. 1, the consumer interface module **146** operates to provide a consumer Web portal, which presents relevant content that is personalized or tailored for the user. For example, by accessing the consumer Web portal, the user can view a pool of recommendations, previous messages sent to the user, as well as individual preferences of the user. The consumer Web portal can also provide a set of controls for particular features of the consumer marketing service. For example, the consumer Web portal can provide a set of options to allow the user to modify individual preferences or to specify additional individual preferences. As another example, the consumer Web portal can provide a set of options to mark particular recommendations as undesirable or already purchased. In response to marking of particular recommendations, the user's pool of recommendations can be adjusted so as to simply include recommendations of interest to the user.

[0035] Still referring to FIG. 1, the merchant interface module **148** operates to provide a merchant Web portal, which provides a set of controls for particular features of the consumer marketing service. By way of example, the merchant Web portal can allow the merchant to specify preference capture characteristics using a wizard-based interface. In particular, the merchant can specify a particular preference capture methodology, such as one based on multi-category check-off or a single click "sign-up" option. Next, the merchant can specify characteristics related to the specified preference capture methodology. For example, if the merchant

has selected a single click "sign-up" option, the merchant can be prompted to specify product characteristics and default values to be used when the user clicks a "sign-up" button. In the case of a product such as wine, the merchant can specify product characteristics such as region, price, wine type, and rating. For each product characteristic, the merchant can be prompted to specify a set of values for collecting the user's individual preferences. For a product characteristic with hierarchical values, the merchant Web portal can allow specification of a current value in a hierarchy as well as a set of additional values higher up in the hierarchy. For example, in the case of wine type, the merchant can specify "red" and "Cabernet Sauvignon." For a product characteristic with numerical values, the merchant Web portal can allow specification of a range of numerical values. For example, in the case of price, the merchant can specify a range of \$20 to \$30 or a range of -30% to +25% relative to some reference value.

[0036] As another example, the merchant Web portal can allow the merchant to specify characteristics of messages using a "What-You-See-Is-What-You-Get" or "WYSIWYG" methodology, which can be based on a set of message templates and a set of configurable rules. In particular, using a wizard-based interface, the merchant can perform one or more of the following: (a) select a particular message template from a library of message templates; (b) specify a particular message format, such as a particular layout or design with particular logos, headers, footers, and colors; and (c) generate or modify a set of configurable rules related to placement or selection of relevant content to be incorporated into a message template.

[0037] In addition, the merchant Web portal can present a set of reports regarding performance or other characteristics of a marketing campaign. For example, by accessing the merchant Web portal, the merchant can view reports regarding key performance indicators, trends with respect to consumer behavior or usage, and segmentation analysis.

[0038] The foregoing provides an overview of an embodiment of the invention. Attention next turns to FIG. 2, which illustrates an operational scenario **200** according to an embodiment of the invention.

[0039] Referring to FIG. 2, as a consumer **202** is visiting a merchant's web site **204**, the consumer **202** is allowed to specify individual preferences at different points along the web site **204**. By way of example, the web site **204** can be set up for selling apparel, and the consumer **202** may be interested in purchasing a coat of a particular size or color. If that size or color is currently out-of-stock, the consumer **202** can be prompted to sign-up for a "Back-in-Stock" notification using a "sign-up" page **206**. The "sign-up" page **206** is provided by a consumer marketing service **208**, but is integrated with the web site **204** so as to appear seamless from the standpoint of the consumer **202**. FIG. 3 illustrates an example of a user interface screen **300** to sign-up for a "Back-in-Stock" notification.

[0040] As another example, the web site **204** can be set up for selling wines, and the consumer **202** may be interested in new wines of a particular type. In this case, the consumer **202** can be prompted to sign-up for a "New Arrivals" notification using the "sign-up" page **206**. Again, the "sign-up" page **206** is provided by the consumer marketing service **208**, but is integrated with the web site **204** so as to appear seamless from the standpoint of the consumer **202**. FIG. 4 illustrates an example of a user interface screen **400** to sign-up for a "New Arrivals" notification. As illustrated in FIG. 4, the user inter-

face screen **400** includes a set of options **402** to specify a wine type, a region, a range of ratings, and a range of prices. In addition, the user interface screen **400** includes a set of options **404** to specify a desired delivery option for a “New Arrivals” notification.

[0041] Referring back to FIG. 2, the consumer marketing service **208** next monitors the web site **204** based on the individual preferences specified by the consumer **202** so as to identify relevant content. Upon identifying relevant content that matches those individual preferences, the consumer marketing service **208** generates a personalized message **210** alerting the consumer **202** of the relevant content.

[0042] By way of example, if the consumer **202** has signed-up for a “Back-in-Stock” notification for a coat of a particular size or color, the consumer marketing service **208** can monitor the web site **204** on a periodic basis to determine whether or when that size or color becomes available. Once that size or color becomes available, the consumer marketing service **208** can generate the message **210** alerting the consumer **202**. When the consumer **202** clicks a navigation link incorporated into the message **210**, the consumer **202** is navigated to the web site **210** so as to complete an on-line purchase.

[0043] As another example, if the consumer **202** has signed-up for a “New Arrivals” notification for new wines of a particular type, the consumer marketing service **208** can monitor the web site **204** on a periodic basis to determine whether or when those new wines become available. Once those new wines become available, the consumer marketing service **208** can generate the message **210** alerting the consumer **202**. Again, when the consumer **202** clicks a navigation link incorporated into the message **210**, the consumer **202** is navigated to the web site **210** so as to complete an on-line purchase.

[0044] FIG. 5 illustrates a computer system **500** that is implemented in accordance with another embodiment of the invention. In the illustrated embodiment, the computer system **500** is a client-server computer network that includes at least one client computer **502** and multiple server computers, including server computers **504A**, **504B**, and **506**. The client computer **502** and the server computers **504A**, **504B**, and **506** are connected by a set of communication channels **510**, which can include any wire or wireless communication channel. Certain features of the computer system **500** are implemented in a similar fashion as previously discussed in connection with FIG. 1 and, thus, are not further described herein.

[0045] As illustrated in FIG. 5, the client computer **502** is operated by a user who wishes to obtain information regarding products, events, sales, or any other topics of interest. The server computer **504A** is operated by a first merchant as a web site **512** for selling a first set of products, while the server computer **504B** is operated by a second merchant as a web site **514** for selling a second set of products. In the illustrated embodiment, the first merchant and the second merchant are members of a group of cooperating merchants who wish to cooperate in reaching out to existing or potential customers. For example, the first merchant and the second merchant can sell complementary, cross-selling, alternative, or similar products, and the first merchant and the second merchant may wish to cooperate in a joint marketing campaign with respect to those products.

[0046] As illustrated in FIG. 5, the server computer **506** is operated as a consumer marketing service **516** to facilitate the design and execution of the joint marketing campaign. Advantageously, the consumer marketing service **516** facili-

tates generation of marketing opportunities for the first merchant and the second merchant through a higher level of insight into consumers’ needs or wants. In particular, the consumer marketing service **516** obtains this higher level of insight by identifying individual preferences of consumers, such as by collecting those individual preferences while the consumers are visiting either of, or both, the web site **512** and the web site **514**. Moreover, the consumer marketing service **516** performs various operations on behalf of the first merchant and the second merchant in an automated and integrated manner, thereby reducing the amount of time and other resources that the first merchant and the second merchant have to devote to the joint marketing campaign.

[0047] For example, while visiting the web site **512**, the user operating the client computer **502** may express interest in purchasing a particular product from the first merchant. If that product is currently out-of-stock, the user can be prompted to sign-up for a “Back-in-Stock” notification. If that product does not become available within a particular time period, the consumer marketing service **516** can monitor the web site **514**, and can alert the user regarding an alternative or similar set of products from the second merchant. These alternative products can be selected by the first merchant and the second merchant or can be dynamically selected by the consumer marketing service **516** based on a set of configurable rules. As another example, if the user has expressed interest in purchasing a particular product from the first merchant, the consumer marketing service can perform segmentation analysis to determine that the user may also be interested in purchasing a complementary or cross-selling set of products from the second merchant. These complementary products can be selected by the first merchant and the second merchant or can be dynamically selected by the consumer marketing service **516** based on a set of configurable rules. It is contemplated that the consumer marketing service **516** can use a permission-based marketing methodology when generating such marketing opportunities for the first merchant and the second merchant.

[0048] As another example, the consumer marketing service **516** can analyze information related to the first merchant and the second merchant so as to identify a set of recommended products. The consumer marketing service **516** can track the recommended products in a pool of recommendations, which can be presented to the user via a consumer Web portal. In addition, the consumer marketing service **516** can alert the user about one or more of the recommended products substantially in real-time. For example, while the user is visiting the web site **512** operated by the first merchant, the consumer marketing service **516** can alert the user about a set of recommended products from the second merchant.

[0049] Advantageously, the consumer marketing service **516** can also generate marketing opportunities for a group of merchants without requiring cooperation between members of the group of merchants. In particular, the consumer marketing service **516** can obtain a higher level of insight into consumers’ needs or wants, and can apply this higher level of insight to generate marketing opportunities for the first merchant and the second merchant, without requiring their cooperation in a joint marketing campaign.

[0050] It should be recognized that the embodiments of the invention described above are provided by way of example, and various other embodiments are contemplated. For example, it is contemplated that a consumer marketing service can implement a number of variations for a user interface

that collects individual preferences. The variations can include differences in format, differences in content, or both. The consumer marketing service can present the variations to a number of consumers, and can track the effectiveness of each of the variation. The effectiveness can be tracked using one or more of the following metrics: (a) a sign-up visit rate, such as a percentage of a total number of web site visitors who visit a “sign-up” page; (b) a sign-up rate, such as a percentage of a total number of visitors of a “sign-up” page who actually sign-up; and (c) a sign-up update rate, such as a percentage of a total number of signed-up implement a feedback loop so as to identify and select a variation that is most effective across various consumers. It is also contemplated that the consumer marketing service can identify and select a variation that is most effective for each consumer. In particular, the consumer marketing service can maintain a preference profile for each consumer, and can reference the preference profile so as to generate a user interface that is personalized or tailored for each consumer and that is consistent across multiple visits.

[0051] As another example, it is contemplated that a consumer marketing service can implement a number of variations for messages that are sent to consumers. The variations can include, for example, differences in message format. The consumer marketing service can present the variations to a number of consumers, and can track the effectiveness of each of the variations. In such manner, the consumer marketing service can implement a feedback loop so as to identify and select a variation that is most effective across various consumers. It is also contemplated that the consumer marketing service can identify and select a variation that is most effective for each consumer. In particular, the consumer marketing service can maintain a preference profile for each consumer, and can reference the preference profile so as to use a message format that is personalized or tailored for each consumer and that is consistent across multiple messages sent to that consumer.

[0052] As a further example, while some embodiments have been described with reference to a consumer marketing service, it should be recognized that the features discussed herein can also be applied to other types of marketing services. In particular, these other types of marketing services can deliver highly relevant communication targeted at different points along a supply chain, such as affiliates, dealers, and suppliers.

[0053] An embodiment of the invention relates to a computer storage product with a computer-readable medium having executable instructions or computer code thereon for performing various computer-implemented operations. The term “computer-readable medium” is used herein to include any medium that is capable of storing or encoding a sequence of executable instructions or computer code for performing the operations described herein. The media and computer code can be those specially designed and constructed for the purposes of the invention, or can be of the kind well known and available to those having ordinary skill in the computer software arts. Examples of computer-readable media include computer-readable storage media such as: magnetic media such as hard disks, floppy disks, and magnetic tape; optical media such as Compact Disc-Read Only Memories (“CD-ROMs”) and holographic devices; magneto-optical media such as floptical disks; and hardware devices that are specially configured to store and execute program code, such as Application-Specific Integrated Circuits (“ASICs”), Programmable Logic Devices (“PLDs”), Read Only Memory

(“ROM”) devices, and Random Access Memory (“RAM”) devices. Examples of computer code include machine code, such as produced by a compiler, and files containing higher level code that are executed by a computer using an interpreter. For example, an embodiment of the invention may be implemented using Java, C++, or other programming language and development tools. Additional examples of computer code include encrypted code and compressed code. Another embodiment of the invention can be implemented in hardwired circuitry in place of, or in combination with, computer code.

[0054] Another embodiment of the invention can be downloaded as a computer program product, which can be transferred from a remote computer (e.g., a server computer) to a requesting computer (e.g., a client computer or a different server computer) by way of data signals embodied in a carrier wave or other propagation medium via a communication channel. Accordingly, as used herein, a carrier wave can be regarded as a computer-readable medium.

[0055] While the invention has been described with reference to the specific embodiments thereof, it should be understood by those skilled in the art that various changes may be made and equivalents may be substituted without departing from the true spirit and scope of the invention as defined by the appended claims. In addition, many modifications may be made to adapt a particular situation, material, composition of matter, method, operation or operations, to the objective, spirit, and scope of the invention. All such modifications are intended to be within the scope of the claims appended hereto. In particular, while the methods disclosed herein have been described with reference to particular operations performed in a particular order, it will be understood that these operations may be combined, sub-divided, or reordered to form an equivalent method without departing from the teaching of the invention. Accordingly, unless specifically indicated herein, the order and grouping of the operations is not a limitation of the invention.

What is claimed is:

1. A computer implemented method comprising:
 - tracking, by a first computer system operated by a first entity, a pool of recommendations for a user based on analysis of interaction by the user operating a second computer system with a website provided by a third computer system operated by a third entity; and
 - updating, by the first computer system, the pool of recommendations based on collection of preferences of the user and based on selected timing criteria.
2. The method of claim 1 wherein the collection of preferences of the user is based on sign ups requesting notifications for the user.
3. The method of claim 1 further comprising initially creating the pool of recommendations based on a collaborative filtering technique.
4. The method of claim 1 wherein the updating includes determining expiration of a recommended product.
5. The method of claim 4 wherein the recommended product is on sale and the selected timing criteria is based on a time period during which the product is on sale.
6. The method of claim 1 wherein the updating includes determining staleness of a recommended product.
7. The method of claim 6 wherein the recommended product is a new product and the selected timing criteria is based on a time period of availability of the new product.

8. The method of claim **1** further comprising alerting the user to a selected subset of the pool of recommendations.

9. The method of claim **8** further comprising determining the selected subset of the pool of recommendations based on the preferences of the user.

10. The method of claim **8** further comprising determining the selected subset of the pool of recommendations based on priorities determined by configurable rules.

11. The method of claim **10** wherein the priorities determined by configurable rules include at least one of: a higher priority for products similarly priced as those previously purchased by the user; a higher priority for products that are on sale if previous behavior of the user indicates price sensitivity; a higher priority for new products if previous behavior of the user indicates a preference for new arrivals; and a higher priority for cross-selling products if indicated by previous behavior of the user.

12. The method of claim **8** further comprising determining a number of recommendations to include in an alert based on at least one of preferences of the user and configurable rules.

13. The method of claim **8** further comprising providing a set of options to mark recommendations as at least one of undesirable and already purchased.

14. The method of claim **13** wherein the updating is based on a response to the set of options.

15. The method of claim **1** wherein the first entity is a consumer marketing service, the user is a consumer, and the third entity is a merchant.

16. A non-transitory computer storage medium storing computer executable instructions that, when executed, cause a computer system to perform a computer implemented method comprising:

tracking a pool of recommendations for a user based on analysis of interaction by the user operating a second computer system with a website provided by a third computer system operated by a third entity; and

updating the pool of recommendations based on collection of preferences of the user and based on selected timing criteria.

17. The non-transitory computer storage medium of claim **16** wherein the collection of preferences of the user is based on sign ups requesting notifications for the user.

18. The non-transitory computer storage medium of claim **16** further comprising alerting the user to a selected subset of the pool of recommendations.

19. A system comprising:

at least one processor; and

a memory storing instructions configured to instruct the at least one processor to perform:

tracking a pool of recommendations for a user based on analysis of interaction by the user operating a second computer system with a website provided by a third computer system operated by a third entity; and

updating the pool of recommendations based on collection of preferences of the user and based on selected timing criteria.

20. The system of claim **19** wherein the collection of preferences of the user is based on sign ups requesting notifications for the user.

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