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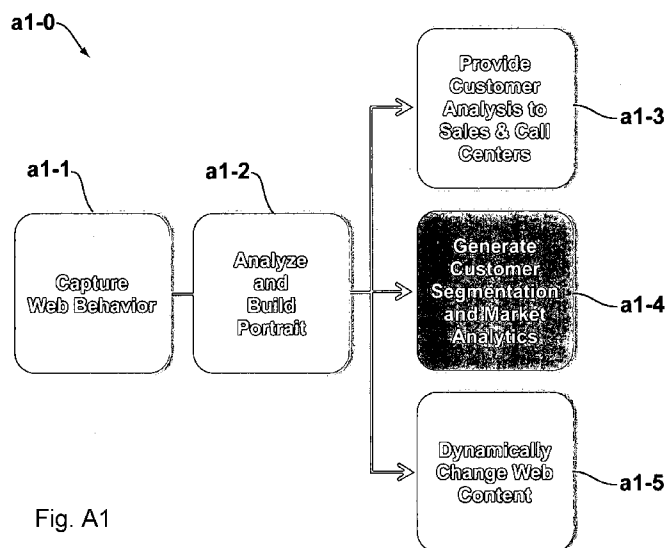


Fig. A1

(57) Abstract: A method is provided for determining a website user behavioral portrait based on navigation on the website and dynamically reconfiguring web pages based on those portraits. In accordance with the method, data relating to the progress of a user through a website is recorded, and an ongoing behavioral portrait of the user is built based on the data. The portrait is then used to dynamically reconfigure web content.

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DYNAMIC RECONFIGURATION OF WEB PAGES BASED ON USER BEHAVIORAL PORTRAIT

FIELD OF THE DISCLOSURE

[0001] The present disclosure relates generally to methods for customizing web page content, and more specifically, to methods for generating user behavioral portraits based on web site navigation and search behavior, and for dynamically reconfiguring web page content based on such portraits to produce personalized web page content.

BACKGROUND OF THE DISCLOSURE

[0002] As e-commerce has evolved into a widespread means of doing business, online competition among merchants has increased dramatically. Much of the attention in online marketing has been directed towards placing advertisements for products or services as close to a spending decision as possible, since this is often a significant factor in an online merchant's likelihood of success.

[0003] As a specific example, a car rental company might design their website so that it is likely to turn up as a relevant hit when a consumer uses a search engine to search the term "car rental". The company might even purchase prioritization from one or more businesses that manage popular search engines such as YAHOO![®] or GOOGLE[®] so that their web site will appear near the top of the search results page whenever terms indicating an interest in car rentals are input into the search engine. In some cases, the company may even go the additional step of purchasing banner ads or pop-ups that are triggered by relevant search queries.

[0004] While the foregoing approach may be part of a sound online marketing strategy, it suffers from the drawback that it relies upon an overt manifestation of consumer interest to identify potential purchasers of a product or service. Consequently, such an approach may miss a significant number of sales opportunities, simply because it identifies many potential purchasers of a product or service well after a spending decision



has been made. In the interim, the consumer may have been exposed to a wide variety of competing products and services.

[0005] Some of the more recent refinements in online marketing have focused on placing products or services even closer to a spending decision by looking for more subtle clues to a consumer's interests. Referring back to the previous example, the car rental company may place advertisements on web sites that help consumers to purchase airline tickets, based on the realization that a significant number of people who are purchasing airline tickets will also require a rental car. However, while this type of approach may also form part of a sound online strategy, it is founded on correlations that may be weak. Hence, this type of approach often yields a low success rate.

[0006] Other methods of online marketing have evolved which seek to match advertising content to perspective purchasers based on relevance determined from broad demographic information or consumer purchase history. For example, some websites use pop-up ads and banners whose content is selected based on the gender and age of a consumer provided during web site registration, on information gleaned from previous on-line purchases by the consumer, or on the geographic region indicated, for example, by the user's IP address.

[0007] However, methods which rely on data obtained from web site registration are of limited utility, since many consumers are hesitant to spend time on websites completing forms and profiles for what is perceived to be of little benefit. Methods based on broad demographic information frequently have a low success rate, since they are necessarily based on broad generalizations which may not apply to a given consumer. Methods based on purchase history are prone to error, since simple product relationships based on previous purchases can be misleading. Previous purchases may have no bearing on the consumer's personal interests, as may be the case if those purchases represent gifts purchased for others. Moreover, even if the previous purchases were for the consumer's personal enjoyment, those purchases may not represent the consumer's current interests. For example, the fact that a consumer's browsing history or previous purchases indicate a past interest in travel does not mean that the consumer has a current interest in travel.

The consumer may have exhausted all of his vacation time, and is now interested in goods and services commensurate with a regular work schedule.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] In the following figures, like reference numerals indicate like elements.

[0009] FIG. A1 is a flowchart illustrating some of the general methodologies described herein.

[0010] FIG. A2 is an illustration of a network over which behavioral portraits may be gathered in accordance with some of the methodologies described herein.

[0011] FIG. A3 is an illustration of user actions which may be analyzed in the building of a behavioral portrait in accordance with some of the methodologies described herein.

[0012] FIG. A4 is an illustration of some of the questions which can be answered with the information provided by some of the systems and methodologies described herein, as compared to the information gleaned by conventional methodologies.

[0013] FIG. B1 is an illustration of a particular, non-limiting embodiment of a network equipped with a dedicated server appliance for implementing some of the software and methodologies taught herein.

[0014] FIG. B2 is an illustration of a particular, non-limiting embodiment of a network equipped with a dedicated server appliance for implementing some of the software and methodologies taught herein.

[0015] FIG. B3 is an illustration of a particular, non-limiting embodiment of a network equipped with a dedicated server appliance for implementing some of the software and methodologies taught herein.

[0016] FIG. B4 is an illustration of a particular, non-limiting embodiment of a network architecture for implementing some of the software and methodologies taught herein.

[0017] FIG. C1 is an illustration of a web page.

[0018] FIG. C2 is an illustration of the web page of FIG. C1 with a color overlay illustrating the categorization of objects appearing thereon.

[0019] FIG. D1 is a chart depicting the various levels of webpage customization possible in accordance with some embodiments of the methodologies described herein.

[0020] FIG. D2 is an illustration of a standard web page as compared to a portrait enhanced web page of the type which may be generated through the application of some of the methodologies described herein.

[0021] FIG. D3 is an illustration depicting the web pages of FIG. D2 in greater detail.

[0022] FIG. D4 is an illustration of some of the behavioral characteristics of a particular portrait type.

[0023] FIG. D5 is an illustration of some of the behavioral characteristics of a particular portrait type.

[0024] FIG. D6 is an illustration of a behavioral portrait corresponding to the portrait type depicted in FIG. D4.

[0025] FIG. D7 is an illustration of a behavioral portrait corresponding to the portrait type depicted in FIG. D5.

[0026] FIGs. D8 through D13 illustrate modifications to a web page in light of the portrait depicted in FIG. D6.

[0027] FIGs. D14 through D19 illustrate modifications to a web page in light of the portrait depicted in FIG. D7.

[0028] FIG. E1 is a flowchart illustrating some of the methodologies described herein which utilize output analytics derived from user behavioral portraits.

[0029] FIG. E2 is an illustration of some of the output analytics which may be obtained from the methodology depicted in FIG. D1.

[0030] FIG. E3 is an illustration of some of the questions a website owner or online marketer may obtain answers to with the output analytics obtained from the methodology depicted in FIG. E1.

[0031] FIG. E4 is a graph showing the percentage of visits to a web site as a function of user behavioral portrait.

[0032] FIG. E5 is a graph showing the distribution of visits to a website as a function of user behavioral portrait.

[0033] FIG. E6 is a graph showing the percentage of return visits to a web site as a function of user behavioral portrait.

[0034] FIG. E7 is a graph showing the distribution of return visits to a website as a function of user behavioral portrait.

[0035] FIG. E8 is a graph showing the percentage of closures or abandonment of a web page as a function of user behavioral portrait.

[0036] FIG. E9 is a graph showing the distribution of closures or abandonment of a web page as a function of user behavioral portrait.

[0037] FIG. E10 is a graph showing the distribution of the average amount of time spent on a web site as a function of user behavioral portrait.

[0038] FIG. E11 is a graph showing the distribution of the average number of links selected on a web site as a function of user behavioral portrait.

[0039] FIG. F1 is an illustration of a particular, non-limiting embodiment of a customer passport which may be obtained in accordance with some of the methodologies described herein.

[0040] FIG. F2 is a flowchart illustrating some of the methodologies described herein which involve generation of a customer passport.

SUMMARY OF THE DISCLOSURE

[0041] In one aspect, a method for dynamically reconfiguring web pages based on user behavioral portraits is provided which comprises (a) recording data relating to the behavior of a user on a website; (b) building a behavioral portrait of the user based on the data; and (c) dynamically reconfiguring web content based on the behavioral portrait.

[0042] In another aspect, a method for developing user behavioral portraits is provided which comprises (a) recording data relating to the behavior of a user on a website; and (b) building a behavioral portrait of the user based on the data.

[0043] In another aspect, a method for reconfiguring web pages is provided which comprises (a) providing a behavioral portrait of a user; and (b) dynamically reconfiguring web content based on the behavioral portrait.

[0044] In a further aspect, a method for providing customized web pages is provided which comprises (a) receiving a request for a web page from a client associated with a user; (b) modifying the requested web page in light of a behavioral portrait developed for the user; and (c) providing the modified web page to the user in place of the requested web page.

[0045] In still another aspect, a system for providing customized web pages is provided which comprises (a) a first server adapted to provide web pages to a client associated with a user and being further adapted to receive input from the user when the user accesses features on the web pages; (b) a software program adapted to (i) receive user input from the first server, (ii) create a behavioral portrait of the user based on the user input, and (iii) dynamically update the behavioral portrait as additional user input becomes available, thereby creating an updated behavioral portrait; and (c) a second server adapted to alter the content of the web pages displayed by said first server based on the updated behavioral portrait.

[0046] In yet another aspect, a system for providing customized web pages is provided which comprises (a) a server in communication with a client over a network; and (b) a software program adapted to develop a behavioral portrait of a user associated with the client based on captured data relating to the online behavior of the user.

[0047] In still a further aspect, a method for doing business is provided which comprises (a) providing a computing device equipped with a software program adapted to (i) receive user input from a server, (ii) create a behavioral portrait of the user based on the user input, and (iii) utilize the behavioral portrait to modify a web page; (b) utilizing the computing device to produce modified web content; (c) providing the modified web content to a web site provider; and (d) charging the web site provider a fee based on the modified web content displayed on the web site.

[0048] In another aspect, a method for doing business is provided which comprises (a) providing a behavioral portrait of a user to a third party entity, the behavioral portrait being based on user input gathered during an online session that the user was involved in; and (b) assessing a first fee to the third party based on the third party's acceptance of the portrait.

[0049] In still another aspect, a method for doing business is provided which comprises (a) creating a behavioral portrait of a user based on user input gathered during an online session that the user was involved in; (b) using the behavioral portrait to determine a recommended manner of interacting with the user; and (c) selling to another party a document containing the recommended manner of interacting with the user.

[0050] In yet another aspect, a method of analyzing a website is provided which comprises (a) recording data relating to the online behavior of a plurality of users through the website; (b) building a behavioral portrait for each of the plurality of users based on the data; (c) categorizing the behavioral portraits of the plurality of users into a plurality of portrait types; and (d) analyzing the behavior of the plurality of users on the website as a function of portrait type.

[0051] In still another aspect, a method for analyzing a web page is provided which comprises (a) categorizing the features appearing on the web page in terms of at least one behavioral trait which selection of the feature would indicate; and (b) creating a graphical overlay which reflects the categorization of the features.

DETAILED DESCRIPTION

A. Overview

[0052] One major shortcoming of the above described marketing methods, especially when they are applied in online marketing contexts, is that they focus almost exclusively on identifying potential purchasers of a product or service, rather than focusing on the manner in which the product or service is being presented. Consequently, these approaches fail to apply psychological principles to the identification and accommodation of a consumer's preferred purchase patterns. In the equivalent human-to-human

interaction attendant to a sales opportunity, body language, interaction, dialog and physical indicators may all influence the tone, form and content of any given conversation. These cues are critical to the success of any face-to-face sales meeting, and a skilled salesperson will utilize these cues to quickly adapt his approach as necessary to maximize the likelihood of success.

[0053] By contrast, such psychological principles have not been applied heretofore to equivalent web-based dialogs. In particular, methods currently utilized for implementing online advertising and selecting web content fail to ascertain the reason and motivation a given online consumer has for closing a sale. These methods ignore the manner in which a given consumer prefers to make decisions, and fail to tailor the presentation of information to a consumer's preferences (e.g., in accordance with how the consumer prefers to have information presented to them).

[0054] Continuing the car rental example given above and applying it to visitors to the website of a car rental company, a first visitor to the website may be looking for a vehicle that offers excitement and entertainment for a camping trip. A second visitor may be looking for an image of success and style in a vehicle. A third visitor may be looking for the safest vehicle. In addition, each of these visitors may have their own unique approaches to making a spending decision. For example, one visitor may prefer to make a spending decision based largely on how others rate a particular product offering, while another visitor may prefer to make a spending decision after reviewing a detailed comparison of product performance specifications. A website that fails to promptly recognize each of these diverse motivations, and to present appropriate content in an appropriate manner that is suitably prioritized to reflect the user's preferred approach to making a spending decision, may strike one or more of these users as being not particularly relevant to that user's interests. As a result, the user may navigate to a different, possibly competing web site.

[0055] It has now been found that the above noted needs may be met through systems, methods and software of the type described herein which analyze an individual's online behavior so as to derive the individual's behavioral portrait, and

which use that behavioral portrait to modify the manner in which information is presented to the individual. In the context of a buying situation, a behavioral portrait is the psychological profile of an individual as it pertains to the individual's preferences in that situation, including their preferred decision-making approach, their motivation for making the purchase, and the manner in which they prefer to have information presented to them.

[0056] FIG. A1 provides an overview of some of these systems and methodologies. As seen therein, the starting point for many of these systems and methodologies is the capture **a1-1** of the web behavior of one or more individuals. This behavior is then analyzed and is used to develop a behavioral portrait **a1-2** of the individual. The resulting behavioral portrait may then be put to a variety of end uses.

[0057] In some embodiments, the methodologies described herein, and the systems and software which implement them, apply scientific and psychological principles to improve the way that information is presented to a website user **a1-5**. These methodologies may be used to emphasize information which is particularly relevant to a user's current needs and state of mind, and to de-emphasize information which, although possibly important, may be ancillary to a particular user's interests or decision making process. Consequently, these methodologies may be utilized to customize websites so that they appear to have been defined for a given user's particular needs at a particular time. As a result, navigation around the website will seem more natural for the user, transaction closure procedures will be appropriately tailored so that they are more appropriate for the situation and the user's current state of mind, and marketing offers on the site will be customized for user behavior as befits the time and context.

[0058] Preferably, the behavioral portrait is utilized to dynamically (and possibly automatically) customize, reconfigure or personalize web pages, web content and/or web sites so that the resulting web pages are more conducive to an individual's state of mind. As a result, the individual's experience in navigating a website may be more rewarding. In an e-commerce setting, this may result in a greater number of sales closures, and may have the effect of improving website applicability, sales, and return rates, while also

providing specific valuable information which may be utilized to differentiate a given website from competitive offerings. Hence, in some embodiments, the methodologies described herein may be utilized to provide dynamic and personalized web content which is adapted to customer buying behaviors.

[0059] In other applications, an individual's behavioral portrait (or information pertaining thereto) may be provided to human salespeople, call centers, marketing teams and the like **a1-3** for use in determining how to interact with that individual. These parties may use the behavioral portrait (or information pertaining thereto) to better understand how to communicate with the individual, how to handle objections the individual may have, and how to close a sale with the individual.

[0060] In still other applications, analyses may be performed on the manner in which individuals interact with a website or web page as a function of their behavioral portrait **a1-4**. These analyses may be utilized, for example, to refine a website or web page to make it more attractive to a target set of users, to help a business better understand its customer base and how to interact with that customer base, and to identify problem areas with a website or web page. In particular, these analyses may be utilized to help the owner of a website or a web marketing program to determine how to improve e-commerce closure rates, to understand how to improve visitor return rates, to understand why customers are leaving the website, to increase the effectiveness of web marketing programs and offline programs, and to understand how best to communicate with various customer segments.

[0061] As seen in FIG. A2, the capture of web behavior may be accomplished through the use of software running on servers **a2-3** which remotely and transparently monitor the online behavior of users **a2-1** on a web site. The pages on the website (or the templates from which these pages are derived) may be provided with appropriate JavaScript or other suitable web applications which categorize and tag every relevant action that a user can take. These actions may include the pages a user navigates, the items the user clicks on, search terms entered by the user (including the entry of narrowing searches), check out information, pages abandoned by the user, selection of

“top 10” items by the user, and other such information. FIG. A3 depicts various actions a visitor may take on a single web page and various paths the visitor may take through a web site. These actions, and the paths taken to get to a given action, may be used to build a psychological behavioral portrait for that visitor.

[0062] FIG. A4 summarizes some of the information the foregoing methodology provides and contrasts it to the information provided by conventional methods (such as polls) utilized to gather information about consumers. As seen therein, the information **a4-7** gathered by conventional techniques typically includes relevance information (information on pricing, promotions, purchase history, products, or typical “crowd” behavior), demographics (including information such as age, location, gender or income), or analytical information (information such as a user’s operating system, the number of closures on a website, the number of visitors to the website, the number of browsers who have abandoned the website, and the browser types being utilized to browse the web site). While such information may be useful, it provides very little information about the consumer’s personality or state of mind. Hence, while this information may be used to identify potential customers, it provides very little useful information about how and when to interact with the customer.

[0063] By contrast, methodologies are possible in accordance with the teachings herein which provide a variety of information very specific to the customer and the customer’s current state of mind. This information is very useful in understanding how, and when, to interact with the customer. This includes information on the customer’s decision-making process **a4-1** (how the customer makes purchase decisions), information on the customer’s motivations **a4-3** (what motivates that customer to close on a transaction), information on how the customer prefers to have information presented to them **a4-5**, an indication of when in the product lifecycle the customer is most likely to make a purchase **a4-2**, the marketing messages and images that are likely to appeal to the customer **a4-4**, and the level of detail appropriate for the customer **a4-6**.

[0064] The methodologies described herein are especially useful in the context of e-commerce, and hence, frequent reference will be made to the application of these

methodologies within this context. However, it will be appreciated that many of the methodologies described herein are broadly applicable to the customization of web content in any context to make it more compatible with the user's behavioral portrait. Thus, unless otherwise indicated, the methodologies and systems described herein should not be construed as being specifically limited to their use in e-commerce settings.

B. Hardware and Network Implementation

[0065] FIGs. B1 and B2 depict one particular, non-limiting embodiment of a system which may be used to implement some of the software and methodologies disclosed herein. This system essentially consists of a front end and a back end. At the front end of the system, the navigational attributes of a user are captured, and those attributes are utilized to develop a behavioral portrait for the user. At the back end of the system, the behavioral portrait so generated is utilized to dynamically reconfigure web content.

[0066] With reference to FIG. B1, the network **b1-1** in this particular embodiment has a server side **b1-3** and a client side **b1-5**. The server side **b1-3** comprises a SAN/NAS (Storage Area Network/Network Attached Storage) storage farm **b1-7** comprising a plurality of storage devices **b1-9**, a database server **b1-11**, a variety of application servers **b1-13**, a dedicated server appliance **b1-15** which runs the software for implementing the methodology described herein, a server farm **b1-17** which includes a plurality of web servers **b1-19**, and a firewall **b1-21**.

[0067] The web servers **b1-19** communicate with a plurality of client devices **b1-23** and with a plurality of business partners **b1-25** through the firewall **b1-21** and over a suitable WAN (wide area network) **b1-27** such as the Internet. The business partners **b1-23** will typically be businesses that wish to market goods or services over the WAN **b1-27**. In some cases, these parties may supply advertising content to the web servers **b1-19**.

[0068] FIG. B2 illustrates how the network **b1-1** depicted in FIG. B1 may be utilized to generate user portraits and to dynamically reconfigure web content based on the user portraits. As seen therein, each web server **b1-19** receives behavioral information from a user of the WAN **b1-27**. That behavioral information is typically in the form of context

sensitive mouse clicks, keyboard entries, searches, menu selections, verbal commands (in the case, for example, of devices utilizing voice recognition software), and other types of user input.

[0069] The dedicated server appliance **b1-15** is equipped with an application programming interface (API) **b1-41** which enables it to receive and analyze user input from the server **b1-19**. The API **b1-41** further includes a portrait database **b1-43** which stores existing user portraits, and a portrait generator **b1-45** which generates new user portraits based on the user input. In the event that the user already has a portrait stored in the portrait database **b1-43**, the portrait generator **b1-45** recognizes this fact and modifies the existing user portrait as new information about the user's behavior becomes available. The API **b1-41** then forwards the resulting user portrait to an application server **b1-13**. The application server **b1-13** acts upon the user portrait by generating re-mashed web content which is personalized to the user's behavioral portrait, and then passes the re-mashed web content to the web server **b1-19** for transmission to the appropriate client device **b1-23**.

[0070] In a preferred mode of operation, the dedicated server appliance **b1-15** continuously updates the user portrait database **b1-43** in real time as new input from a user becomes available, and promptly passes an updated portrait (or the updated portion thereof) for the user to the application server **b1-13**. The application server **b1-13**, in turn, serves up re-mashed content to the user. Hence, the dedicated server appliance **b1-15** provides dynamic reconfiguration of web page content, and personalizes subsequent web pages for that user.

[0071] FIG. B3 depicts a second embodiment of a system made in accordance with the teachings herein. The system **b3-1** depicted therein is similar in many respects to the system depicted in FIGs. B1-B2. However, while the system depicted in FIGs. B1-B2 passes a portrait between the server appliance **b1-15** and the application server **b1-13** to generate re-mashed web content, in the system **b3-1** depicted in FIG. 3, the server appliance **b3-15** generates the re-mashed web content directly. Thus, in this system **b3-1**, the server appliance **b3-15** receives and analyzes user input from the server **b3-19**, builds

a behavioral portrait for the user (or modifies an existing behavioral portrait for the user), generates a new web page (or Portrait Enhanced Page (PEP)), and provides the PEP to the e-commerce web server **b3-19** for display to the user (assuming that the e-commerce site accepts the PEP).

[0072] It will thus be appreciated that the server appliance **b3-15** in FIG. 3 may be implemented as a “black box” device which intercepts user behavioral data and outputs re-mashed web pages based on that data. Such a device is advantageous in some applications in that it provides a means by which the provider of the device can extract a revenue stream from the re-mashed web content using various business models, some of which are described in greater detail below.

[0073] The manner in which the server appliance **b3-15** achieves the foregoing functionalities may be appreciated from FIG. B3. As seen therein, the server appliance **b3-15** comprises an API **b3-41** that receives user input from the server **b3-19** and outputs PEPs to the server **b3-19**, and which communicates with the application server **b3-13** as necessary to accomplish these tasks. The server appliance **b3-15** further includes a customer portrait engine **b3-45** which assembles and modifies customer portraits based on behavioral data captured from the server **b3-19**, a page interpreter **b3-47** which interprets the various objects present on a web page, a PEP generator **b3-49** which utilizes the customer portrait to generate PEPs, and a PEP database **b3-51** where the PEPs so generated are stored. Though not explicitly shown, the server appliance **b3-15** may further include a portrait database for storing customer portraits generated by the customer portrait engine **b3-45**.

[0074] The server appliance **b3-15** in the system **b3-01** of FIG. B3 is further adapted to communicate customer portraits, or information contained in or relating to customer portraits, to various third parties **b3-55**. Such third parties **b3-55** may include, without limitation, sales people, marketing teams, and call centers, and may utilize this data to more effectively communicate with the customer, either directly or via the Internet or another suitable network.

[0075] The particular, non-limiting embodiments depicted in FIGs. B1-B3 implement some of the methodologies described herein by incorporation of a dedicated server appliance into the server side of the network. Such an appliance solution is useful in some applications in that it provides the ability to architect the solution “out-of-band” with the current architecture, and also provides a platform for the owners of a website to develop specific content for a user’s portrait in the future (this may include, for example, specific marketing offers on an e-commerce website). However, it will be appreciated that various other means are also possible for implementing some of the methodologies described herein.

[0076] For example, some of these methodologies may be implemented as a software solution adapted to co-exist on a given web-server or back-end server. In such embodiments, the dedicated server appliance may be a hosted system. Instead of residing behind the client’s firewall and web servers, the appliance may reside in a central location (for example, at an ISP (internet service provider)). The software code used to observe customer web sessions and to develop behavioral portraits may be injected into the client web site using a JavaScript snippet placed in the client’s web page templates. These JavaScript snippets may be activated in real-time to insert the most current JavaScript code from the host system into the web page on demand. The JavaScript may then send the customer’s click stream or other captured information back to the portrait engine on the hosted system. Using this captured information, the portrait engine generates a behavioral portrait for the customer, which is stored in a portrait database on the hosted system.

[0077] In a similar manner, a portrait enhanced page (PEP) may be generated using JavaScript code that is injected into the client web page (or a template from which the web page is derived) using one or more JavaScript snippets which are inserted by the client into their web page structure. Following the same approach as described above, a PEP generator may utilize the customer portrait to generate PEPs. The difference in this case is that the software code for the PEP generator resides on a hosted system instead of a dedicated server appliance behind the client firewall.

[0078] FIG. B4 depicts a particular, non-limiting embodiment of the foregoing type of implementation. In the system **b4-0** depicted therein, a client **b4-1** is in communication with an e-commerce site **b4-2** and a service provider **b4-3** over the Internet or another WAN **b4-21**. A dedicated server appliance **b4-4** is present as a hosted system at the location of the service provider **b4-3**.

[0079] In operation, the client **b4-1** requests a webpage from the e-commerce site **b4-2**. The e-commerce site **b4-2** provides the requested web page, which includes JavaScript of the type previously described. The JavaScript monitors the web activity of the client **b4-1**, and sends information about that activity to the web servers **b4-5** of the service provider **b4-3**. The web servers **b4-5** store the information in one or more database servers **b4-6**, where it is used by the dedicated server appliance **b4-4** to build user behavioral portraits. When the client **b4-1** requests the next web page from the e-commerce site **b4-2**, the web servers **b4-5** intercept the requested web page and modify it based on the user's behavioral portrait. The web servers **b4-5** then provide the modified web page to the client **b4-1**.

[0080] The hosted server appliance **b4-4** in the particular system **b4-0** depicted in FIG. B4 consists of a portrait database **b4-11**, a portrait engine **b4-12** (which may be based on a neural network), a tool set **b4-13**, an analyzer **b4-14**, an instrumentor **b4-15**, and an augmentor **b4-16**. The analyzer **b4-14** analyzes information concerning the client's web activity as captured by the JavaScript inserted into the client's web page templates, and works in conjunction with the portrait engine **b4-12** to develop a user portrait which is then stored in the portrait database **b4-11**. A variety of callable programs, functions, routines and the like may be used in this analysis which are stored in the toolset **b4-13**. The augmentor **b4-16** then utilizes portraits contained in the portrait database **b4-11** to provide modified web content. The instrumentor **b4-15** assembles the modified web content into a modified web page which is forwarded to the client **b4-1**. In order to instrument a site, the major set of web-page templates is identified. The sections of the web page, and the existing portrait bias of each, are then categorized. Modifications to the sections are dependent on the type of portrait bias of that section.

[0081] Other variations and embodiments of the foregoing systems are also possible. For example, while the user portraits are preferably stored in a portrait database (see, e.g., profile database **b1-43** of FIG. B1), in some embodiments of the systems and methodologies described herein, these portraits may be stored instead on a cookie defined in a client device, assuming this is permitted by the user's privacy software. In such embodiments, the dedicated server appliance may be adapted to collect the user information from the client device as necessary via a server. It will be appreciated that hybrids of this embodiment are also possible, where some user portraits (or portions thereof) are stored in the portrait database, and other user portraits (or portions thereof) are stored on a cookie defined in a client device. In still other embodiments, the software for implementing the methodologies described herein may be installed on a web server, which may query the client device at appropriate intervals for updated user input information.

C. Generation of a User Behavioral Portrait

[0082] In a preferred embodiment, the software described herein applies a (possibly complex) algorithm to determine an individual's psychological portrait score by interpreting the individual's navigation through a website hosted by a server. The scoring mechanism utilizes a derivative of a technique known as "meta-linguistic programming". In particular, the algorithm weights user actions that can take place on a given website by category, and also by specific lexical analysis. Predicate and historical analysis is also input into the weighting. The algorithm is preferably adapted to reset to a generic weighting under appropriate circumstances to ensure that model inaccuracies or exceptional behavior can be accommodated.

[0083] Preferably, the algorithm is characterized by a tipping point so that, once a sufficient portrait weighting is achieved, the software portrait triggers a number of potential actions on the website. These actions may include, without limitation, re-mashing of the current website content for emphasis of particular data, re-routing procedures to suit a user's behavior in the current context, re-wording website content in

accordance with a user's presentation preferences, and re-presentation of, for example, marketing offers to focus on the user's current context and portrait.

[0084] The methodologies described herein, and the systems and devices which implement them, offer a number of potential advantages. In particular, these methodologies may be used to dynamically reconfigure web pages to make them commensurate with a user's current behavioral portrait. As a result, the user will feel more comfortable on the website, will be less likely to browse away from the website, and will be more likely to return to the website in the future. This, in turn, will increase the likelihood of closure on the sale of products or services advertised on the website, will allow marketing offers to be customized for that user's portrait at that particular time, and will provide the user with customized procedures on the website.

[0085] The customer portraits which are generated may also be provided to sales teams, marketing teams, call-centers, or other such entities. These entities can use the information contained therein to personalize conversations and advertising campaigns for the respective users.

[0086] Some of the methodologies described herein also provide an effective means for context sensitive marketing. These methodologies provide the means to analyze the first few interactions (e.g., mouse clicks) with a website and apply that information to establish a behavior portrait (frequently with respect to buying patterns) for the user for subsequent interactions. These methodologies also provide the means to analyze the phraseology and syntax of a search, and apply that information to the user's portrait for improved click-through. All subsequent user interactions in the same session are then customized for the user's preferred information sources, preferred marketing messages, preferred sales approach, and the like.

[0087] In a preferred embodiment of the methodologies described herein, a meta-linguistic process is utilized which comprehends fifteen different psychological attributes for a given user. These attributes are described briefly in TABLE C1 below. Of course, it will be appreciated that various other psychological attributes (of greater or lesser number) could be utilized in the systems, methodologies and software described herein.

It will also be appreciated that various combinations or sub-combinations of these or other psychological attributes may be utilized in these systems, methodologies and software, or in a given application or task. Moreover, the number of attributes utilized may vary from one application to another, and from one context to another.

TABLE C1: PSYCHOLOGICAL ATTRIBUTES

	Psychological Attribute	Description
1	Decision Making	Determines the way in which the customer makes decisions, via information or reference
2	Motivation	Determines the rational for the website visit and completing a transaction—should the product offer an opportunity or prevent a problem
3	Information Presentation	Indicates how a customer prefers to receive information—process-based preferences versus behavior that demands alternatives
4	Adoption Stage	Indicates when, in the product life-cycle, a customer is comfortable making a purchase—early adopter versus conventional adoption tendency
5	Relationships	Describes the level of personal interaction desired by a customer and amount of personal relationship for transaction/product
6	Specificity	Indicates the level of detail a customer prefers
7	Frequency	Indicates the frequency/repetition of message required to close
8	Teamwork	Defines level of independence versus gradation of interaction (decision making and product use)
9	Rules	Determines agreed method of transaction – rules of the transaction
10	Speed	Determines rate of navigations/speed of clicks – indicates surety of other weightings – can indicate level of decisiveness
11	Empathy	Indicates the consideration/impact of decisions on other people
12	Intensity	Indicates level of intensity of transaction/dialog
13	Temperature	Determines comfort of color preference in context of transaction/dialog
14	Shade	Determines visual stimuli and environment preference
15	Pattern	Second level visual stimuli and environmental preferences

[0088] Each psychological attribute is suitably weighted by the Customer Portrait Engine. Preferably, this weighting occurs on a numerical scale which is given an almost infinite number of context-sensitive and real-time permutations for any given user at any given time. For example, if the Customer Portrait Engine utilizes the 15 psychological attributes noted above, each of these attributes may be tracked using a sliding scale, with 0 as the neutral score. A weighting significantly on either side of neutral would indicate a tendency of behavior toward that setting.

[0089] The manner in which user behavior may be correlated to psychological attributes may be better understood by considering some specific examples. For example, a user navigating directly to product specifications would demonstrate behavior typical of one type of decision making tendency, while a user browsing through customer recommendations would demonstrate behavior typical of another type of decision making tendency. A customer clicking on a toothpaste advertisement described as “bright smile” would indicate a behavioral tendency towards one type of motivation, versus a customer clicking on an offer to “prevent tooth decay”, which would demonstrate behavior typical of another motivational tendency. A customer navigating through categories in a stepwise fashion (e.g., electronics, TV and video, DVD player) would indicate a behavioral tendency towards one type of information gathering, versus a user selecting different categories which would indicate a behavioral tendency towards another type of information gathering.

EXAMPLE C1

[0090] The following example illustrates the application of some of the methodologies taught herein to an e-commerce transaction.

[0091] User A decides to purchase a DVD player from a multi-category website (that is, a website which sells electronics, books, clothing, and various other goods and services). The user’s pass through the website involves the steps of:

- (a) Searching for a specific DVD player model;
- (b) Checking the detailed specifications of the model;

- (c) Comparing the model with other top sellers;
- (d) Adding the selected model to the shopping cart;
- (e) Choosing expedited shipping; and
- (f) Checkout.

[0092] Each of these individual actions during the web session can be mapped to a set of rules or a knowledge base in the Portrait Engine. An example of such a mapping is shown in FIGs. C1-C2. In particular, FIG. C1 shows a standard e-commerce web page with a selection of electronics products, specifically DVD Players. FIG. C2 shows the same web page with a link overlay showing the mapping from each individual link to the associated rule set within the knowledge base.

[0093] As User A performs the search in Step (a), a rule in the knowledge base is triggered to recognize a search for a specific item with multiple terms. This type of search indicates an independent decision making behavior. Therefore, the score on the Decision Making attribute (see TABLE C1 above) is increased by 10 points. Similarly, Steps (b) and (c) trigger rules for information gathering, again indicating independent decision making behavior and increasing the score on that attribute to +30. Given the collection of Steps (a) through (d)—identifying a specific product, gathering specification data, comparing to similar models, and then selecting the individual DVD Player—the knowledge base rules recognize procedural behavior. Therefore, the score on the Information Presentation attribute is increased by 20 points. In Step (e), User A displays goal-oriented behavior by expediting the shipping for this product and the knowledge base decreases the score on the Motivation attribute by 10 points. Therefore, in this example, User A’s scores for the first three attributes in Table C1 are:

TABLE C2: User A score

	Psychological Attribute	Score	Behavior
1	Decision Making	+30	Independent decision making
2	Motivation	-10	Goal-oriented motivation
3	Information Presentation	+20	Procedural information presentation

[0094] By comparison, User B also goes to the same website to buy a DVD player, and this user's e-commerce dialog is as follows:

- (a) Select electronics category;
- (b) Select DVD Players;
- (c) Choose "Top 10 Sellers";
- (d) Select number 1 seller;
- (e) Check what other people said about this model;
- (f) Check editorials and reviews;
- (g) Select another player referenced in the reviews;
- (h) Sort and read reviews from most negative to least negative; and
- (i) Checkout and purchase the referenced DVD player.

[0095] Again, with the mapping from the links and actions on the web site to the rules in the knowledge base of the Portrait Engine, each individual action by User B during this web session drives a score in the behavioral portrait. In the case of User B, the focus on the recommendations and reviews of other customers, shown in Steps (c) through (h), demonstrate a collaborative decision making behavior. The rules triggered by these steps collectively decrease the score on the Decision Making attribute by 30 points. The shift in User B's product direction, demonstrated by Step (g), triggers rules which decrease the score on the Information Presentation attribute by 10 points, indicating a choice-oriented preference. In Step (h), User B exhibits a desire to avoid problems, and the rules increase the score on the Motivation scale by 20 points. In this example, User B's scores for the first three attributes in Table C1 are as follows:

TABLE C3: User B score

	Psychological Attribute	Score	Behavior
1	Decision Making	-30	Collaborative decision making
2	Motivation	+20	Problem-avoidance motivation
3	Information Presentation	-10	Choice-oriented preference

[0096] Both users A and B have displayed key behavioral patterns in each of the transactions which can be used to dynamically reconfigure the web pages displayed on the website. Referring again to FIGs. B1-B2, clicks and entries are passed from the clients' web browsers **b1-23** through the Internet **b1-27** to the enterprise web server **b1-19**. At this point, the web server **b1-19** passes the entry information through to the dedicated server appliance **b1-15** (see FIGs. 1-2) via the API **b1-41** software component (in embodiments in which the methodology is implemented with software installed on an application server, the web server **b1-19** would pass the entry information to the appropriate application server **b1-13** instead).

[0097] The API **b1-19** passes the entry and user identification information through to the portrait generator **b1-45**, which interfaces with the portrait database **b1-43** for historic user patterns and portrait information. At this point, a current portrait is generated for that user at that time. If the current portrait is determined to be strong enough for representation of the website data, the portrait and trigger is passed to the enterprise application server **b1-13** responsible for presenting the website information to the web server **b1-19** for potential re-mashing of content and offers. The result of the processing in an e-commerce application is a user-personalized web-page in the context of the current user behavior and buying pattern.

[0098] In some embodiments, an initial matrix of behaviors may be utilized to establish an initial portrait for a user. Such a matrix may reflect the fact that consumers have different personalities, and exhibit different behaviors, based on time and topic. Such behaviors may be hard-wired, and may directly impact how a consumer feels when they are presented with information concerning a product or service.

EXAMPLE C2

[0099] This example illustrates how user behavior may be tracked, weighted and utilized to develop a behavioral portrait for the user.

[00100] A user's behavior on a website is recorded and analyzed. That behavior may include such factors as:

- (a) navigation selections (which navigation choices are made on the site);
- (b) search text parsing and analysis (search used to navigate to a particular area on the site in conjunction with term analysis);
- (c) icon selection (where the user clicks);
- (d) marketing offer selection (the type of marketing offer a user selects);
- (e) order of behavior (e.g., whether the user engages in seemingly random “browsing” or more focused selections);
- (f) speed of navigation (timed clicks, e.g., speed of checkout or skipping less relevant pages); and
- (g) omitted selections (what the user does not do or select).

[00101] After each action, the user’s portrait is recalculated. This calculation is based upon a dynamic (real-time) weighting for each of the 15 tracked psychological attributes shown in TABLE C1, with each attribute having a neutral setting of 0. The calculation also considers historical knowledge of that user’s previous behavior in known dialogs, and the previous weightings in the current dialog. Each of the 15 behaviors in TABLE C1 is tracked using a sliding scale with 0 as the default weighting for each attribute. A weighting significantly on either side of 0 indicates a tendency of behavior toward that setting.

[00102] As a specific example, a user may display the portrait depicted in TABLE C4 below:

TABLE C4: Example Psychological Attribute Weighting

	Psychological Attribute	Weight
A	Decision Making	49
B	Motivation	62
C	Information Presentation	-53
D	Adoption Stage	-77
E	Relationships	0
F	Specificity	0
G	Frequency	28
H	Teamwork	0
I	Rules	65
J	Speed	0
K	Empathy	0
L	Intensity	0
M	Temperature	0
N	Shade	61
O	Pattern	-33

Such a user is demonstrating behaviors in A, B, C, D, G, I, N and O that are significant enough to trigger a website change.

[00103] The Portrait Engine or Portrait Generator is preferably used to dynamically recalculate the customer's scores on each of the attributes during the web session. The Portrait Engine also preferably considers historical knowledge of that user's previous behavior in known dialogs, and the previous weightings in the current dialog. The engine may be based on a transition table, a rule-based knowledgebase, other forms of artificial intelligence tools, or various combinations or sub-combinations of any of those tools.

[00104] While individual significant weightings (that is, weightings which might impact the website display, format or navigation route) may be sufficient to change web page content or layout in some of the embodiments described herein, preferably, combinations of attributes, the user's behavioral history, and the context of the dialog will be used to set the "trigger" flag and to intercept and analyze the web page being displayed to the user. Typically, the page to be displayed will be modified (that is, a Portrait Enhanced Page (PEP) will be generated). As previously stated, triggers and fail-safes may be implemented throughout the system to ensure that PEPs are not displayed until the behavior is known with a degree of certainty, or, for example, if the user demonstrates behavioral swings while in a transaction.

D. Modification of Web Site Content Based on User Behavioral Portrait

[00105] It will be appreciated that Portrait Enhanced Pages (PEPs) may be produced in the methodologies taught herein by amending web pages in a number of ways. Such changes include, but are not limited to:

- (a) content reorganization/re-prioritization;
- (b) content addition;
- (c) content deletion;
- (d) style alterations of content (i.e. highlighting, changing font/size/color, borders, padding, etc);
- (e) content folding (placing content in collapsible/expandable containers);
- (f) marketing offer personalization;
- (g) icon personalization;
- (h) language personalization;
- (i) expedited navigation paths through the website;
- (j) elongated (added pages) navigation paths through the website.

[00106] As previously noted, in some embodiments, the methodologies described herein may be utilized to modify or augment web page or website content or presentation as a function of user behavioral portrait. This process may be appreciated with respect to

FIG. D2. As seen therein, the behavior of a user on a website is captured **d2-1**, and is analyzed to build a behavioral portrait **d2-2** for that user. It is then determined whether content modification is appropriate in light of the user's behavioral portrait **d2-3**. If so, the content on the website is modified, augmented or enhanced **d2-4** in light of the user's behavioral portrait. Typically, as seen with reference to the sample web pages **d2-5** (shown in greater detail in FIG. D3), this will result in a portrait enhanced web page which is substantially different from the standard, unmodified web page.

[00107] FIG. D1 provides an overview of some possible types of webpage modification that may be effected with some of the methodologies described herein. As seen therein, these modifications preferably occur dynamically and in real-time, and may involve varying levels of complexity and interaction with the user.

[00108] In the particular embodiment depicted in FIG. D1, the first level **d1-2** of web page augmentation involves emphasizing or de-emphasizing certain content. This may result in content being highlighted or being presented with an increased or decreased font size. It may also result in the collapse or expansion of certain menus, and in the repositioning of content within a given web page.

[00109] Again referring to the particular embodiment depicted in FIG. D1, the second level **d1-3** of webpage augmentation involves personalizing offers appearing on the web page. This may involve, for example, presenting banner ads, pop-ups, or hot links whose content is targeted to the user based on their behavioral portrait. This may also involve repositioning of offers on the web page in light of the user's behavioral portrait.

[00110] Still referring to the particular embodiment depicted in FIG. D1, the third level **d1-4** of webpage augmentation involves personalizing the content appearing on the web page. This may involve modifying the format in which content appears (e.g., tab reviews), modifying data appearing on the web page, mash-up of local content (e.g., reviews on the home page), and mash-up of remote content.

[00111] Still referring to the particular embodiment depicted in FIG. D1, the fourth level **D1-5** of webpage augmentation involves the re-routing, expedition or delay of certain webpage content. For example, the check-out process required to purchase an

item advertised on the web page may be modified in light of the user's behavioral portrait to ensure a higher level of satisfaction and success. Up-sell processes appearing on the web page (that is, the practice of suggesting higher priced products or services to a customer who is considering a purchase, such as an offer for a better version of the same product or service the consumer is considering purchasing) may also be modified.

[00112] The augmentor (see FIG. B4) uses portrait attributes and/or type for deciding what applies to a given web page and a specific portrait or portrait type. In a preferred embodiment, the augmentor uses JavaScript injection, which requires the client to include a JavaScript snippet on each page that should be tailored to the current website user. Multiple insertion points may be required, depending on the type of desired modifications and/or page complexity.

[00113] Modification of the webpages is preferably accomplished via JavaScript that gets executed in the customer's browser. The JavaScript manipulating the page is preferably structured as rules along with a core library (jQuery + extensions). Only the rules specific for the combination of the client's web-page and the customer's portrait type or attributes will be downloaded into the browser.

[00114] The jQuery JavaScript library is preferably utilized for creating rules to identify page sections (portrait-based content) and to manipulate content. Extensions to the jQuery library may be created to simplify rule creation, data selection, and content manipulation. In order to reduce bloat, it is preferred to use two types of extensions: those common across clients, and those specific to a client. In order to further minimize load and processing time, the jQuery library may be reduced to the minimum code set required for the rules. The resulting library may then be compressed.

[00115] In order to instrument a site, the major set of web-page templates is identified. The sections of the web page, and the existing portrait bias of each, are then categorized. Modifications to the sections are dependent on the type of portrait bias of that section. The major types of typical content are listed in TABLE D1 below.

TABLE D1: Content Types

	Decision	Motivation	Presentation
Best Sellers	Other	Opportune	
Featured Items	Other		Choice
Popular	Other		
Search	Self		Process
Recommendations	Other		
User Reviews	Other		
Expert Reviews	Self/Other		
Promotions		Opportune	
Advertisements	Other		
Product Details	Self		
Related Items	Other		Choice
Accessories			
Support	Other	Safety	
Informational	Self		
Crumbs			Process
Footnotes			Process
Terms/Policies		Safety	

The foregoing types of content may be represented in the following formats:

- Headings
- Lists/Tables

- Links
- Text
- Images
- Form Items
- Groupings of the above items.

D1. Level 1 Modifications

[00116] Level 1 modifications may include bolding, highlighting, changing the size of text, collapsing sections/lists, repositioning sections, expanding sections/lists, and deleting sections/content using rules based on portrait attributes. Modifications of the identified sections on given web pages depend on the current user's portrait data and on the existing content type in the given sections. For example, reviews and recommended product lists can be collapsed for a 'self' user. Likewise, reviews and recommended product lists might be positioned more prominently on the page for an 'other' user. Examples of some possible modifications which may be implemented for various users are set forth in TABLES D2-D4 below.

TABLE D2: Modifications of Sections Based on User Behavioral Portrait Type:
Self/Other

	Self	Other
Best Sellers	<ul style="list-style-type: none"> • Collapse • Move to lower positioning • Reduce font size and bolding of header and text 	<ul style="list-style-type: none"> • Move to higher position • Increase font size and bolding of heading
Featured Items	<ul style="list-style-type: none"> • Collapse • Move to lower positioning • Reduce font size and bolding of header and text 	<ul style="list-style-type: none"> • Move to higher position • Increase font size and bolding of heading
Popular	<ul style="list-style-type: none"> • Collapse • Move to lower positioning • Reduce font size and bolding of header and text 	<ul style="list-style-type: none"> • Move to higher position • Increase font size and bolding of heading
Search	<ul style="list-style-type: none"> • Move to higher position 	<ul style="list-style-type: none"> • No manipulation necessary
Recommendations	<ul style="list-style-type: none"> • Collapse • Move to lower positioning • Reduce font size and bolding of header and text 	<ul style="list-style-type: none"> • Move to higher position • Increase font size and bolding of heading
User Reviews	<ul style="list-style-type: none"> • Collapse • Move to lower positioning • Reduce font size and bolding of header and text 	<ul style="list-style-type: none"> • Move to higher position • Increase font size and bolding of heading
Expert Reviews	<ul style="list-style-type: none"> • No manipulation necessary 	<ul style="list-style-type: none"> • No manipulation necessary
Advertisements	<ul style="list-style-type: none"> • Remove 	<ul style="list-style-type: none"> • No manipulation necessary
Product Details	<ul style="list-style-type: none"> • Move to higher position • Increase font size and bolding of heading 	<ul style="list-style-type: none"> • Collapse • Move to lower positioning • Reduce font size and bolding of header and text
Related Items	<ul style="list-style-type: none"> • Collapse • Move to lower positioning • Reduce font size and bolding of header and text 	<ul style="list-style-type: none"> • Move to higher position • Increase font size and bolding of heading
Accessories	<ul style="list-style-type: none"> • No manipulation necessary 	<ul style="list-style-type: none"> • Move to higher position • Increase font size and bolding of heading
Support	<ul style="list-style-type: none"> • Collapse • Move to lower positioning • Reduce font size and bolding of header and text 	<ul style="list-style-type: none"> • Move to higher position • Increase font size and bolding of heading
Informational	<ul style="list-style-type: none"> • Move to higher position • Increase font size and bolding of heading 	<ul style="list-style-type: none"> • Collapse • Move to lower positioning • Reduce font size and bolding of header and text

TABLE D3: Modifications of Sections Based on User Behavioral Portrait Type:
Opportune/Safety

	Opportune	Safety
Best Sellers	<ul style="list-style-type: none"> • Move to higher position • Increase font size and bolding of heading 	<ul style="list-style-type: none"> • No manipulation necessary
Promotions	<ul style="list-style-type: none"> • Move to higher position • Increase font size and bolding of heading 	<ul style="list-style-type: none"> • Collapse • Move to lower positioning • Reduce font size and bolding of header and text
Support	<ul style="list-style-type: none"> • No manipulation necessary 	<ul style="list-style-type: none"> • Move to higher position • Increase font size and bolding of heading
Terms/Policies	<ul style="list-style-type: none"> • No manipulation necessary 	<ul style="list-style-type: none"> • Move to higher position • Increase font size and bolding of heading

TABLE D4: Modifications of Sections Based on User Behavioral Portrait Type:
Choice/Process

	Opportune	Safety
Featured Items	<ul style="list-style-type: none"> • Move to higher position • Increase font size and bolding of heading 	<ul style="list-style-type: none"> • No manipulation necessary
Search	<ul style="list-style-type: none"> • No manipulation necessary 	<ul style="list-style-type: none"> • No manipulation necessary
Related Items	<ul style="list-style-type: none"> • Move to higher position • Increase font size and bolding of heading 	<ul style="list-style-type: none"> • No manipulation necessary
Crumbs	<ul style="list-style-type: none"> • No manipulation necessary 	<ul style="list-style-type: none"> • Move to higher position • Increase font size and bolding of heading
Footnotes	<ul style="list-style-type: none"> • Collapse • Move to lower positioning • Reduce font size and bolding of header and text 	<ul style="list-style-type: none"> • No manipulation necessary

D2. Level 2 Modifications

[00117] Level 2 modifications preferably target specific portrait types by altering images and/or text. There are at least two options for modifying text or images on a web

page. One is to create an explicit augmentor rule, and the other is to define images for a page and section in the portal.

[00118] The portal will preferably include web pages where the client can specify images and text that will be dynamically displayed, based on the portrait type of the user. Prior setup work will typically include defining the page templates (URL regex matching) and page sections (jQuery selectors) using friendly names. For example, the product page might have a friendly name of 'Product Page' and the advertising section might have a friendly name of 'Top Right Advertisement'. The user would then be able to specify alternate images/text based on the portrait type. Images may be specified using only a URL. Text content will typically be specified in HTML format.

D3. Level 3 Modifications

[00119] Level 3 modifications preferably add or replace content from the client, and add mash-up content from third party web sites. The portal will include web pages where the client can specify an RSS feed or URL from which to retrieve the mash-up content, along with a list of the desired fields from the resulting content. The mash-ups may be handled by the client's development team to provide for optimal performance and client control.

[00120] Client content may be retrieved through a number of methods. These may include, without limitation:

- an AJAX request from the web browser to the client's systems, which is then displayed;
- instrumentation of links with a portrait type indicator to allow the client to display appropriate data on subsequent pages;
- client addition of multiple content options (one for each portrait type), which the JavaScript will appropriately display based on portrait type; and
- client data retrieval through the use of a client provided API (this approach is not preferred, as it may require very tight integration and substantial custom code).

D4. Level 4 and 5 Modifications

[00121] Level 4 modifications preferably provide re-routing, expediting, and delaying website navigation.

[00122] Level 5 modifications preferably involve product description personalization.

[00123] In the foregoing process, it is preferred that the clients identify web page sections by ids and classes, as this may result in higher performance and reduced rule volatility. It is also preferred that the client assume as much responsibility for dynamic content as possible, as this may provide for higher performance, greater stability and consistency.

EXAMPLE D-1

[00124] This example illustrates the modification of content (on the website of an on-line computer retailer) for two different types of users in accordance with a particular, non-limiting embodiment of the methodologies described herein.

[00125] With respect to FIG. D4 and FIG. D5, some of the behavioral traits of two different hypothetical users are summarized. With respect to FIG. D4, the first user (“Trish”) is a “thinker” type user. Trish is a type of user who is in control of her decisions **d4-1**, and will often say “I have a gut feel” **d4-2**. Trish typically makes her decisions based on a review of detailed specifications and trusted sources **d4-3**, and is motivated by how an offered product will help her to achieve her goals **d4-4**. She wants to see a positive result from her purchase **d4-5**, is heavily dependent on process and procedure **d4-6**, and is not likely to move to the next step in a purchase process before the current step is completed **d4-7**.

[00126] By contrast, the second hypothetical user (“Karl” – see FIG. D5) is a “browser” type user. Karl likes to gather opinions on his potential purchase **d5-1**. It is important to Karl that the product is positively reviewed, has won awards, and is a top 10 choice **d5-2**. Karl is motivated more by avoiding problems than by missing opportunities **d5-3**. Karl will often ask “What do you think?” **d5-4**. He feels constricted by process,

and wants to be able to choose from many options **d5-5**. As a consumer, Karl requires multiple paths to the same result **d5-6**.

[00127] The behavioral portraits of Trish and Karl are summarized in FIGs. D6 and D7, respectively. As seen therein, their behavioral portraits in this particular embodiment consist of a scaled weighting of 15 different behavioral characteristics, including decision, motivation, information, adoption, relationships, specificity, frequency, teamwork, rules, speed, empathy, intensity, temperature, shade and pattern.

[00128] Referring now to FIGs. D8-D13, the manner in which particular web pages on a web site are modified in light of Trish's behavioral portrait is illustrated.

[00129] With reference to FIG. D8, on the homepage **d8-4** of the web site, the advertisement appearing on the top of the home page is personalized **d8-1** so that the language in the advertisement is more aligned with Trish's decision-making attribute. Moreover, the search bar is emphasized **d8-2**. Given Trish's behavioral portrait, it is likely that Trish knows what she's here for, and she prefers web sites that allow her to get to a result quickly. This behavioral trait is accommodated by emphasizing the search bar, which allows her to navigate through the site more quickly.

[00130] With reference to FIG. D9, on the notebook category page **d9-7** of the web site, the fact has been recognized that the standard notebook category page does not give someone of Trish's behavioral portrait sufficient detailed information to make an informed choice. Consequently, the page has been augmented by mashing up additional specification information **d9-3** from other areas on the website. In addition, non-relevant content has been collapsed and de-emphasized **d9-5**, thus resulting in a web page that more accurately reflects Trish's preferences. As with the home page **d8-4** (see FIG. D8), advertising has been personalized **d9-1** and offers have been reformatted **d9-4** in accordance with Trish's behavioral portrait. Also, the search bar has once again been emphasized **d9-2** to allow Trish to get to a result quickly.

[00131] With reference to FIG. D10, the notebook model page **d10-6** of the web site has been personalized with the addition of specification detail **d10-2** and re-formatted

offers **d10-3**. Non-relevant content has been collapsed **d10-4**, and search tools/bread crumbs have been emphasized **d10-1**.

[00132] With reference to FIG. D11, the “1520” page **d11-6** of the web site has been augmented so that the detailed technical specifications of the product under consideration are opened by default **d11-4**. The advertising appearing on the web page, and the layout of the web page itself, continues to be customized **d11-1** in accordance with Trish’s information presentation preferences. The reviews which would ordinarily appear on this web page have been collapsed into a reviews tab **d11-3** so that Trish may choose that content if she decides to, but is otherwise not presented with it. Once again, search tools and bread crumbs have been emphasized **d11-2**.

[00133] Referring now to FIG. D12, the featured systems page **d12-5** of the web site has been customized in light of Trish’s preferences with respect to advertising and page layout **d12-1**. A reviews tab has been added **d12-3** to the page so that the information it contains is de-emphasized, but is available to Trish if she chooses it. Search tools and bread crumbs have again been emphasized **d12-2**.

[00134] With reference to FIG. D13, the configuration page **d13-4** of the web site has been reconfigured so that Trish is redirected past the services page **d13-1**. This reflects her suspicion of content which is introduced into the close process without her consent. All other close pages which are appropriate for Trish’s buying patterns are available. Non-relevant content as been collapsed **d13-2**.

[00135] Referring now to FIGs. D14-D19, the manner in which particular web pages on the same web site are modified in light of Karl’s behavioral portrait is illustrated.

[00136] With reference to FIG. D14, the homepage **d14-4** of the web site has been modified to reflect Karl’s preference for gathering product information from reviews, testimonials and customer success stories. To that end, review content **d14-3** has been added to the page, and a community link **d14-2** has also been provided. Moreover, since Karl is motivated by choices, the advertising content appearing on the page has been personalized **D14-1** to stress the choices that the product offers.

[00137] With reference to FIG. D15, which shows the notebook selection page **d15-6** of the web site, Karl's online buying patterns have indicated a need for choices and recommendations. He is less concerned with detailed specifications, but prefers peer reviews and popular choices. Therefore, some of the product specification information on this page has been replaced with a listing of all notebooks available in all product lines **d15-2**, and the user ratings of each of these products is specified. In addition, recommended links have been expanded **d15-3**, and the availability of help and support has been emphasized **d15-4**. Advertising has also been personalized in light of Karl's behavioral portrait **d15-1**.

[00138] Referring now to FIG. D16, which shows the featured system page **d16-6**, this page of the web site has been modified to reflect the fact that Karl's primary information source is peer reviews. Consequently, the specification content has been collapsed **d16-3** (though it is still accessible), and a reviews tab has been added **d16-2** and expanded **d16-4**. The advertising appearing on the web page has again been personalized **d16-1** to reflect Karl's behavioral portrait.

[00139] Karl's check-out page **d17-3** is depicted in FIG. D17. Karl is opened to recommended configuration options for his purchase, including service options. Therefore, this page is not skipped as it was for Trish. Again, the advertising appearing on this web page has been personalized **d17-1** to reflect Karl's behavioral portrait.

[00140] FIG. D18 depicts Karl's configuration page **d18-5**. Karl displays buying behaviors that indicate a suspicion of process and of being "led down a path". He prefers to be able to somewhat randomly access sections of the check-out process, and he always desires choices. Consequently, the configuration page **d18-5** has been modified to ensure that Karl is comfortable with the check-out process. In particular, new tab formats **d18-1**, new navigation buttons **d18-2**, and new instructions **d18-3** are provided to allow him to randomly access sections of the check-out process.

[00141] FIG. 19 depicts Karl's check-out page **d19-3**. Since Karl is open to purchasing additional products if they are recommended by experts or peers, the

“essential add-ons” tab has been moved **d19-1** to the primary position in the configuration section.

E. Web Site Analysis Based on User Behavioral Portrait

[00142] As previously noted, some of the methodologies described herein may be utilized to provide an analysis of browsing behavior on a web site as a function of behavioral portrait type. Such an analysis may help the owner of a website to improve e-commerce closure rates, to improve the rate of return visits to the website, to understand why customers (or potential customers) leave the website, to understand how to improve the effectiveness of web marketing programs and offline programs, to better align offline marketing with website content, and to understand how to best communicate with different customer segments.

EXAMPLE E1

[00143] This example illustrates the types of analytics (see FIG. A1) which may be generated on an e-commerce web site using some of the methodologies described herein.

[00144] FIGs. E5-E12 represent the results of an analysis report of the type described herein which was prepared on an e-commerce web site. Such an analysis provides trends and indicators which are derived from portrait-based analytics for the website over a predetermined period of time.

[00145] FIGs. E5-E6 depict the number of visits to the web site over a predetermined period of time, broken down in percentages by consumer behavioral portrait type (FIG. E5) and by the total number of visits by each behavioral portrait type (FIG. E6). These results demonstrate that, with respect to the particular web site under consideration, consumers having portrait types F and H showed a visit rate to the web site which was much higher than the average visit rate, while consumers having portrait types B, D, and G showed a much lower than average visit rate to the website. These results suggest that the language used in external marketing campaigns (both online and offline) is attracting consumers of portrait types F and H to the website significantly more than consumers

having other portrait types. Similarly, these results suggest that the language used in the external marketing campaigns is attracting consumers with B, D and G type behavioral portraits significantly less than consumers with other behavioral portrait types. This result may be intentional, or it may be an indicator that traffic generation activities are linguistically skewed to F and H behavioral portrait types, and away from B, D, and G behavioral portrait types.

[00146] FIGs. E7-E8 depict the number of return visits to the website over a predetermined period of time, broken down in percentages by user behavioral portrait type (FIG. E7) and by the total number of visits by each behavioral portrait type (FIG. E8). As these results illustrate, consumers having behavioral portrait types F and H are showing much greater than average return rates as compared to other behavioral portrait types. The combination of above average total visit numbers described above, and the very high return rates shown here, indicates that there is good alignment between traffic generation activities and website behavior.

[00147] As these results also illustrate, behavioral portrait types B, D, and G show a much lower than average return rate as compared to other behavioral portrait types. The combination of below average total visit numbers for these behavioral portrait types as indicated above, combined with the very low return rates indicated here, suggest an issue with website behavior not matching expectations for consumers of this behavioral portrait type.

[00148] FIGs. E9-E10 summarize the close rates as a function of behavioral portrait type. These data suggest that consumers of behavioral portrait type H are showing below average close rates when compared other behavioral portrait types. This behavior indicates a potential issue with the check-out process for consumers of this behavioral portrait type. The high visitor rates indicate good traffic generation. High return rates imply that the website informational structure is sound. However, the low closure rate is a concern. This may be due to a misalignment of the closure process language and behavior with the rest of the web site. Thus, it would be prudent to check the top ranking

abandoned pages for consumers of this behavioral portrait type to determine the key pages to be examined and tuned.

[00149] Consumers of behavioral portrait types C, E, and G are showing very low close rates on the website when compared to other behavioral portrait types. The very poor visit rates exhibited by consumers of this behavioral portrait type as compared to consumers of other behavioral portrait types strongly suggests that traffic generation for consumers of these behavioral portrait types is not working. When it does work, these visitors close less than those with other portrait types. This result may be intentional. However, if it is not, these results suggest that the abandoned pages should be checked, and the language or presentation on these pages should possibly be modified, to better align them with consumers of these behavioral portrait types.

[00150] Consumers of behavioral portrait types A and F are closing and abandoning at approximately the same rates. These indicators demonstrate very good alignment between marketing campaigns and website behavior. Nonetheless, the web site manager may wish to check the abandoned pages and program/marketing campaign statistics to determine whether further tuning can occur.

[00151] Consumers of behavioral portrait types B and D are showing very high close rates when compared to consumers of other behavioral portrait types. This result suggests a serious misalignment of traffic generation activities (online and offline marketing campaigns, pay-per-click, etc.) and the behavior and language used on the website. Consumers having these portrait types are closing at a high rate, but traffic generation programs in the outbound marketing activities in use appear to be driving these customers to the site in lower numbers as compared to consumers having other behavioral portrait types. Alignment of the language used in those marketing campaigns may drive higher levels of qualified, closing traffic to the site. The programs and advertising statistics may also be checked for further details on what is working and what is not working.

[00152] FIG. E11 summarizes the average time spent on the web site as a function of consumer behavioral portrait type. The results shown therein indicate that consumers of

behavioral portrait types G and H are spending an average amount of time on the website. These consumers are leaving the website early in the website page hierarchy, but are spending an average time on the pages they are viewing. This may indicate that pages on the website are lengthy and informational, but are not targeted to consumers of these behavioral portrait types. Another possibility is that the website behavior does not offer a clear path to the next step or a procedure for closing on the product. This would suggest that the abandoned pages and portrait definitions should be checked for further information.

[00153] FIG. E12 summarizes the link analysis for the website as a function of consumer behavioral portrait type. The results shown therein suggest that consumers of behavioral portrait types C and E are clicking through an average number of pages on the website, and yet are abandoning the website more often than not. This may be an indication that the language used in marketing and outbound programs is misaligned with website behavior. In this case, it is possible that the website demonstrates a similar flow throughout and that consumers of this behavioral portrait type abandoned the website at the first page that did not give them the information that they needed. These results suggest that the abandoned pages should be checked for more details on where these consumers are leaving. It is also possible that consumers are satisfied with the first few interactions with the web site, and then hit an area of misalignment. Again, the abandoned page details may be consulted to provide more information on this issue.

[00154] These results also show that consumers of behavioral portrait types B and D are clicking through an average number of pages on the website. Consumers having these behavioral portrait types are closing within a few clicks. This suggests that the website is organized appropriately for consumers of these portrait types, and that such consumers are finding the information that they need.

[00155] The results also demonstrate that consumers of behavioral portrait types G and H are clicking through very few pages on the website and are abandoning the website very quickly (on average, within the first few clicks). It is possible that the first few pages presented to these customers are the problem. For example, specifically ending

pages from outbound programs or common entry points from pay-per-click activities may be demonstrating the suspect behavior. These results suggest checking the abandoned page details, and focusing on tuning these pages first. Another possible approach would be to test specific marketing programs with new landing pages more specifically focused on consumers of these portrait types.

[00156] In a preferred embodiment of the web site analytical software and methodologies provided herein, a knowledge base is provided which conducts real-time analysis of the behavioral data collected from web sessions. Using a set of rules or other analytical tools, the exhaustive set of data may be mined for patterns, trends, alignments, disconnects, and other observations. This analysis recognizes and identifies the complex conditions involving various combinations of the data and statistics collected by the Portrait Engine (the software module that generates user behavioral portraits; see FIG. B4). The key results can be highlighted, and a manageable set of recommendations can be made based on those results. In this way, a marketing team utilizing the report receives more actionable information, instead of an overload of data with no ability or means of identifying the critical content.

[00157] The generated report describes the web analytics and behavioral data presented in the report's graphs by pointing out the important observations marketing or e-commerce teams should notice. In the example shown above, the rules engine identifies that customers with Portrait type F have a much higher visit rate than average. However, the closure rate for Portrait type F is considerably lower than that of Portrait type B. In this particular example, the results could indicate that the outbound marketing campaign is more oriented to those customers who display the behaviors of Portrait F, while the site itself is more comfortable to customers with behaviors of Portrait type B.

F. Strategic Information for Sales Groups based on User Behavioral Portrait

[00158] The user behavioral portraits obtainable with the systems and methodologies described herein may be utilized by various groups to enable them to communicate more

efficiently with the user to whom the behavioral portrait corresponds. Such groups include, without limitation, telemarketers, call centers, sales representatives, help centers, and sales teams making face-to-face sales pitches. The information contained in the user behavioral portrait may be utilized, by itself or in combination with general analyses or recommendations for users of the general behavioral portrait type, to understand how to communicate with the user more effectively, to understand how to handle common objections the user may have, and to identify the best manner in which to close a sale with the user.

[00159] In the case of call centers, sales forces, or other similar teams, the portrait of the customer (or potential customer) may be used to generate a customer passport. A review of the customer passport, a non-limiting example of which is depicted in FIG. F1, may provide the employee with information about the customer's preferred approach for making decisions, their basic motivation for completing a transaction, their preferred means of receiving information, and their behavior in terms of each of the remaining attributes. Recommended language may be provided to the employee to create the highest level of comfort for the customer. Similarly, language which will create a dissonance for the customer may be identified. Furthermore, specific language recommendations may be provided to advise the employee on preferred or optimal methods for closing or re-engaging the customer, or responding to common objections the customer may have. Finally, a sample engagement script may be provided for the employee's specific company and situation.

[00160] Again, all of this information and these suggestions may be based on the customer's portrait which is dynamically generated during their web session. It will thus be appreciated that the passport allows a person using it to understand the proper language to use to describe products and services to the customer, to understand the proper way to personalize and position marketing messages for the customer, and to understand the proper way to close each customer.

[00161] The foregoing methodology is depicted schematically in FIG. F2. As seen therein, after a user's behavior on a web site has been captured **f2-1**, a comprehensive

customer portrait is built **f2-2** based upon that behavior. This portrait is then used to generate a customer passport **f2-3** which may be utilized by any of the groups described above to facilitate interaction with the customer **f2-4**.

G. Other Concepts and Applications

G1. General Internet Applications

[00162] While much of the foregoing discussion has dealt with web-based marketing, it will also be appreciated that the systems, methodologies and software disclosed herein are not particularly limited to that application. In particular, the systems, methodologies and software disclosed herein may be applied to a wide variety of applications where customized web pages and/or content are desirable, including, for example, gaming, nonprofit websites, and general Internet use.

[00163] As a particular, non-limiting example, methodologies of the type described herein may be utilized to provide customized web pages or web content in noncommercial applications such as government web sites. For instance, these methodologies may be utilized to provide customization of an IRS web site. Since many taxpayers consult such a site when they have questions relating to their taxes, and since some of the methodologies described herein may be utilized to ensure that information is being presented to these users in a way that is most helpful to them, the use of these methodologies may ensure that users are more likely to stay on the website longer and to find the information they are looking for. This, in turn, may reduce the burden on the IRS call center, and may also reduce the number of mistakes in subsequent tax returns.

[00164] In other embodiments, behavioral portraits for users may be derived from web sites which are unrelated to a business. Those behavioral portraits may then be utilized in the conduct of the business with respect to the individual or to the public and general.

[00165] For example, the behavior of a particular individual on a noncommercial website may be monitored, and a behavioral portrait of the individual may be derived. That behavioral portrait may then be applied to customize content on a commercial website, or may be provided to call centers or other marketing groups to help those

groups understand how to interact with the individual. Such embodiments make it conducive for a business to underwrite a website which provides free content of interest to the general public, since the business may then apply the information it has learned on the nonprofit site to provide a commercial benefit (albeit indirectly) to its commercial business.

G2. Business Models

[00166] The methodologies disclosed herein may also give rise to a number of unique business models. In the current business climate, businesses are increasingly looking for methods to ensure that the products and services they purchase are not burdened with onerous up-front costs. Rather, the current trend is for products and services which demonstrate business value before payment. Consequently, a number of “pay-per-use” and “pay-per-performance” products are available today.

[00167] In the present case, some of the systems and methodologies described herein lend themselves well to a cost model that allows the customer to decide whether the product has impact as the transaction occurs. The unit of cost may be taken as the Portrait Enhanced Page (i.e., the modified web page for a particular customer during a particular web session). As the psychological behavior of the customer is tracked and weighted, the software described herein may be used to generate new web pages for that dialog. These Portrait Enhanced Pages (PEPs) may be offered to the website provider, who may either display the PEPs or opt out of doing so. If the PEP is displayed, the website provider may be charged a small fee, thus eliminating heavy up-front licensing costs and allowing the customer to determine the limit of the investment based upon business value. This model also lends itself to subscription services, where an Internet service provider may package availability of PEPs with their higher end service packages.

[00168] In other business models possible in accordance with the teachings herein, the user portraits described above may be provided to various third party entities, such as call centers, marketing teams, sales forces, and the like. Preferably, the fee for such portraits

is based only on the number of portraits provided to, and accepted by, the third party entity, although various other payment options may be utilized instead. For example, the party providing the portraits may earn a commission which is calculated as a percentage of, or is otherwise based on, the value of one or more successful sales which are subsequently made by the third party entity to the user whose portrait is provided to that entity.

[00169] In some embodiments of the methodologies described herein, the provision of user portraits may be coupled with the provision of other leads relating to the users whose portraits are provided. The party providing the user portraits may be the same as, or different from, the party providing the leads. For example, the party providing the user portraits may be a search engine, and the party providing the leads may be the sponsor of one or more websites that the user has visited, or a business entity (such as, for example, a travel agency, retailer, bank or credit card company) that the user has done business with in the past. In such embodiments, the third party entity may decide whether or not to accept the portrait with the lead, and fees may be charged only when portraits are exchanged.

[00170] The resulting fees may be apportioned among the search engine and lead generation company in accordance with a contractual agreement between the organizations. If the party providing the user portraits is the same as the party providing the leads, a premium may be charged for the provision of a lead in conjunction with a portrait, as compared to the fee charged for providing only a portrait.

[00171] The above description of the present invention is illustrative, and is not intended to be limiting. It will thus be appreciated that various additions, substitutions and modifications may be made to the above described embodiments without departing from the scope of the present invention. Accordingly, the scope of the present invention should be construed in reference to the appended claims.

What is claimed is:

1. A method for dynamically reconfiguring web pages based on user behavioral portraits, comprising:
 - recording data relating to the behavior of a user on a website;
 - building a behavioral portrait of the user based on the data; and
 - dynamically reconfiguring web content based on the behavioral portrait.
2. The method of claim 1, wherein dynamically reconfiguring web content includes at least one action selected from the group consisting of (a) changing the position at which content appears on a web page; (b) highlighting content on a web page; and (c) deemphasizing content on a web page.
3. The method of claim 2, wherein highlighting content on a web page includes at least one action selected from the group consisting of (a) changing the font size of content on the web page, (b) changing the font type of content on the web page, and (c) changing the font color of content on the web page, and wherein deemphasizing content on a web page includes at least one action selected from the group consisting of (a) moving content on the web page to a pull down menu, and (b) moving content on the web page to a separate page accessible by a hotlink placed on the web page.
4. The method of claim 1, wherein recording data includes at least one action selected from the group consisting of (a) recording selections made by the user; (b) recording search entries made by the user; (c) recording the amount of time the user spends on a web page; and (d) recording the speed at which the user scrolls down a web page.
5. The method of claim 1, further comprising:
 - passing the recorded data in real-time to data analysis software.
6. The method of claim 1, wherein the behavioral portrait is built by applying psychological portrait scoring.

7. The method of claim 1, wherein the behavioral portrait is built by utilizing an analysis software package to apply a psychological behavior model scoring system to each action taken by the user.
8. The method of claim 7, wherein an existing portrait for the user is updated for each subsequent action the user takes.
9. The method of claim 1, wherein the behavioral portrait is a numerical score derived from the user's progress through the website.
10. The method of claim 9, wherein the numerical score is derived through meta linguistic psychology.
11. The method of claim 9, wherein the numerical score is determined by assigning weights to a user's actions as the user navigates through the website, and wherein the weights are based on possible actions that can be taken by a user as the user navigates through the website.
12. The method of claim 11, wherein the user's actions are weighted by category and lexical analysis.
13. The method of claim 11, wherein the weights are reset to default values when the user portrait exhibits exceptional behavior, and wherein the web content is dynamically reconfigured only when the weighting reaches a predefined tipping point.
14. The method of claim 1, wherein the web pages are from an e-commerce web site, and wherein dynamically reconfiguring web content based on the behavioral portrait includes the application of psychological principles to the identification and accommodation of the user's preferred purchase patterns.
15. The method of claim 1, wherein the web pages are from an e-commerce web site, and wherein dynamically reconfiguring web content based on the behavioral portrait includes the application of psychological principles to ascertain reasons and motivations a user has to close a sale.
16. The method of claim 1, wherein the behavioral portrait of the user is a psychological profile of the user as it pertains to the user's preferred decision making process.

17. The method of claim 1, wherein the behavioral portrait of the user is a psychological profile of the user as it pertains to the manner in which the user prefers to have information presented to them.
18. The method of claim 1, wherein dynamically reconfiguring web content based on the behavioral portrait involves at least one action selected from the group consisting of (a) emphasizing information which is particularly relevant to the user's state of mind; and (b) de-emphasizing information which is of lesser relevance to the user's current needs.
19. The method of claim 1, wherein recording data relating to the progress of a user through a website is accomplished by imbedding Javascript on the pages of the website.
20. The method of claim 1, wherein recording data relating to the progress of a user through a website is accomplished by imbedding Javascript in templates from which the pages of the website are derived.
21. The method of claim 20, wherein the Javascript is adapted to categorize and tag actions of the user on the web page the Javascript is embedded in.
22. The method of claim 1, further comprising:
using the behavioral portrait to determine how the user makes purchase decisions.
23. The method of claim 1, further comprising:
using the behavioral portrait to determine at least one item selected from the group consisting of (a) the user's motivations for making a purchase; (b) how the user prefers to have information presented to them; (c) when, in the lifecycle of a product, the user is most likely to make a purchase; (d) the marketing messages and images most likely to appeal to the user; and (e) the level of detail most appropriate for the user.
24. The method of claim 1, wherein the website is an e-commerce website.
25. A method for developing user behavioral portraits, comprising:
recording data relating to the behavior of a user on a website; and
building a behavioral portrait of the user based on the data.
26. A method for providing customized web pages, comprising:
receiving a request for a web page from a client associated with a user;

modifying the requested web page in light of a behavioral portrait developed for the user; and

providing the modified web page to the user in place of the requested web page.

27. The method of claim 26, further comprising:

monitoring the online behavior of the user; and

developing a behavioral portrait for the user based on that behavior.

28. The method of claim 26, wherein monitoring the online behavior of the user comprises providing the client with web pages having embedded therein software which captures data relating to the user's online behavior.

29. The method of claim 28, wherein the embedded software is JavaScript.

30. The method of claim 28, wherein the captured data includes information relating to items selected from the group consisting of (a) items on a web page selected by the user; (b) search terms entered by the user on a web page; (c) context-sensitive mouse clicks; (d) keyboard entries; and (d) menu selections.

31. A system for providing customized web pages, comprising:

a first server adapted to provide web pages to a client associated with a user and being further adapted to receive input from the user when the user accesses features on the web pages;

a software program adapted to (a) receive user input from the first server, (b) create a behavioral portrait of the user based on the user input, and (c) dynamically update the behavioral portrait as additional user input becomes available, thereby creating an updated behavioral portrait; and

a second server adapted to alter the content of the web pages displayed by said first server based on the updated behavioral portrait.

32. The system of claim 31, wherein the user input includes data relating events selected from the group consisting of mouse clicks and field entries.

33. The system of claim 31, wherein the behavioral portrait is a numerical score derived through neural linguistic programming and based on the user's navigation through the web pages hosted by the first server.

34. The system of claim 31, wherein the numerical score is determined by assigning weights to a user's actions based on possible actions that can be taken by a user as the user navigates through the web pages.
35. The system of claim 34, wherein the user's actions are weighted by category and lexical analysis.
36. A system for providing customized web pages, comprising:
a server in communication with a client over a network; and
a software program adapted to develop a behavioral portrait of a user associated with the client based on captured data relating to the online behavior of the user.
37. The system of claim 36, wherein the software program is further adapted to modify web content based on the behavioral portrait of the user.
38. The system of claim 37, wherein the software is adapted to modify web dynamically and to provide the server with modified web content in real-time.
39. The system of claim 36, wherein the software program is adapted to capture data relating to the behavior of the user on a website.
40. The system of claim 36, wherein the server is in communication with a plurality of clients over the network, and wherein the software is adapted to develop behavioral portraits of a plurality of users associated with the plurality of clients.
41. The system of claim 36, wherein the server is adapted to provide the client with web pages having software embedded therein, and wherein the embedded software is adapted to monitor client activity.
42. The system of claim 41, wherein the embedded software is adapted to capture data relating to the monitored client activity, and to transmit the captured data to the server.
43. The system of claim 41, wherein the embedded software is JavaScript.
44. The system of claim 42, wherein the server is adapted to store the captured data in a database.
45. The system of claim 44, wherein the software program is adapted to develop a behavioral portrait for a user based on the captured data stored in the database.

46. The system of claim 37, wherein the server is adapted to receive requests for web pages from the client, wherein the server is adapted to receive from the software program modified versions of the requested web pages, and wherein the server is further adapted to transmit the modified versions of the requested web pages to the client.

47. The system of claim 46, wherein the modified versions of the requested web pages are original versions of the requested web pages which have been modified in light of the behavioral portrait of the user.

48. The system of claim 40, wherein the software is resident in a dedicated server appliance comprising:

an application programming interface adapted to receive and analyze user input from the server;

a portrait database which stores existing user portraits; and

a portrait generator which generates new user portraits based on the user input.

49. The system of claim 48, wherein the portrait generator is adapted to determine whether a user already has a portrait stored in the portrait database, and is further adapted to modify the existing user portrait as new information about the user's behavior becomes available.

50. The system of claim 49, further comprising an application server, wherein the application server is adapted (a) to act upon a user portrait by generating re-mashed web content which is personalized to the user's behavioral portrait, and (b) to pass the re-mashed web content to the web server for transmission to the client.

51. The system of claim 50, wherein the dedicated server appliance continuously updates the user portrait database in real-time as new input from a user becomes available, and passes updated portrait information for the user to the application server.

52. The system of claim 51, wherein the application server serves up re-mashed content to the user based on the updated portrait information.

53. The system of claim 36, wherein the software is resident on a dedicated server appliance adapted to (a) receive and analyze user input from the server, (b) build a

behavioral portrait for the user, (c) generate a portrait enhanced web page, and (d) provide the portrait enhanced web page to the client.

54. The system of claim 53, wherein the dedicated server appliance comprises an application programming interface that receives user input from the server and outputs portrait enhanced page is to the server.

55. The system of claim 54, wherein the dedicated server appliance further comprises:

- a customer portrait engine which assembles and modifies customer portraits based on behavioral data captured from the server;

- a page interpreter which interprets the various objects present on a web page;

- a portrait enhanced page (PEP) generator which utilizes the customer portrait to generate PEPs; and

- a PEP database where PEPs are stored.

56. The system of claim 55, wherein the server appliance further comprises a portrait database for storing customer portraits generated by the customer portrait engine.

57. The system of claim 56, wherein the dedicated server appliance is further adapted to communicate information pertaining to customer portraits to third parties upon demand.

58. The system of claim 53, wherein the dedicated server appliance resides at an Internet service provider.

59. The system of claim 36, wherein the software is injected into a client's website using JavaScript snippets placed in the client's web page templates.

60. The system of claim 36, wherein the software is further adapted to capture data relating to the online behavior of the user.

61. The system of claim 60, wherein the JavaScript snippets are adapted to be activated in real-time to insert the most current JavaScript code from the host system into the web page on demand.

62. The system of claim 61, wherein the dedicated server appliance comprises a portrait engine, wherein the JavaScript is adapted to send a user's click stream back to the

portrait engine, and wherein the portrait engine utilizes the click stream to generate a behavioral portrait for the user.

63. A method for analyzing a website, comprising:

recording data relating to the online behavior of a plurality of users through the website;

building a behavioral portrait for each of the plurality of users based on the data;

categorizing the behavioral portraits of the plurality of users into a plurality of portrait types; and

analyzing the behavior of the plurality of users on the website as a function of portrait type.

64. The method of claim 63, wherein the recorded data relates to behavior selected from the group consisting of (a) items clicked on by a user; (b) the number of times a user abandons the web site; (c) the number of return visits a user makes to the website; (d) the number of online purchases made by a user on the website; (e) the average time a user spends on the web site; and (f) the number of pages visited on the web site by a user.

65. The method of claim 63, wherein analyzing the behavior of the plurality of users on the website as a function of portrait type involves determining at least one factor selected from the group consisting of (a) the relative frequency with which items are clicked on by a user as a function of portrait type; (b) the relative frequency with which users abandon the website a function of portrait type; (c) the relative frequency with which users make return visits to the website a function of portrait type; (d) the relative frequency of online purchases on the website a function of portrait type; (e) the average time users spend on the website a function of portrait type; and (f) the average number of pages users visit on the website a function of portrait type.

66. The method of claim 63, further comprising:

outputting graphical information representing the recorded data as a function of portrait type.

FIG. A1

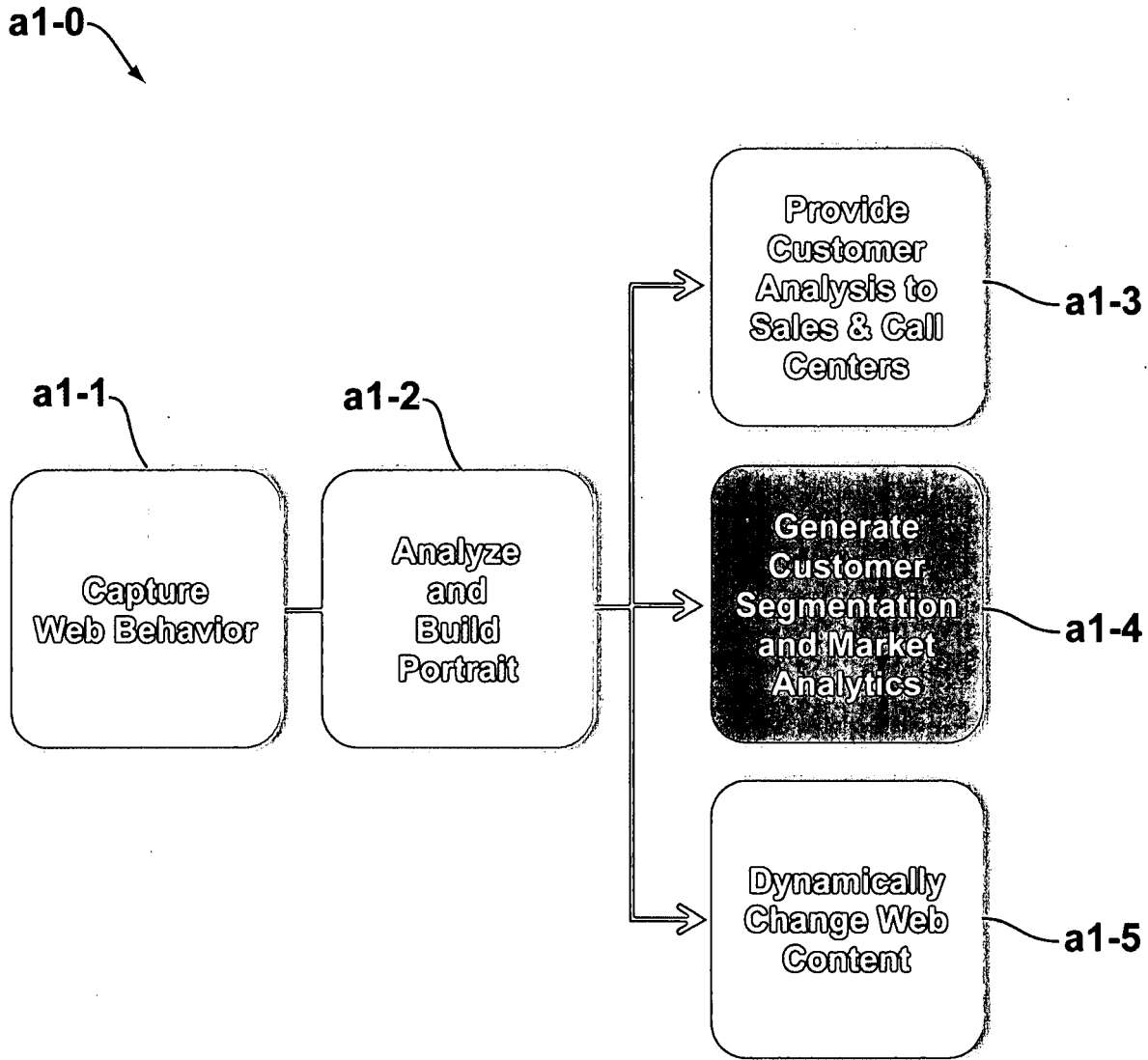


FIG. A2

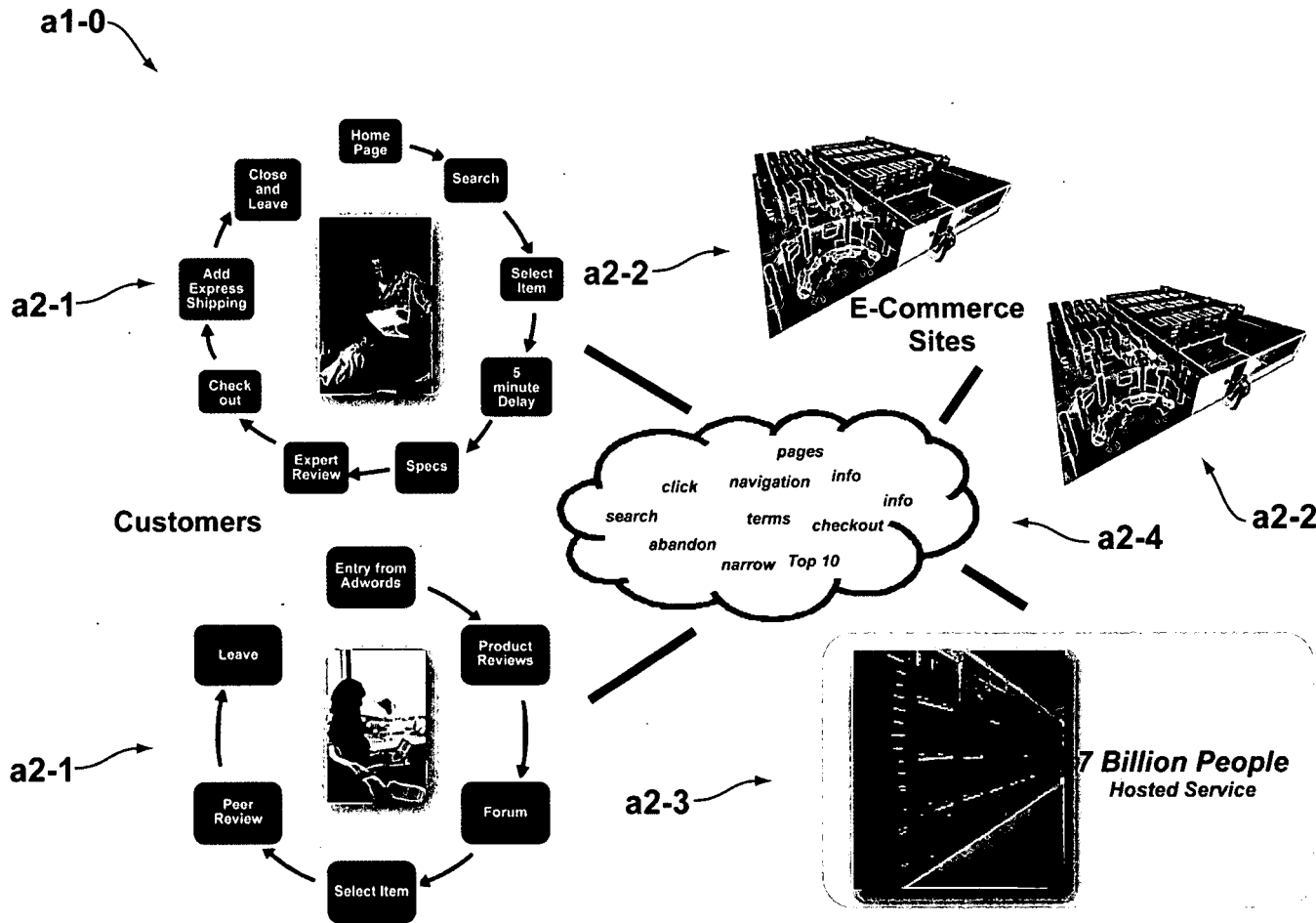


FIG. A3

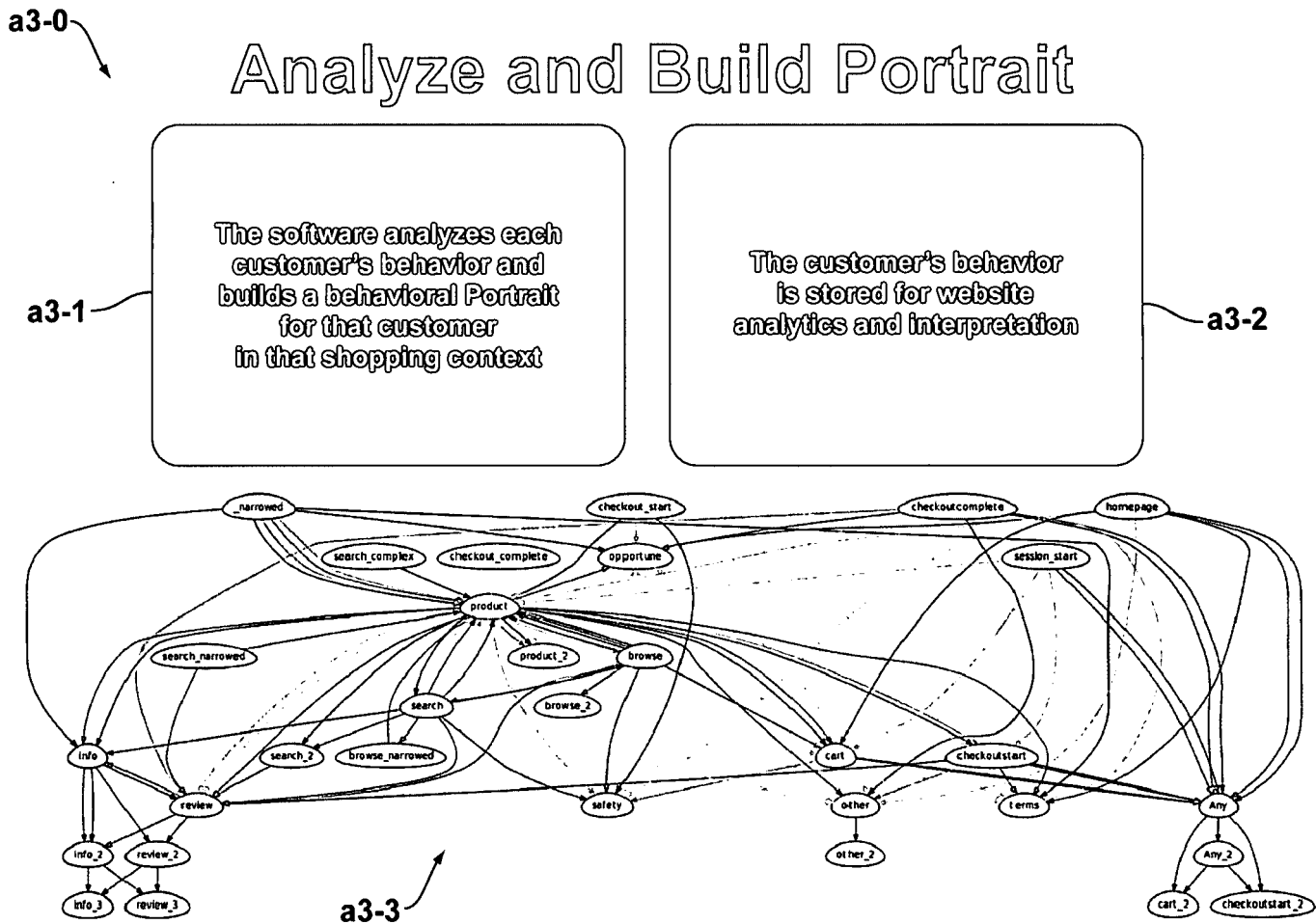
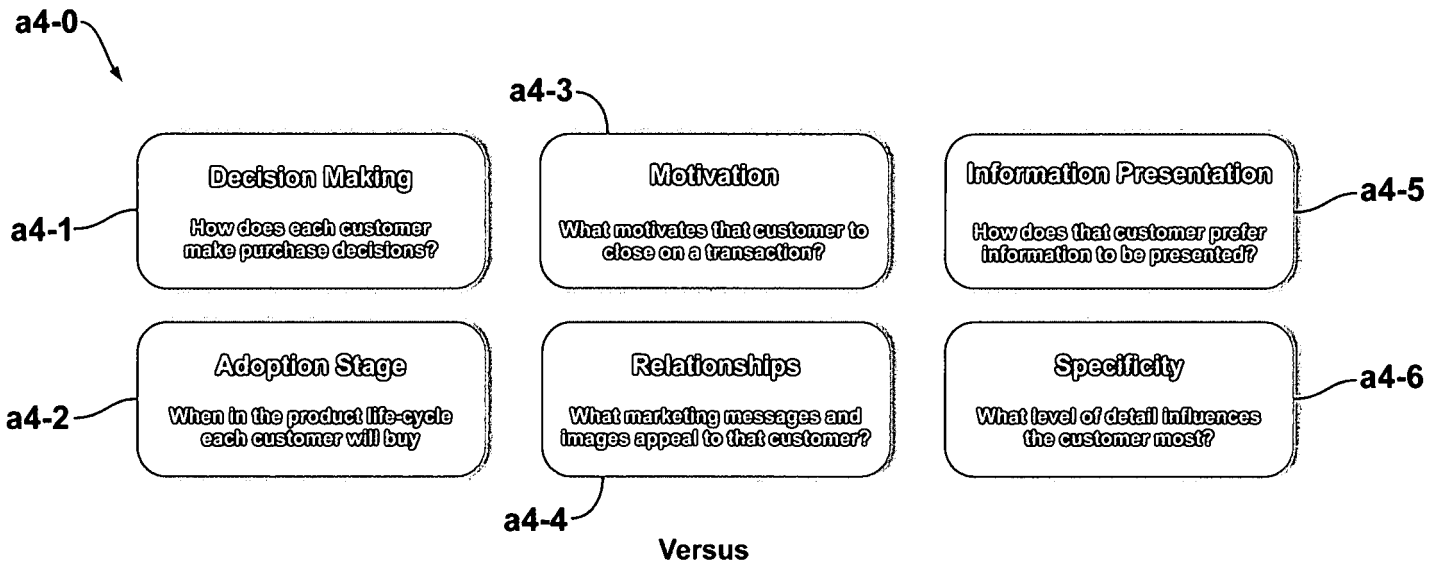


FIG. A4



- a4-7** points to the following list:
- | | | |
|------------------|---------------------|--------------------|
| Relevance | Demographics | Analytics |
| Pricing | | Operating System |
| Promotions | Age | Number of Closures |
| Purchase History | Location | Number of Visitors |
| Products | Gender | Number of Abandons |
| "Crowd" Behavior | Income | Browser type |

FIG. B1

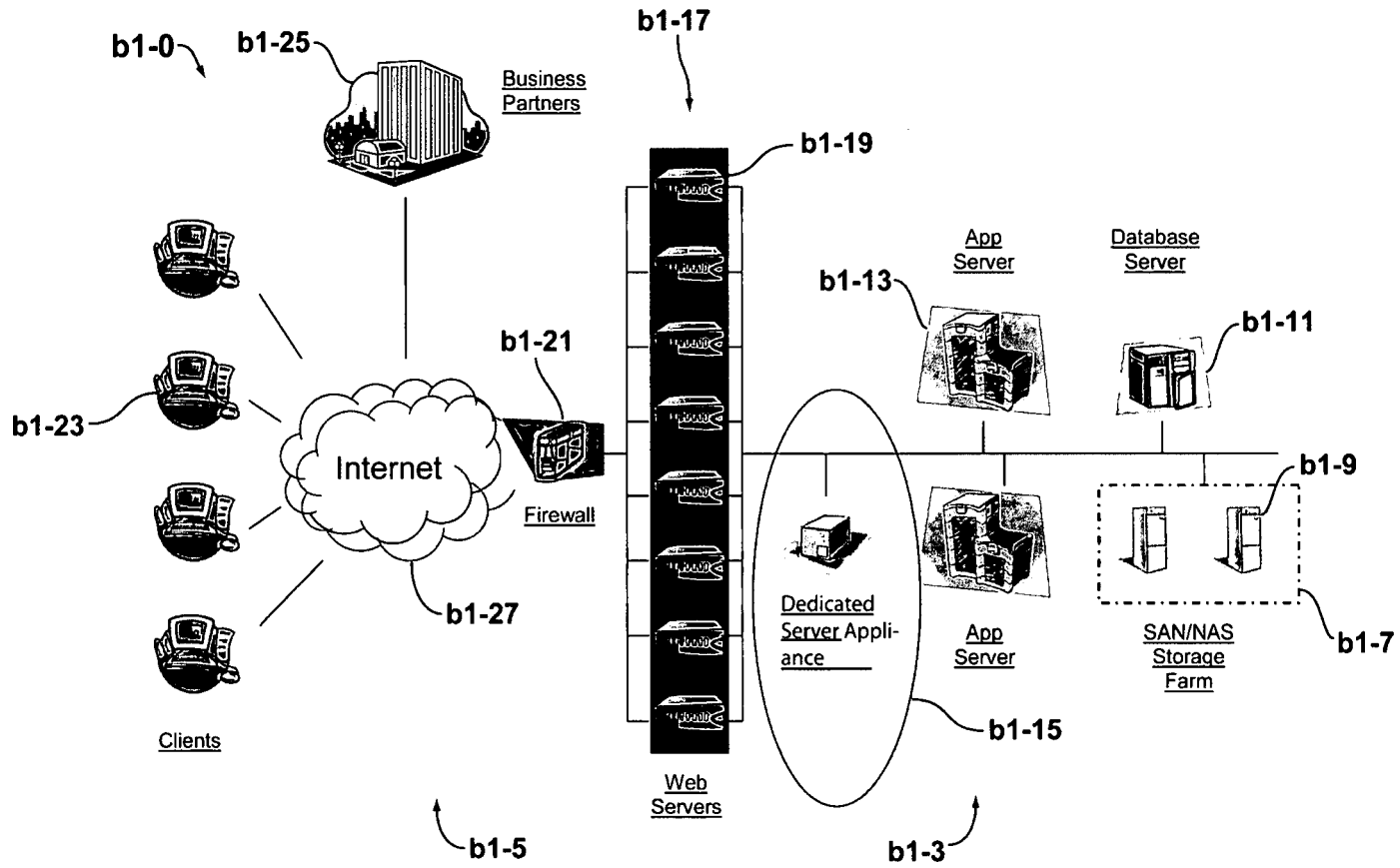


FIG. B2

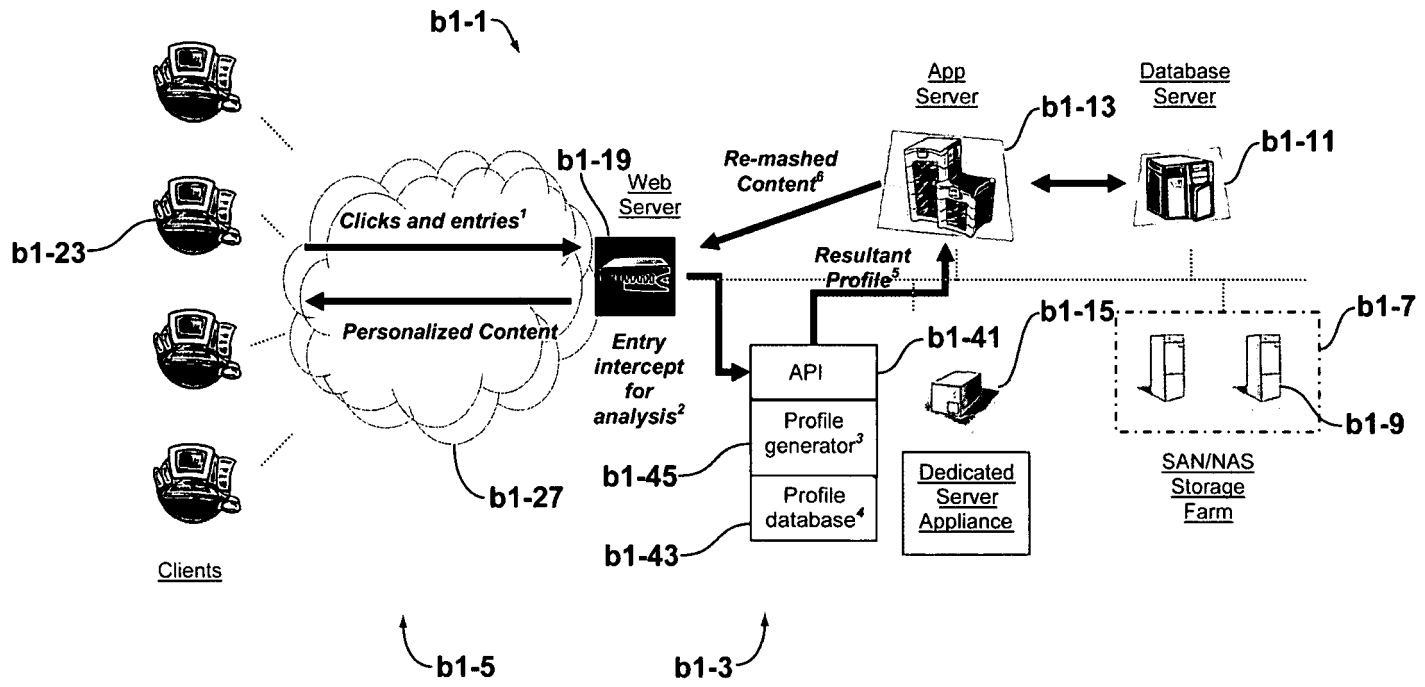
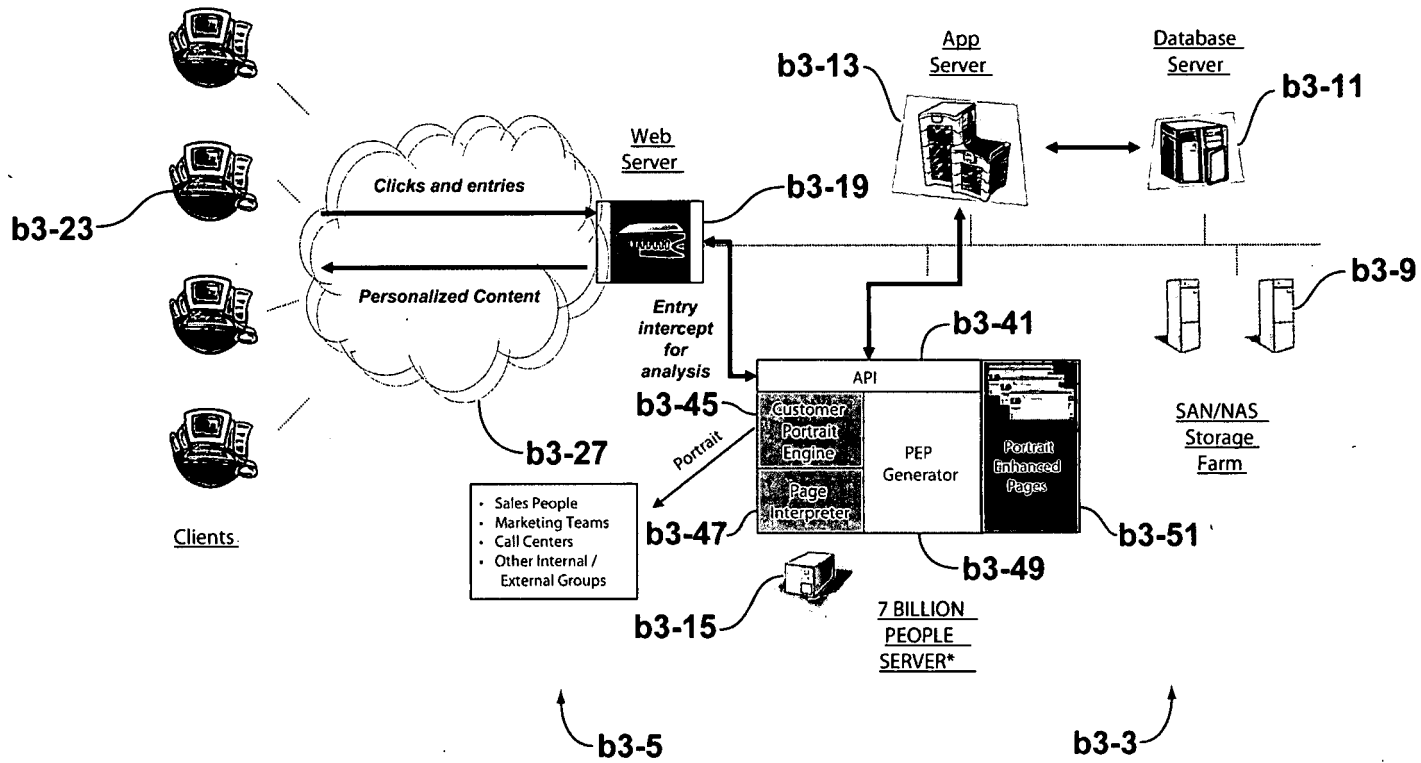


FIG. B3



b4-0

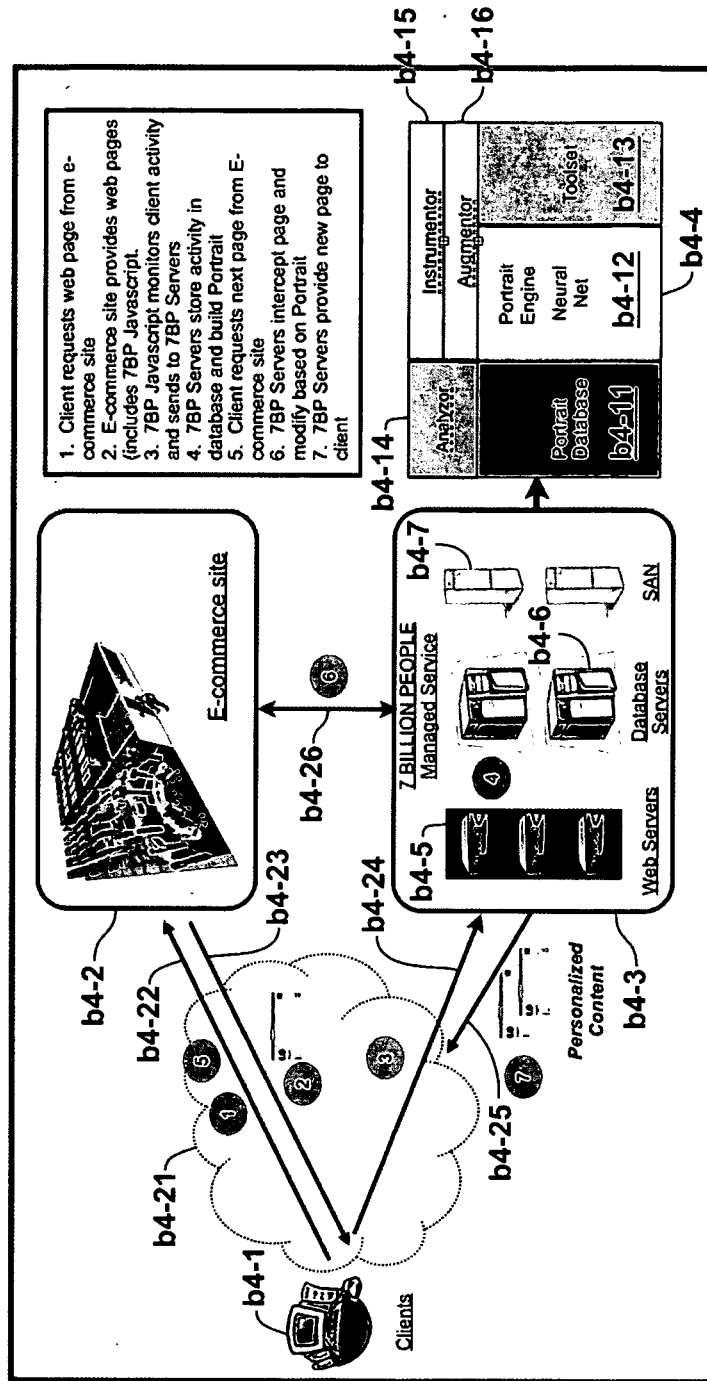


FIG. B4

Category Electronics Audio & Video

Electronics > Audio & Video > DVD Players & Recorders

Showing 1 - 24 of 1,400 Results Previous | Page: 1 2 3 ... | Next

Sort by Bestselling

- DVD Players & Recorders Blu-ray Disc Players (16) DVD Changers (66) DVD Players (257) DVD Recorders (224) DVD-VCR & Other DVD Combos (115) HD DVD Players (15) Portable DVD Players (192) Upconverting DVD Players (40)

- Brand Any Brand Toshiba (112) Philips (82) Sony (74) OPPO Digital (3) Coby (81) Panasonic (77) Samsung (59) Sharp HE (1) Pioneer (18) Audiovox (54) LG (17) jWIN (24) See more...

- Seller Any Seller Amazon.com (183) DiscountJungle (160) Beach Audio (130) B&H Photo-Video (126) J&R Music and Computer World (122) GizmosForLife (105) ANTOline (105) PricePiggie (104)

1.



Philips DVP5982 1080p Upscaling DVD Player Buy new: \$89.99 \$64.99 28 Used & new from \$49.75 Get it by Thursday, Jan 31 if you order in the next 22 hours and choose one-day shipping. Eligible for FREE Super Saver Shipping. ★★★★★ (119)

2.



Philips DVP5140 Multiformat DVD Player with DivX, MP3, Windows Media Support Buy new: \$69.99 \$39.99 39 Used & new from \$34.95 Get it by Thursday, Jan 31 if you order in the next 22 hours and choose one-day shipping. Eligible for FREE Super Saver Shipping. ★★★★★ (199)

3.



Sony DVP-NS77H/B 1080p Upscaling DVD Player with HDMI Output Black Buy new: \$89.99 Click to see price 13 Used & new from \$71.77 Get it by Thursday, Jan 31 if you order in the next 22 hours and choose one-day shipping. Eligible for FREE Super Saver Shipping. ★★★★★ (48)

4.



OPPO DV-980H 1080p Up-Converting Universal DVD Player with HDMI and 7.1CH Audio Buy new: \$169.99 2 Used & new from \$169.99 Get it by Thursday, Jan 31 if you order in the next 22 hours and choose one-day shipping. Eligible for FREE Super Saver Shipping. ★★★★★ (112)

5.



Coby DVD-224ss Compact DVD Player Buy new: \$26.18 47 Used & new from \$19.72 In Stock Eligible for FREE Super Saver Shipping. ★★★★★ (260)

6.










Panasonic DMP-BD30K 1080p Blu-Ray Disc Player Buy new: \$489.99 Click to see price 14 Used & new from \$400.54 Get it by Thursday, Jan 31 if you order in the next 22 hours and choose one-day shipping. Eligible for FREE Super Saver Shipping. ★★★★★ (37)

FIG. C1

Sheet 9/37

FIG. C2

-  = Browse link
-  = Product link
-  = Customer review
-  = Advertisement
-  = Recommendation
-  = Cart
-  = Information link

amazon.com Hello, Sign in to get New customer? [Start here.](#)

Search

Category: [Electronics](#) > [Audio & Video](#) > [DVD Players & Recorders](#)

Showing 1 - 24 of 1,400 Results Previous | Page: 1 2 3 ... Next Sort by: [Bestselling](#)

DVD Players & Recorders

- [Blu-ray Disc Players \(16\)](#)
- [DVD Chargers \(66\)](#)
- [DVD Players \(257\)](#)
- [DVD Recorders \(224\)](#)
- [DVD-VCR & Other DVD Combos](#)
- [HD DVD Players \(15\)](#)
- [Portable DVD Players \(192\)](#)
- [Upconverting DVD Players](#)

Brand

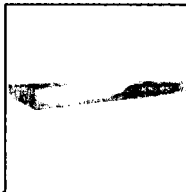

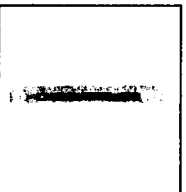
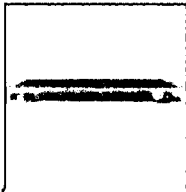
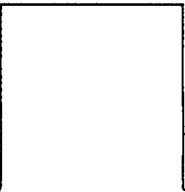
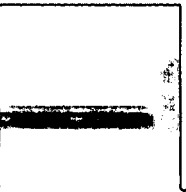
Any Brand

- [AOC \(112\)](#)
- [Philips \(82\)](#)
- [Sanyo \(74\)](#)
- [OPPO Digital \(3\)](#)
- [Soby \(81\)](#)
- [Panasonic \(77\)](#)
- [Samsung \(59\)](#)
- [Sharp HD \(1\)](#)
- [Hionex \(18\)](#)
- [Audiovox \(34\)](#)
- [LG \(17\)](#)
- [VIZO \(24\)](#)
- [See more...](#)

Seller

Any Seller

- [Amazon.com \(185\)](#)
- [Bestand Audio \(1160\)](#)
- [Hatch Audio \(130\)](#)
- [DCH Photo-Video \(126\)](#)
- [J&K Music and Computer World \(1\)](#)
- [Samsara \(105\)](#)
- [AUTO \(105\)](#)
- [Price \(104\)](#)

<p>1. </p> <p>DVD Player</p> <p>59.00 \$64.99</p> <p>25 Best from \$49.75</p> <p>Get it by Thursday, Jan 31 if you order in the next 22 hours and choose one-day shipping.</p> <p>Eligible for FREE Super Saver Shipping.</p> <p>1,234 (819)</p>	<p>2. </p> <p>Player with DivX, MP3, Windows Media Support</p> <p>69.00 \$39.99</p> <p>1,234 from \$34.95</p> <p>Get it by Thursday, Jan 31 if you order in the next 22 hours and choose one-day shipping.</p> <p>Eligible for FREE Super Saver Shipping.</p> <p>1,234 (839)</p>	<p>3. </p> <p>Upscaling DVD Player with HDMI Output Black</p> <p>800.00</p> <p>1,234 from \$71.77</p> <p>Get it by Thursday, Jan 31 if you order in the next 22 hours and choose one-day shipping.</p> <p>Eligible for FREE Super Saver Shipping.</p> <p>1,234 (839)</p>
<p>4. </p> <p>Up-Converting Universal DVD Player with HDMI and 7.1CH Audio</p> <p>169.00 \$169.99</p> <p>1,234 from \$169.99</p> <p>Get it by Thursday, Jan 31 if you order in the next 22 hours and choose one-day shipping.</p> <p>Eligible for FREE Super Saver Shipping.</p> <p>1,234 (815)</p>	<p>5. </p> <p>Player</p> <p>\$26.18</p> <p>1,234 from \$19.72</p> <p>In Stock</p> <p>Eligible for FREE Super Saver Shipping.</p> <p>1,234 (839)</p>	<p>6. </p> <p>Blu-Ray Disc Player</p> <p>800.00</p> <p>1,234 from \$400.54</p> <p>Get it by Thursday, Jan 31 if you order in the next 22 hours and choose one-day shipping.</p> <p>Eligible for FREE Super Saver Shipping.</p> <p>1,234 (839)</p>

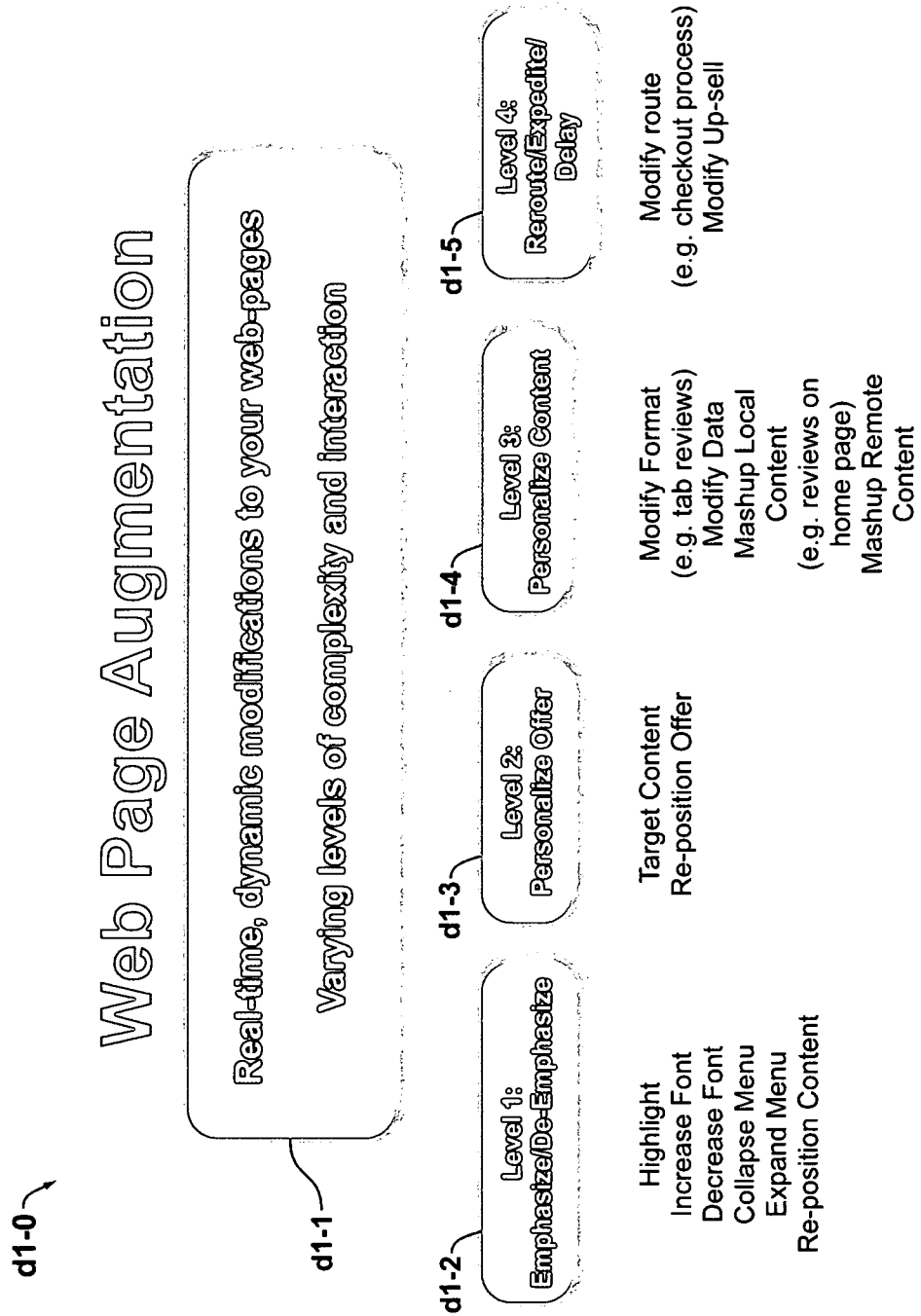


FIG. D1

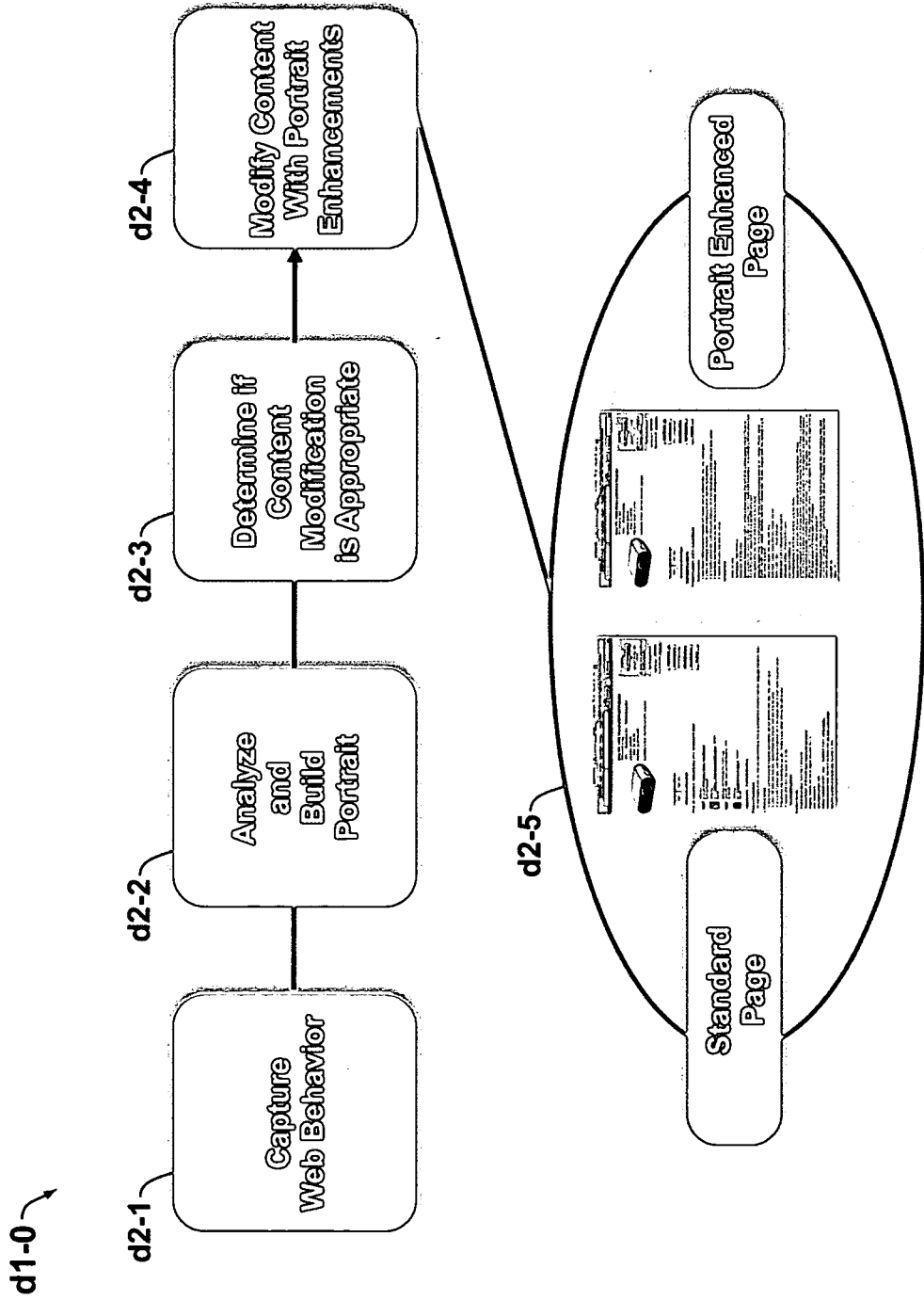


FIG. D2

d3-0

Sony WVA-1451 Cinema LCD Front Projector Item number: 1451
 Part No. 1451-1100-00
 MSRP: \$1,999.99
 MSRP: \$1,999.99 (US)

Availability in Your Region and Sell by Location

For more information, visit www.sony.com

Viewing Options

- View in 3D
- View in 2D
- View in 1D
- View in 4D
- View in 5D
- View in 6D
- View in 7D
- View in 8D
- View in 9D
- View in 10D
- View in 11D
- View in 12D
- View in 13D
- View in 14D
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- View in 99D
- View in 100D

Product Details

Get the shipping on the item when you spend \$149.99 or more on Qualifying Items offered by Sony (MSRP). (Restrictions apply)

Product Features

- View in 3D
- View in 2D
- View in 1D
- View in 4D
- View in 5D
- View in 6D
- View in 7D
- View in 8D
- View in 9D
- View in 10D
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- View in 100D

d3-1

Sony WVA-1451 Cinema LCD Front Projector Item number: 1451
 Part No. 1451-1100-00
 MSRP: \$1,999.99
 MSRP: \$1,999.99 (US)

Availability in Your Region and Sell by Location

Viewing Options

- View in 3D
- View in 2D
- View in 1D
- View in 4D
- View in 5D
- View in 6D
- View in 7D
- View in 8D
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- View in 100D

Product Details

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Product Features

- View in 3D
- View in 2D
- View in 1D
- View in 4D
- View in 5D
- View in 6D
- View in 7D
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- View in 99D
- View in 100D

d3-2

Portrait Enhanced Page

Standard Page

FIG. D3

d4-0

Example Portrait

Trish - The Thinker



- d4-1 She is in control of her decisions
- d4-2 Will often say "I have a gut feel..."
- d4-3 Makes decisions based on her review of detailed specifications and trusted sources
- d4-4 She is motivated by how the product helps her achieve her goals
- d4-5 Wants to see a positive result from her purchase
- d4-6 Is heavily dependent on process and procedure
- d4-7 Will never move to the next step before the current step is completed

FIG. D4

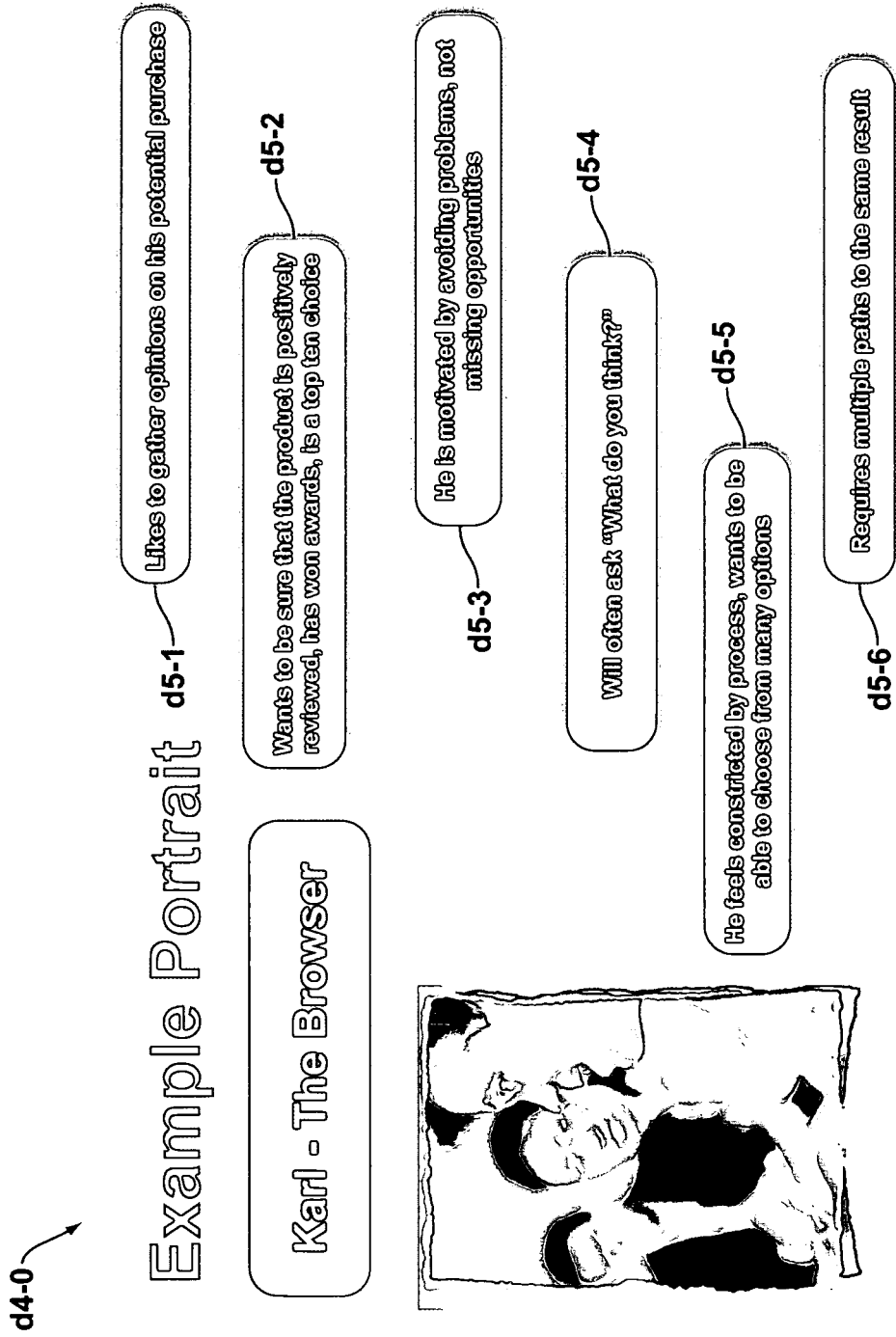


FIG. D5

Trish Portrait

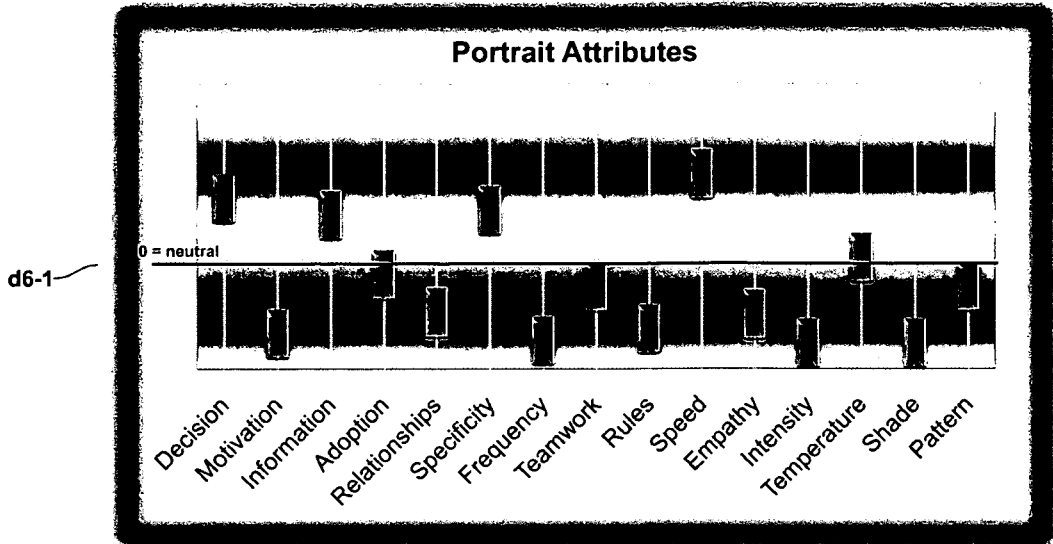


FIG. D6

Karl Portrait

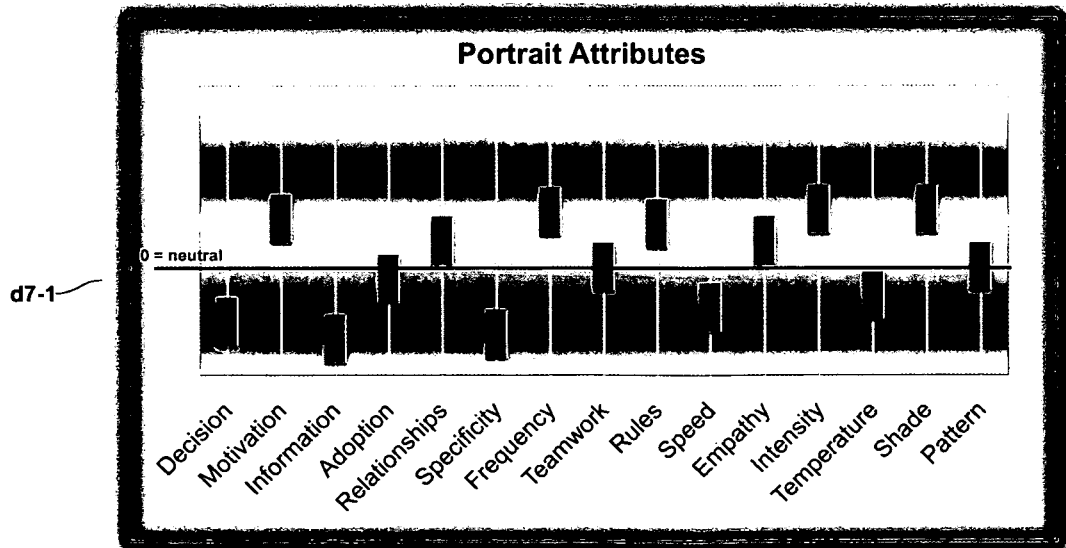


FIG. D7

d8-0 → **Trish's Home Page**

d8-1 Personalized advertising

d8-2 Emphasized search bar

d8-3 Notes:
 Ad is changed so that the language in the ad is "aligned" with Trish's decision making attribute.
 Trish knows what she is here for. She prefers sites that allow her to get there quickly. The search bar is emphasized to allow her to get where she wants to go quickly.

d8-4

DELL™ Buy Online or Call 1-800-4MY-DELL
 You are here: USA

My Account | Premier Logn | My Cart | My Order Status

WILL YOU DECIDE ON THE NEW XPS ONE?
 Performance, Power, Looks.

Keyword Search All Results

Solutions For:
 ▶ Home & Home Office
 ▶ Small & Medium Business
 ▶ Large Business
 ▶ Government, Education, Healthcare & Life Sciences

Support & Help

Desktops and All-in-One

Green, Storage & Networking

Printers, Ink & Toner

The Software & Accessories

Desktops, Notebooks, Servers, Storage, Peripherals, Software & Services, Support & Help

Choose A Country/Region United States

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Ⓞ Large Text

Top

FIG. D8

d9-0

Trish's Notebook Category Page

FIG. D9



- d9-1 Personalized advertising
- d9-2 Emphasized Search Bar
- d9-3 Add specification detail
- d9-4 Personalize and reformat offers
- d9-5 Collapse non-relevant content

Notes:

The standard notebook category page does not give Trish enough detailed information to make an informed choice. Extra specification information has been mashed up from other areas on the site.

Non-relevant content has been collapsed and de-emphasized resulting in a page that more accurately reflects Trish's preferences.

d9-6

d9-7

The screenshot shows the Dell website's notebook category page. At the top, there's a navigation bar with 'Dell' logo and links for Products, Services, Support, Purchase Help, Learn, and Account. Below that, a breadcrumb trail reads 'You are here: USA - Home & Home Office - Notebooks'. A search bar is prominently displayed on the right. On the left, a 'Narrow Your Selection' sidebar allows filtering by Product Category, Notebook Usage, and Screen Size. The main content area features a large banner 'Get prepared now. 12.11.07 is the day.' followed by three product cards: Inspiron Notebooks, XPS Notebooks, and XPS Gaming Notebooks. Each card shows a starting price and a 'Continue' button. Below the cards, there are detailed specifications for three different models, including processor, memory, storage, and screen size. At the bottom, there's a 'FREE HOLIDAY SHIPPING!' banner with a 'LEARN MORE' link, and a 'FREE DELL PROMOTIONAL GIFT CARDS.' banner. The footer contains the user's location, a disclaimer, and a 'Large Text' option.

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d10-0

Trish's Notebook Model Page



d10-1

Emphasize Search/Breadcrumbs

d10-2

Add specification detail

d10-3

Personalize and reformat offers

d10-4

Collapse non-relevant content

Notes:

Continued personalization with emphasized specification detail and custom offers.

d10-5

The screenshot shows a Dell website page for an Inspiron notebook. Annotations include:

- d10-0**: Points to the top navigation bar.
- d10-1**: Points to the breadcrumb trail: "Home > Home Office > Notebooks > Inspiron Notebooks".
- d10-2**: Points to the product specifications section.
- d10-3**: Points to the promotional offer: "FREE DELL PROMOTIONAL GIFT CARDS".
- d10-4**: Points to the "FREE HOLIDAY SHIPPING!" banner.
- d10-5**: Points to the footer area.
- d10-6**: Points to the "JUST IN TIME FOR THE HOLIDAYS BUY TODAY, SHIPS TOMORROW!" banner.

d111-0 →

Trish's 1520 Page

d111-1 → Personalized Advertising

d111-2 → Emphasize Search/Breadcrumbs

d111-3 → Reformat Reviews into Tab

d111-4 → Enter direct to Tech Specs Tab

d111-6 →

Notes:
 Trish has been directed to the detailed technical specs tab of the Inspiron 1520 page.
 Advertising and page layout continues to be customized for her information presentation preferences.
 A new Reviews tab has been added to allow her to choose that content if she decides.

d111-5 →

FIG. D11

d12-0

Trish's Featured Systems Page



d12-1

Personalized Advertising

d12-2

Emphasize Search/Breadcrumbs

d12-3

Add Reviews Tab

Notes:

Continued personalization of advertising and layout including the reviews tab.

d12-5

d12-6

The screenshot shows a Dell Inspiron 1520 product page. At the top, there are navigation links: 'CUSTOMIZE', 'COMPARE', 'BUY', and 'TRACK STOCK'. Below these are three columns of product specifications for the Inspiron 1520. The first column lists the processor (Intel Core 2 Duo E6700), operating system (Windows Vista Home Premium), LCD panel (15.5" Widescreen LED-Backlit), memory (4GB DDR2), and hard drive (160GB 7200 RPM). The second column lists the processor (Intel Core 2 Duo E6700), operating system (Windows Vista Home Premium), LCD panel (15.5" Widescreen LED-Backlit), memory (4GB DDR2), and hard drive (160GB 7200 RPM). The third column lists the processor (Intel Core 2 Duo E6700), operating system (Windows Vista Home Premium), LCD panel (15.5" Widescreen LED-Backlit), memory (4GB DDR2), and hard drive (160GB 7200 RPM). At the bottom right of the screenshot, there is a 'Notes' section with the text: 'Continued personalization of advertising and layout including the reviews tab.'

FIG. D12

FIG. D14



d14-0

Karl's Home Page

d14-5

- d14-1 Personalized advertising
- d14-2 Add Dell Community link
- d14-3 Add review content

Notes:

Karl prefers to gather product information from reviews, testimonials and customer success stories. His home page is modified for his preferences.

Advertising is personalized to Karl's buying behavior, with language focused on the choices that he will get if he buys that product. The language also appeals to Karl's motivation.

d14-4

Karl's Notebook Selection Page

d15-0 →

d15-1 → Personalized advertising

d15-2 → Choico of all notebooks

d15-3 → Personalized navigation

d15-4 → Emphasize help and support


d15-5 →

d15-6 →

Notes:
 Karl's online buying patterns indicate a need for choices and recommendations. He is less concerned with detailed specifications but prefers peer reviews and popular choices.
 Karl's notebook page shows all notebooks available in all product lines.
 Recommended links are expanded and advertising is personalized.

FIG. D15

Karl's Featured System Page

d16-0 → 

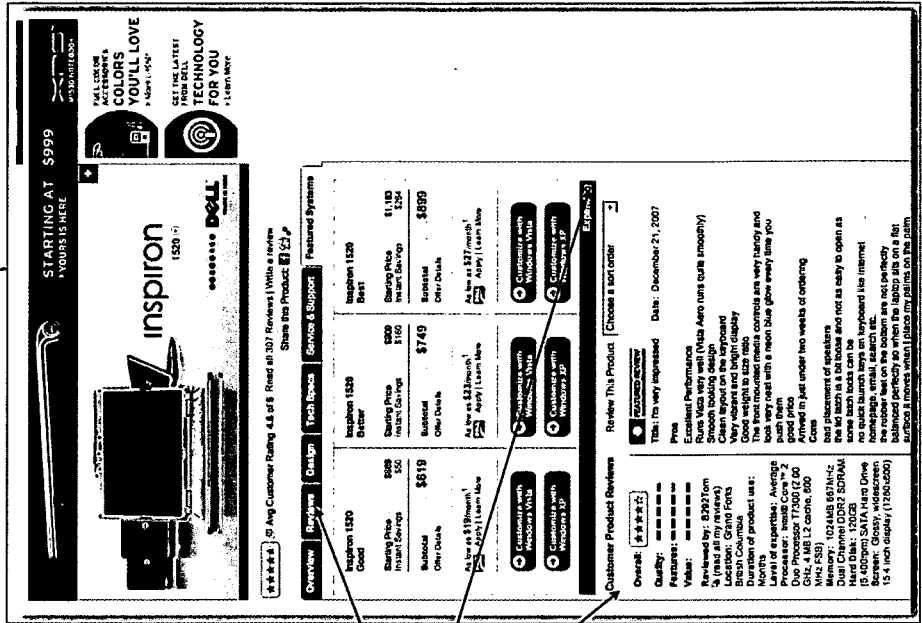
d16-1 → Personalized Advertising

d16-2 → Add reviews tab

d16-3 → Collapse specification content

d16-4 → Expand reviews tab

d16-5 → Notes

d16-6 → 

Notes:
Karl's primary information source is peer reviews. The personalized Featured Systems page shows the (new) reviews tab selected with detailed specification content collapsed, but still accessible.

FIG. D16

d17-0

Karl's Checkout DellCare Page

d17-3



d17-1

Personalized advertising

DellCare Protection Plan

Don't pay too much for protection. Use DellCare to protect your Dell products.

Product Name	DellCare Plan	DellCare Price	Selected
Product Name	Basic	\$119.99	<input type="checkbox"/>
Product Name	Standard	\$179.99	<input type="checkbox"/>
Product Name	Premium	\$239.99	<input checked="" type="checkbox"/>

PER YOUR SYSTEM

Product Name	Basic	<input checked="" type="checkbox"/>
Product Name	Standard	<input checked="" type="checkbox"/>
Product Name	Premium	<input checked="" type="checkbox"/>

EXPRESS/DESK

Product Name	Basic	<input checked="" type="checkbox"/>
Product Name	Standard	<input checked="" type="checkbox"/>
Product Name	Premium	<input checked="" type="checkbox"/>

Notes:
Karl is open to recommended configuration options for his purchase, including service. This page is not skipped as it is for Irish.

d17-2

FIG. D17

d18-0

Karl's Configuration Page



d18-1

New tab format

d18-2

New navigation

d18-3

New instructions

d18-5

Notes:
 This page is modified to ensure that Karl is comfortable with the checkout process. Karl displays buying behaviors that indicate that he is suspicious of process and "being led down a path". He prefers to be able to somewhat randomly access sections of the checkout process and always desires choice.

d18-4

FIG. D18

d19-0

Karl's Checkout Page

d19-3



DELL Inspiron 1520

REVIEW MY SUMMARY
Congratulations! Your system is ready to be built. We have some recommendations for you highlighted in green below.

ESSENTIAL ADD-ONS

- Printer and paper \$19
- Power adapter \$19
- Mouse \$19

By Components

- SYSTEM COLOR
- OPERATING SYSTEM
- DISPLAY
- MEMORY
- HARD DRIVE
- DRIVE
- WIRELESS NETWORK
- INTERNALIZED MODEM
- BATTERY OPTIONS
- SCISSOR OPTIONS

Notes:
Essential add-ons is moved to the primary position in the configuration section since Karl is open to purchasing additional products if they are recommended by experts or peers.

d19-1

Emphasize accessory recommendations

d19-2

FIG. D19

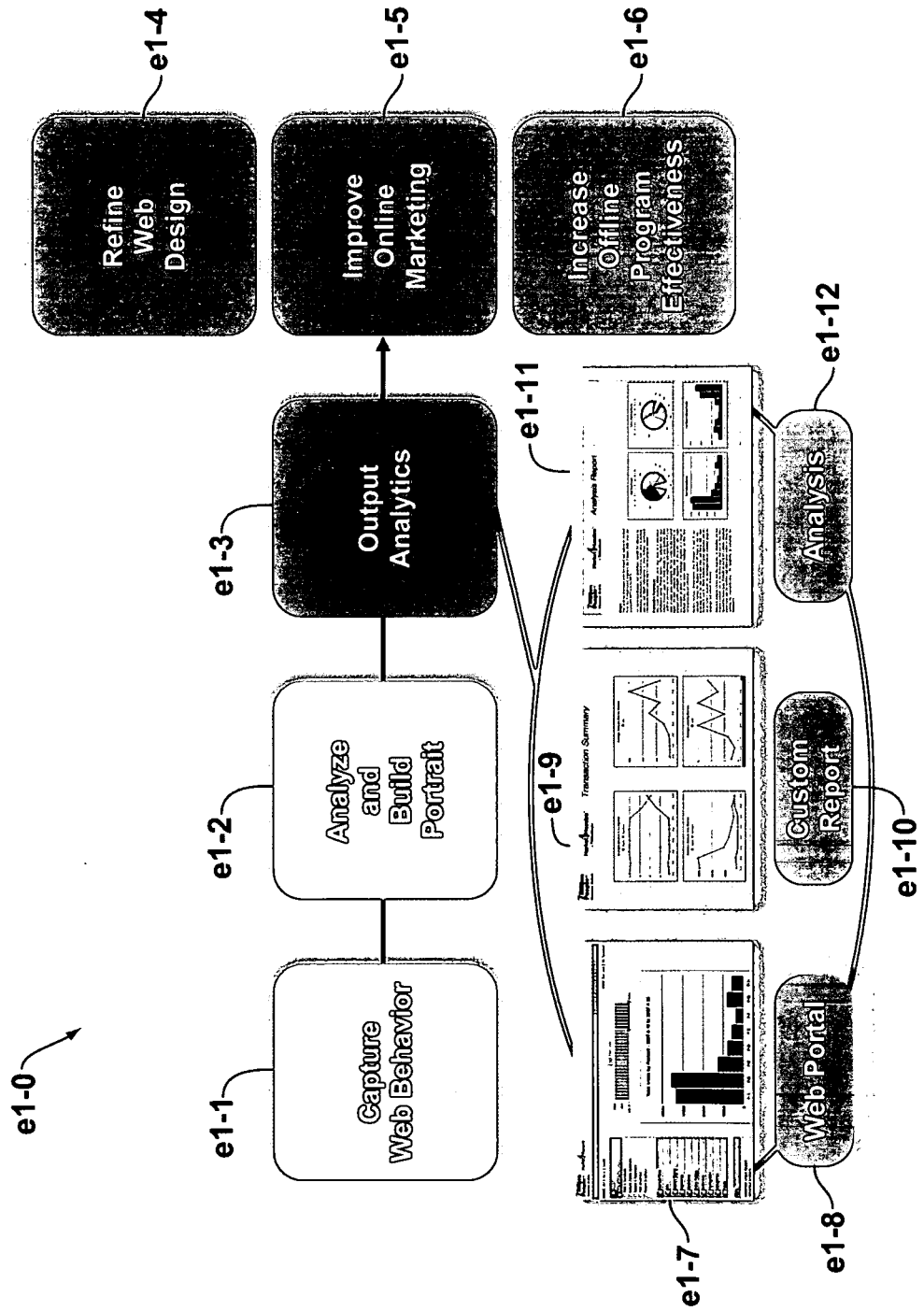
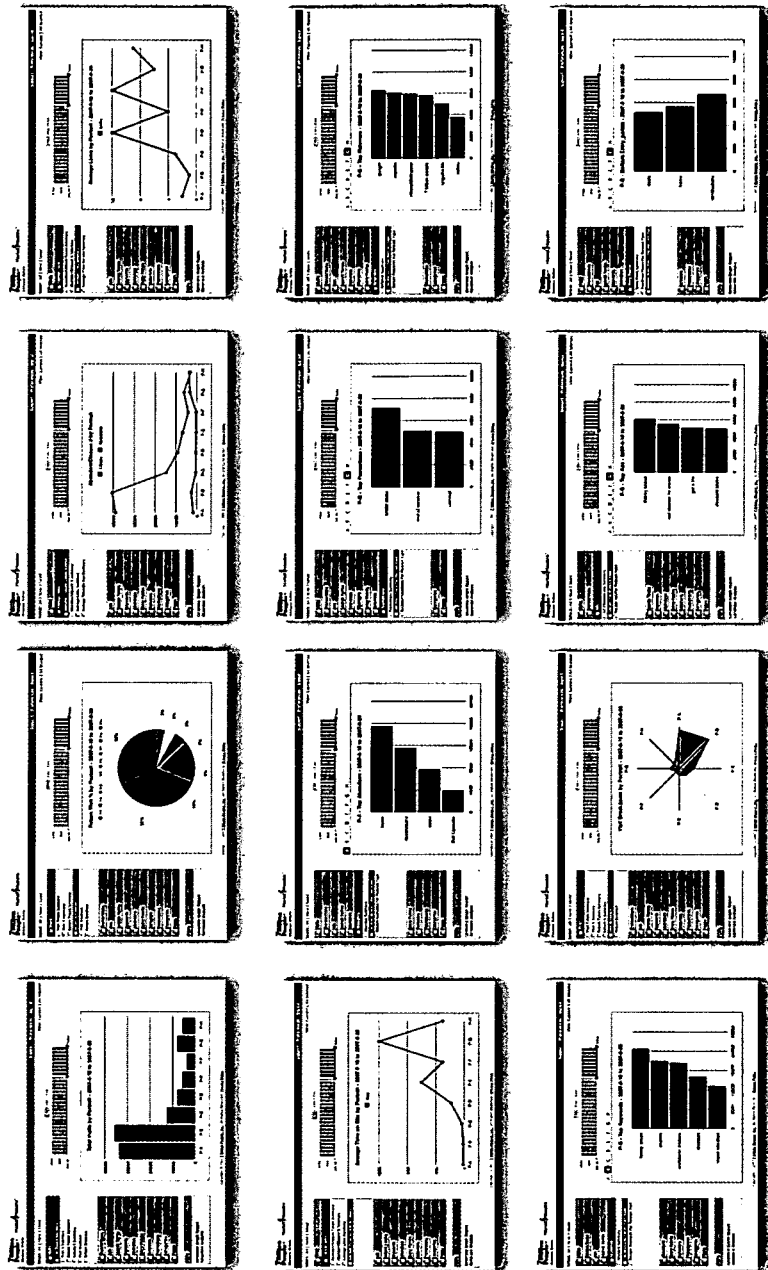


FIG. E1



e2-0

e2-1

FIG. E2

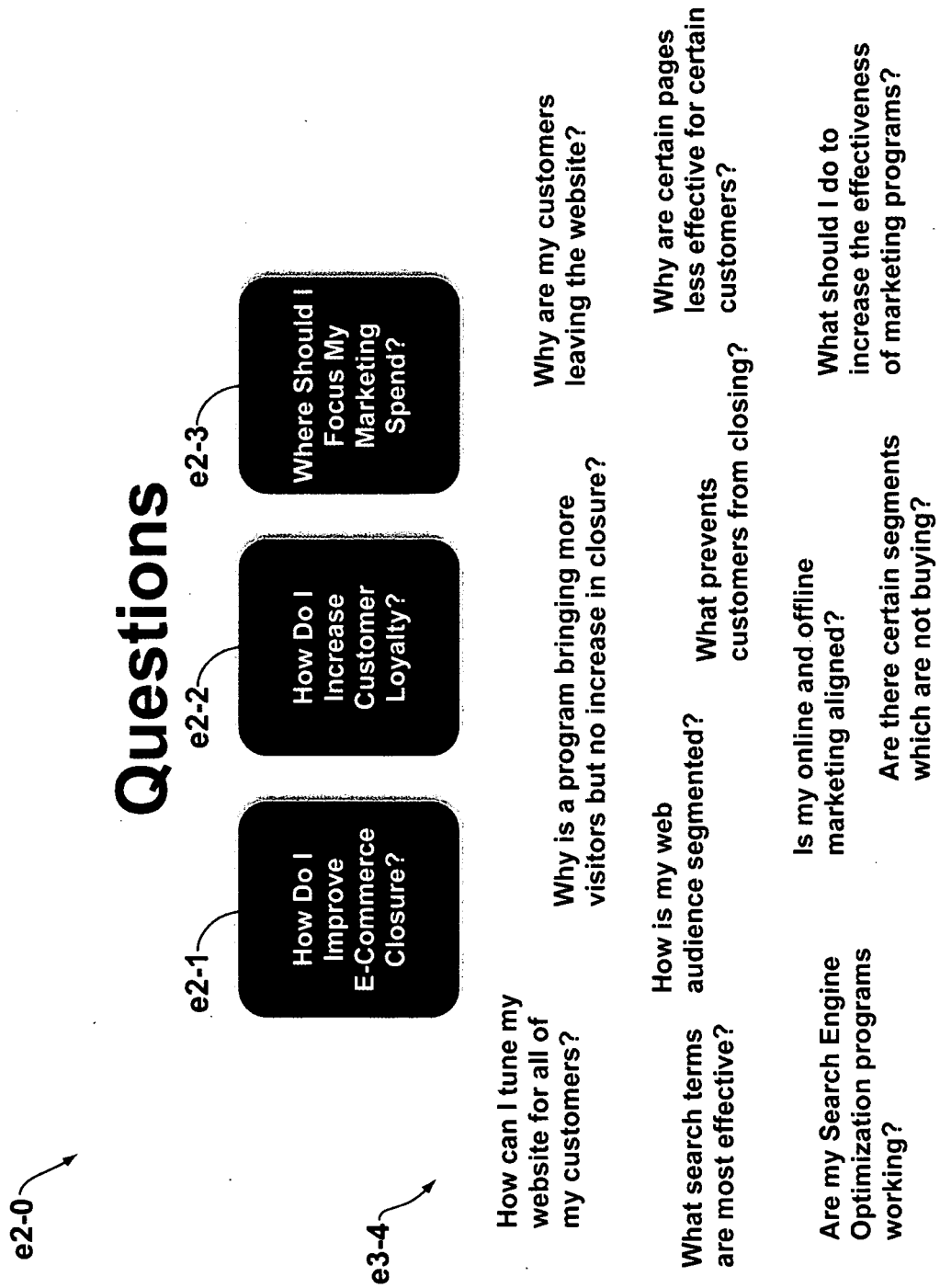


FIG. E3

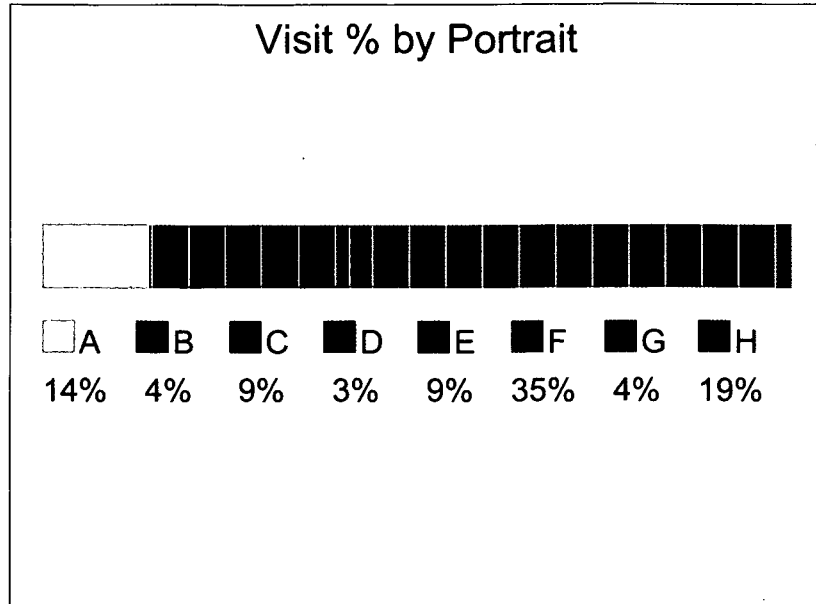


FIG. E4

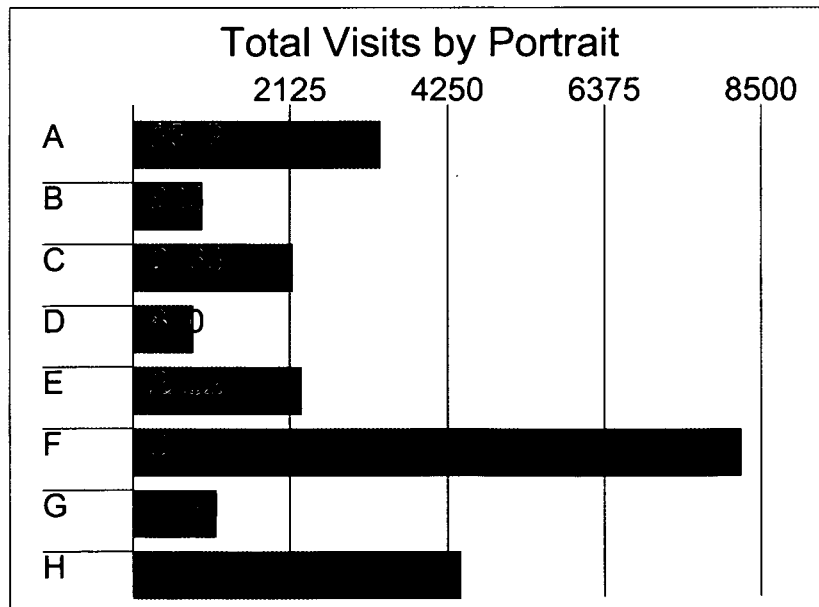


FIG. E5

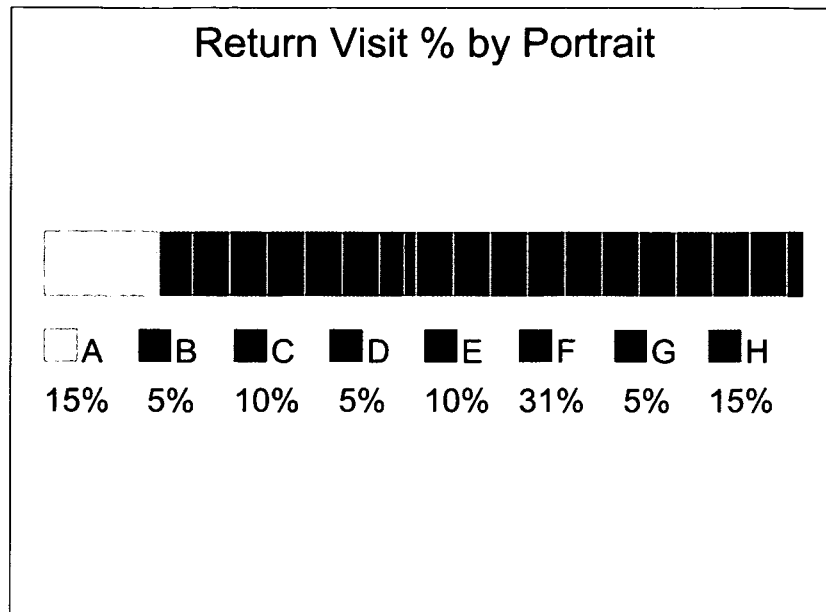


FIG. E6

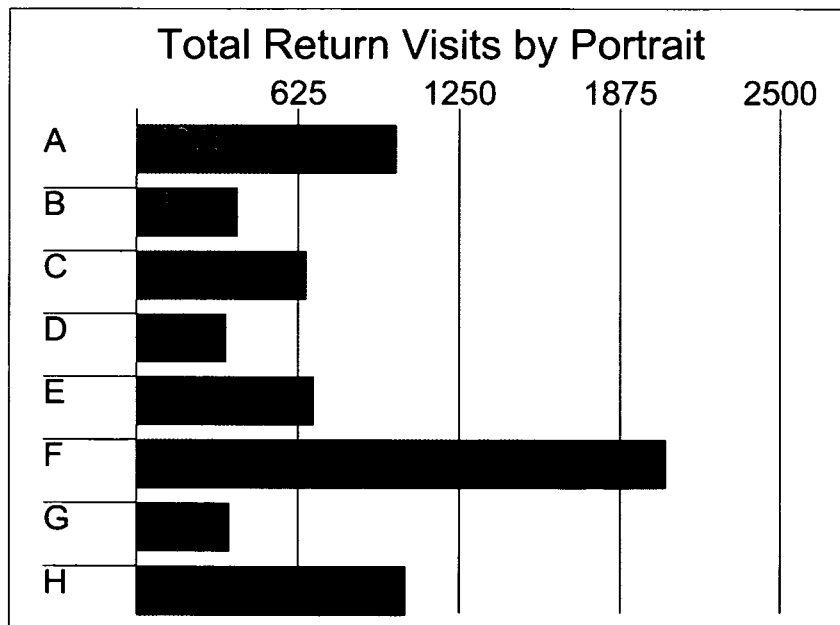


FIG. E7

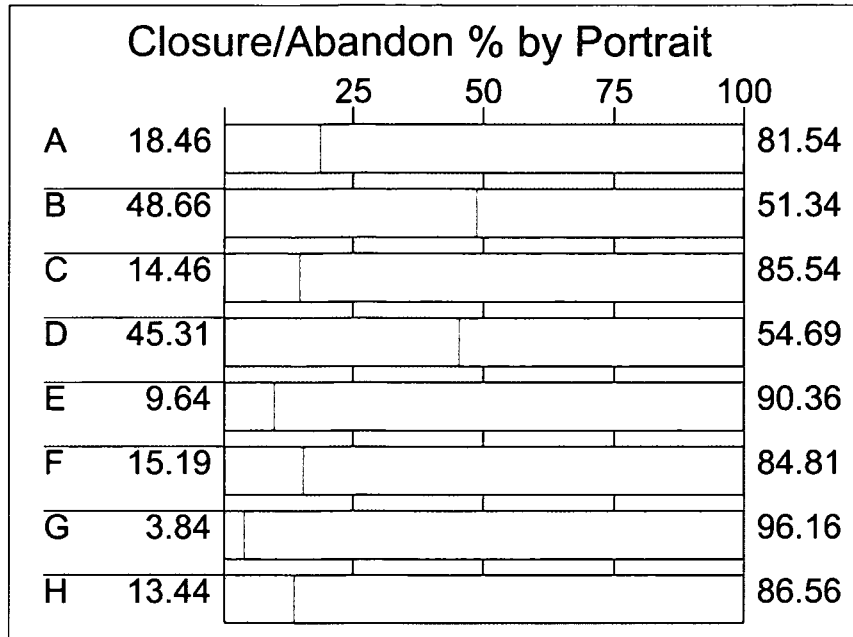


FIG. E8

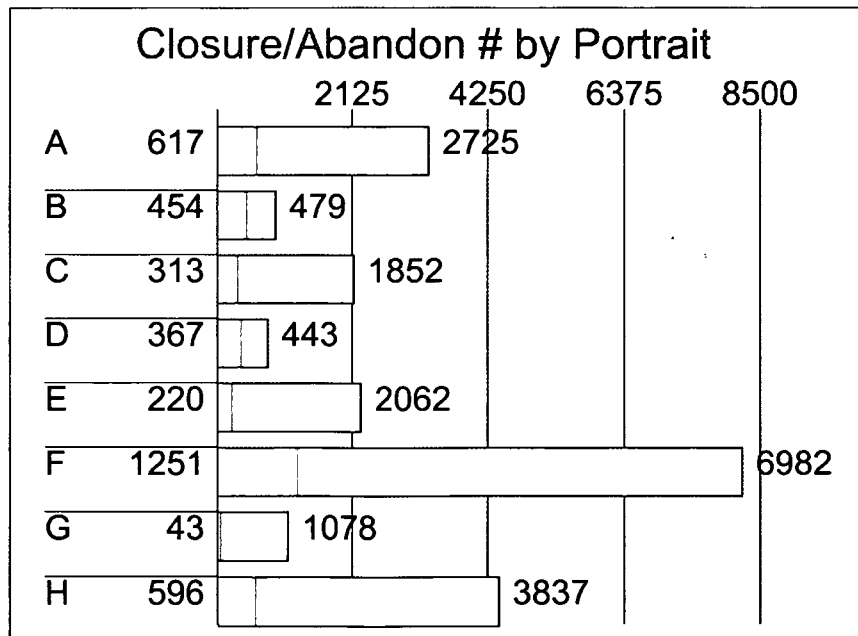


FIG. E9

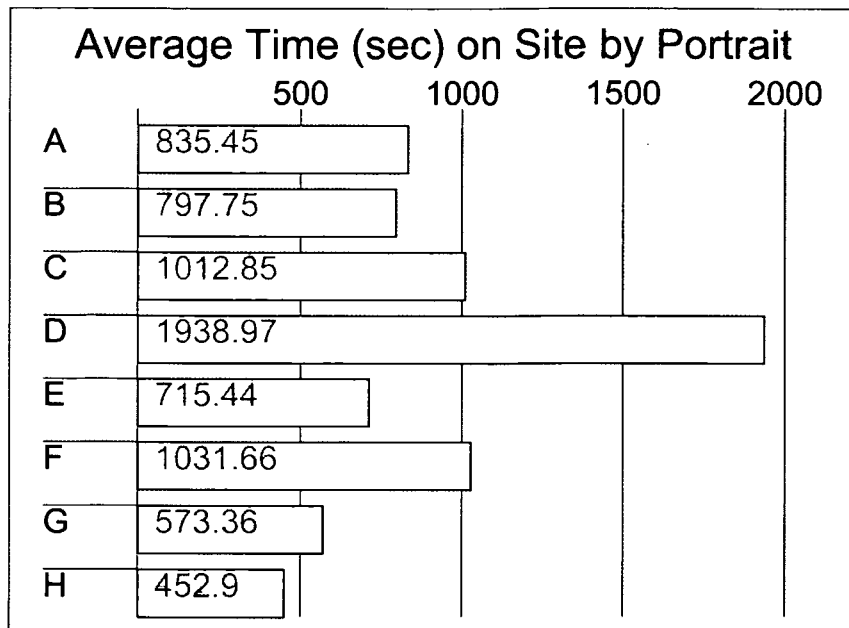


FIG. E10

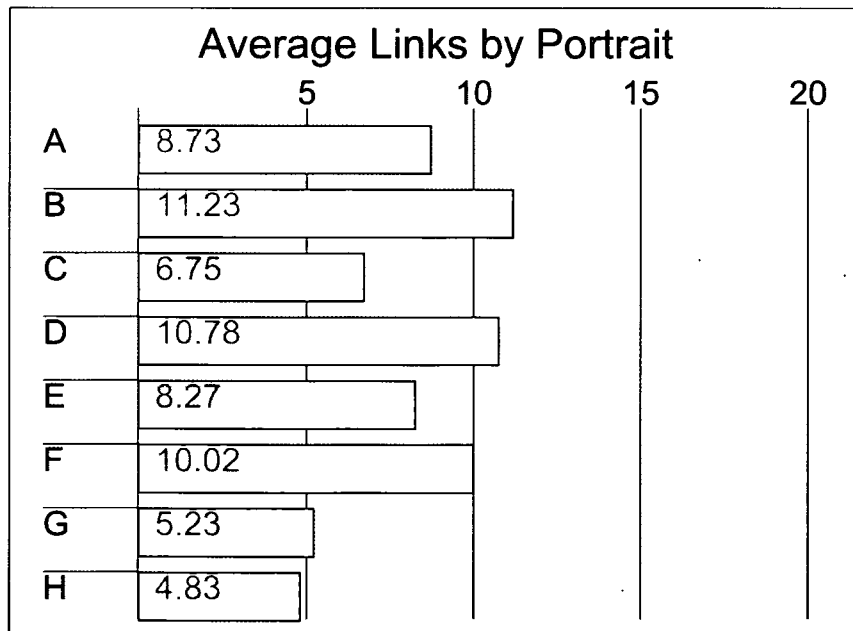
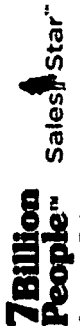



FIG. E11



7 Billion People™
Connect. Reclate.



7 Billion People™
Connect. Reclate.

Home Support Preferences Help Logout

	Decision Making	Motivation	Presentation
Overview			
Decision Making	Motivated by making their own decisions based on information.	Motivated by what risks or problems your product or service or solution can help them avoid.	Most comfortable when a process and structure is in place.
	Interested in the facts and specifications.	Responsive to what they won't have to worry about or what you can help them manage that will prevent things going wrong.	How to purchase is important to them.
	Offer this person information.	Talk about how product will help them avoid problems and manage risk.	Use lists, steps, and sequences.
	Avoid "selling".	Acknowledge potential for problems.	Only present choices in a sequenced fashion.
	Keep calls short and factual.	Don't avoid problems or suggest quick solutions. Suggest that you too will be focused on problem identification.	Make renewals part of the process.
Language			
	Use		Avoid
	It's your decision	You should	
	It's up to you	You need to	
	It's your call	Everyone else is...	
	With your permission	John is doing...	
	May I	I recommend	
	You can avoid problems by	I suggest	
	You can manage risk by	That's not a problem	
	First, second, third	There is no risk	
	Step 1, step 2, step 3	It doesn't matter how	
	Process, procedure	How we get there is not important	
	How	You need to do this another way	

General

Summary

How to Close

How to Reengage

Engagement Sample

Common Objections

Reports

Generate Report

FIG. F1

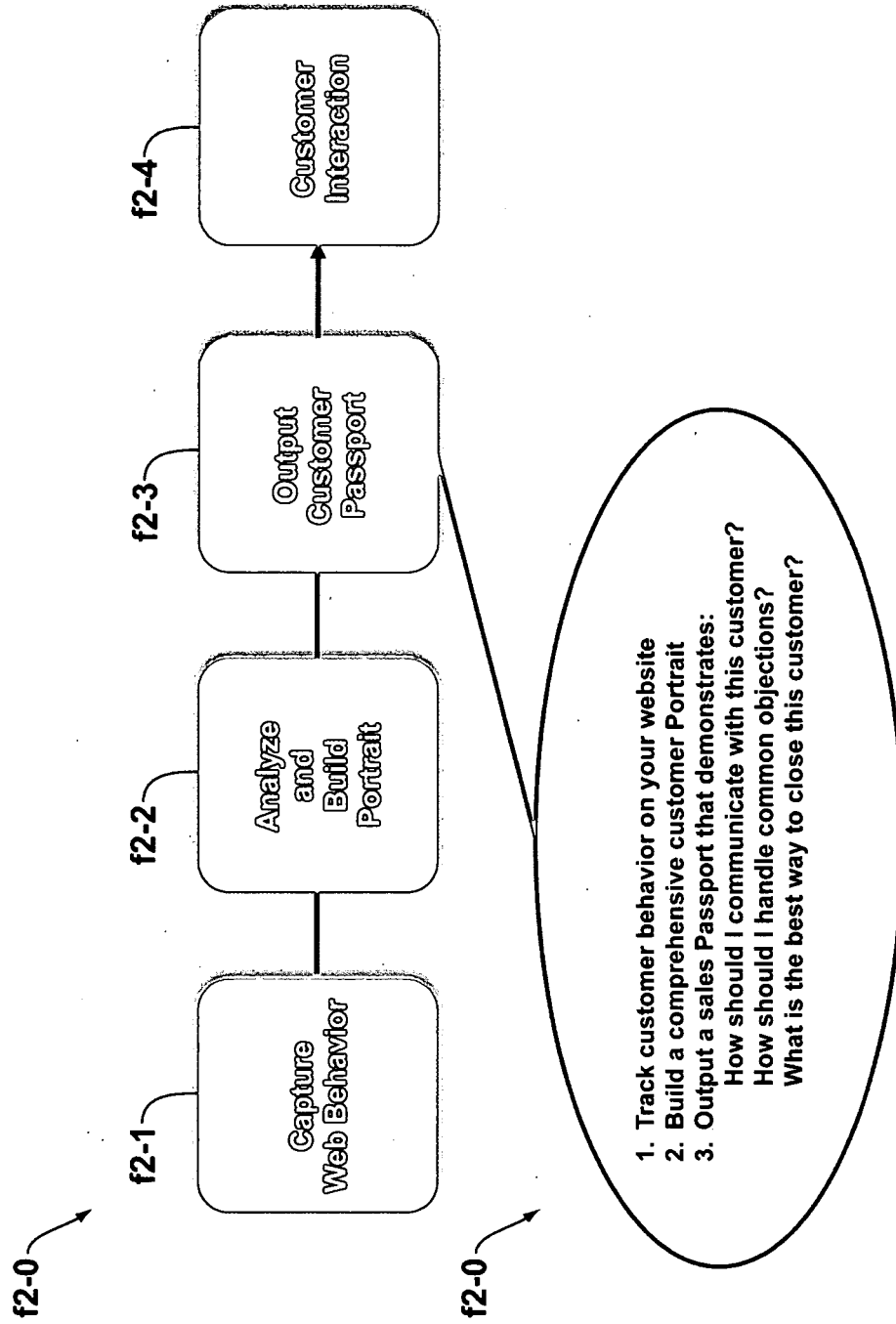


FIG. F2