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(71) Applicant: **TRANS UNION LLC** [US/US]; 555 West Adams Street, Chicago, IL 60661 (US).

(72) Inventors *(for US only)*: **LACHAPELLE, Craig, F.**; 5923 Anniston Rd, Bethesda, MD 20817 (US). **BURNS, Clifton, H.**; 1295 Herrington Rd., Geneva, IL 60134 (US). **MITCHELL, Tammy, P.**; 632 Exmoor Rd., Kenilworth, IL 60043 (US). **WHITE, Patrick**; 13534 Fairway Loop South, Goodyear, AZ 85395 (US). **CHAOUKI, Steven, M.**; 858 W. Armitage Ave., Unit 152, Chicago, IL 60614 (US).

(74) Agents: **LENZ, William, J.** et al.; Neal, Gerber & Eisenberg LLP, Two North LaSalle Street, Suite 1700, Chicago, IL 60602 (US).

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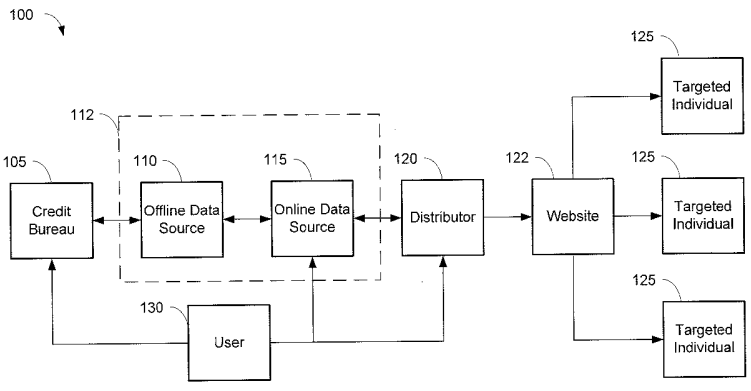

FIG. 1

(57) Abstract: Systems and methods are disclosed for matching of offline data with online data by comparing the offline data with online data using credit-related data. The systems and methods receive offline data and online data and retrieve credit-related data with identifying information for targeted individuals. The offline data records and online data records are independently compared to the credit-related data to determine whether the data records correspond to a matching targeted individual. If both an offline data record and an online data record correspond to a matching targeted individual, then a key is generated that links the offline data record and the online data record. The key may be stored in a key database. The key may be utilized for targeted marketing to the matching targeted individual. The matching of offline data and online data may be more accurate and complete.

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SYSTEMS AND METHODS FOR TARGETED INTERNET MARKETING BASED ON OFFLINE, ONLINE, AND CREDIT-RELATED DATA

Cross-Reference to Related Application

[0001] This international application claims priority to U.S. Provisional Application No. 61/618,747, filed March 31, 2012, which is incorporated herein by reference in its entirety.

Technical Field

[0002] This disclosure generally relates to the internet marketing industry, and more particularly, to systems and methods for matching online data with offline data using credit-related data in order to support targeted internet marketing.

Background

[0003] In current Internet marketing systems, users, such as buyers of advertising space, advertising businesses, and other advertisers, directly or indirectly purchase or otherwise obtain the advertising space from distributors, such as advertising networks and publishers, to place or otherwise distribute advertisements to targeted individuals using data gleaned from the online activity of the targeted individuals. Targeted individuals may be, for example, consumers and/or persons employed, affiliated, and/or associated with a business, such as owners, executives, and/or employees of the business. Distributors may own the advertising space and/or represent another entity which owns the advertising space. For example, if a consumer navigates to a travel website and enters parameters for a desired vacation, the parameters can be stored as part of the consumer's browsing data. Further, the distributor can obtain the browsing data and use

the browsing data to identify advertisements tailored to the various parameters, and serve the advertisements to the consumer while the consumer navigates through various websites.

[0004] There are drawbacks, however, to current targeted marketing platforms. In particular, the users and distributors have limitations in identifying targeted individuals and matching various data to the targeted individuals and/or to aggregated pools with sufficient accuracy. The data related to the targeted individuals may include, for example, consumer-related data and/or business-related data. As a result, the users have a limited view in identifying targeted individuals with credit-, service-, or product-related advertisements and offers, such as, for example, credit card applications, small business loans, vehicle offers, non-financial services offers, offers related to improving business operations, and/or other similar advertisements and offers.

[0005] Furthermore, current systems typically match offline data directly to online data to determine exact matches for targeted marketing to targeted individuals. Online data includes data related to activity on the Internet or other telecommunications networks, and can include, for example and without limitation, data associated with web browsing, click-through data, click stream data, cookies, e-mail account information, online registration data, transaction data, and/or similar data. Offline data includes data that is not online data and can include, for example and without limitation, consumer- or business-related data, public records, and/or similar data. Matching offline data directly to online data for targeted marketing purposes can be incomplete or inaccurate, particularly if either or both types of data do not include enough information to successfully match one another. If the matches are incomplete or inaccurate, then the effectiveness of a targeted marketing campaign based on the matching may be reduced or

ineffective. For example, the matching may result in a false negative, e.g., certain consumers or business owners may not be targeted when they should have been, or a false positive, e.g., other consumers or business owners may be targeted when they should not have been. When matching results in false negatives or false positives, the advertising space from distributors may be less valuable, and users may waste or inefficiently allocate spending on advertising and marketing.

[0006] Therefore, there exists an opportunity for improved systems and methods that can match and link offline data and online data more completely and accurately, in order to, among other things, provide better leads and more effective management of advertising and marketing spending.

Summary

[0007] The invention is intended to solve the above-noted problems by providing systems and methods for matching of offline data with online data using information, such as credit-related data, from a database, such as a credit data database. The systems and methods are designed to, among other things: (1) receive the offline data and the online data; (2) retrieve credit-related data; (3) compare offline data records to the credit-related data to determine whether the offline data records corresponds to a matching targeted individual; (3) compare online data records to the credit-related data to determine whether the online data records corresponds to a matching targeted individual; and (4) if an offline data record and an online data record both correspond to a matching targeted individual, generate a key linking the offline data record and the online data record, and store the key in a key database. This systems and methods utilize the depth and quantity of the various pieces of data, such as names and addresses within

the credit files, and the ability of the matching algorithms to manage variations in data to establish a link between the offline data and the online data.

[0008] In a particular embodiment, offline data including at least one offline data record and online data including at least one online data record may be received. Credit-related data may be retrieved from a database, such as a credit data database, and may include identifying information for a plurality of targeted individuals. The offline data record may be compared to the credit-related data to determine whether the offline data record corresponds to a matching targeted individual of the plurality of targeted individuals. The online data record may be compared to the credit-related data to determine whether the online data record corresponds to the matching targeted individual. If both the offline data record and the online data record correspond to the matching targeted individual, a key may be generated that links the offline data record and the online data record. The key may be stored in a key database.

[0009] In another embodiment, a system may include a processor in communication with a network and a memory in communication with the processor. The memory may include a database, such as a credit data database, and a key database. The memory may also include a matching engine for receiving offline data including at least one offline data record and online data including at least one online data record. The matching engine may retrieve credit-related data from the database, and the credit-related data may include identifying information for a plurality of targeted individuals. The offline record may be compared by the matching engine to the credit-related data to determine whether the offline data record corresponds to a matching targeted individual of the plurality of targeted individuals. The online data record may be compared by the matching engine to the credit-related data to determine whether the online data

record corresponds to the matching targeted individual. If both the offline data record and the online data record correspond to the matching targeted individual, the matching engine may generate a key that links the offline data record and the online data record. The key may be stored by the matching engine in a key database.

[0010] The systems and methods also include matching a set of data from an offline data source to associated online data, wherein the set of data comprises information on targeted individuals, such as a plurality of consumers and/or a plurality of persons employed, affiliated, and/or associated with a business. The systems and methods further include examining the set of data to generate a matched set of data, and comparing the matched set of data to the associated online data to identify at least a portion of the targeted individuals that meet criteria of the matched set of data for targeted advertising offers. In some embodiments, the targeted advertising offers can be based on criteria specified by users offering the advertisements.

[0011] The systems and methods as described herein provide various advantages over existing platforms. For example, by matching offline data to online data (e.g., cookies), users can target criteria-meeting consumers with prescreened or other credit-related offers, such as an invitation to apply (ITA). Further, users can target persons employed, affiliated, and/or associated with a business with offers or advertisements based on the businesses meeting or matching certain business marketing segments. Still further, the offline data can be matched to the online data in a more effective and efficient manner using the techniques as discussed herein. It should be appreciated that other advantages and improvements are envisioned by the embodiments as described herein.

[0012] These and other embodiments, and various permutations and aspects, will become apparent and be more fully understood from the following detailed description and accompanying drawings, which set forth illustrative embodiments that are indicative of the various ways in which the principles of the invention may be employed.

Brief Description of Drawings

[0013] FIG. 1 is a schematic diagram of an exemplary environment and associated functionality in accordance with one or more aspects described herein.

[0014] FIG. 2 is a chart of exemplary functionality according to one or more aspects described herein.

[0015] FIG. 3 is a chart of exemplary functionality according to one or more aspects described herein.

[0016] FIG. 4 is a flow chart of an exemplary method according to one or more aspects described herein.

[0017] FIG. 5 is a flow chart of an exemplary method according to one or more aspects described herein.

[0018] FIG. 6 is a schematic diagram of an exemplary device capable of supporting and facilitating one or more aspects described herein.

[0019] FIG. 7 is a block diagram illustrating a system for matching of offline data and online data with credit-related data.

[0020] FIG. 8 is a flow chart of an exemplary method for matching of offline data and online data with credit-related data.

[0021] FIG. 9 is a flow chart of an exemplary method for comparing data to credit-related data.

[0022] FIG. 10 is a flow chart of another exemplary method for comparing data to credit-related data.

[0023] FIG. 11 is a flow chart of another exemplary method according to one or more aspects described herein.

Detailed Description of Exemplary Embodiments

[0024] The description that follows describes, illustrates and exemplifies one or more embodiments in accordance with their principles. This description is not provided to limit the embodiments described herein, but rather to explain and teach the principles of the embodiments in such a way to enable one of ordinary skill in the art to understand these principles and, with that understanding, be able to apply them to practice not only the embodiments described herein, but also other embodiments that may come to mind in accordance with these principles. The scope of the embodiments is/are intended to cover all such embodiments that may fall within the scope of the appended claims, either literally or under the doctrine of equivalents.

[0025] It should be noted that in the description and drawings, like or substantially similar elements may be labeled with the same reference numerals. However, sometimes these elements may be labeled with differing numbers such as, for example, in cases where such labeling facilitates the didactic purpose of the specification. Additionally, the drawings set forth herein are not necessarily drawn to scale, and in some instances proportions may have been exaggerated to more clearly depict certain features. Such labeling and drawing practices do not necessarily

implicate an underlying substantive purpose. As stated above, the present specification is intended to be taken as a whole and interpreted in accordance with the principles of the embodiments as taught herein and understood to one of ordinary skill in the art.

[0026] With respect to the exemplary systems, components and architecture described and illustrated herein, it should also be understood that the embodiments may be embodied by, or employed in, numerous configurations and components, including one or more systems, hardware, software, or firmware configurations or components, or any combination thereof, as understood by one of ordinary skill in the art. Accordingly, while the drawings illustrate exemplary systems including components for one or more of the embodiments contemplated herein, it should be understood that with respect to each embodiment, one or more components may not be present or necessary in the system.

[0027] As used herein, the term "online data" can refer to data associated with Internet or online activity, such as, for example and without limitation, data associated with web browsing, click-through data, click stream data, cookies, e-mail account information (e.g., e-mail addresses, names, etc.), online registration data (e.g., names, addresses, phone number, etc.), online transaction data, online site usage data (e.g., social networking usage data, etc.), IP addresses, electronic device identifiers (e.g., IMEI, IMSI, UDID, Android ID, phone numbers, etc.), search result data, biometric data, network identifiers, Media Access Control addresses, and/or other similar data. Online data may also include data associated with mobile applications executing on electronic devices, SMS messages, instant messages, and the like. Further, as used herein, the term "offline data" can refer to any data that is associated with non-Internet or non-online activity and that is separate from the online data. For example and without limitation, offline

data can be consumer- or business-related data, consumer identifying data, aggregated credit data, credit scores, pre-screen offers, business identifiers, product profits, estimated incomes, actual incomes, consumer behavioral data, wealth data, education data, vehicle ownership data, proprietary data, non-aggregated credit data, public records, and/or similar data.

[0028] It should also be noted that the disclosures made in this specification are in accordance with the principles of the embodiments(s), which are intended to be disclosed or interpreted to their broadest extent under the patent laws, and while such disclosure may describe or otherwise cover subject matter that may be regulated by other existing laws or regulations, including, without limitation, the Fair Credit Reporting Act (FCRA) or the Equal Credit Opportunity Act (ECOA), nothing in this disclosure is intended to suggest or imply noncompliance with any such law or regulation by the assignee. It should also be noted that nothing in this disclosure is intended to suggest or imply that aggregated credit data can be used to determine the credit or insurance eligibility of an individual consumer and/or targeted individual.

[0029] Referring to FIG. 1, an exemplary environment 100 in which the systems and methods can be implemented is illustrated. It should be appreciated that the environment 100 is merely exemplary and can comprise other various combinations of components as discussed herein.

[0030] As shown in FIG. 1, the environment 100 includes a credit bureau 105 configured to interface with an offline data source 110 and/or an online data source 115, such as a matching partner or a data mart. In embodiments, the offline data source 110 can interface with the online data source 115 to exchange data, and can be combined into a single processing entity 112. The

credit bureau 105 can be any company or entity that collects information or data from various sources and provides information about targeted individuals, such as consumers, to other entities for a variety of uses such as, for example, to assess credit worthiness, determine a loan interest rate, and/or perform other uses. Targeted individuals may be, for example, consumers and/or persons employed, affiliated, and/or associated with a business, such as owners, executives, and/or employees of the business. The information and data can include financial-related information as well as non-financial related and identifying information, such as that found in credit-related data including credit header data, such as, for example, a name, address, telephone number, location information such as ZIP+4 data, and/or other data. Variations in the data include, but are not limited to, nicknames, name reversals, partial names, maiden names and previous addresses. Further, the offline data source 110 can be any company, entity, or component that can aggregate, collect, and store marketing data such as purchasing data, transactional data, and the like. The offline data source 110 can aggregate the data into pools based on demographics (e.g., location, income, etc.) and Internet browsing habits.

[0031] The online data source 115 can aggregate anonymous behaviors from websites such as ecommerce sites, and classify the behaviors. According to embodiments, a distributor 120 can purchase the online data from the online data source 115 for the purpose of providing advertisements to targeted individuals 125, such as a set of consumers, via a website 122 to which the set of targeted individuals 125 can browse. The distributor 120 can be any type of data exchange, marketer, ad network, publisher, and/or the like that can use the purchased data to provide advertisements relevant to the targeted individuals 125 via the website 122. The distributor 120 can be any company, entity or system that can provide, auction, or otherwise sell

data, such as online data, intent data, and/or the like, to individuals or entities. In embodiments, the exchange or selling of the data can occur on a real-time basis. More particularly, when the targeted individual 125 navigates throughout or browses to various websites 122, the distributor 120 can serve targeted advertisements based on the data purchased from the online data source 115. The targeted advertisements can display on the website 122 to which the targeted individuals 125 are browsing. The website 122 may in some embodiments leverage web tags to cause a web browser to display one or more ads, or otherwise collect data to be provided to the distributor 120.

[0032] As shown in FIG. 1, the environment 100 further includes a user 130 that can have relationships with any of the credit bureau 105, the online data source 115, and the distributor 120. The user 130 may be, for example, buyers of advertising space, advertising businesses, and other advertisers. More particularly, the user 130 can have a set of advertisements or offers that the user 130 wants the distributor 120 to provide to the targeted individuals 125. For example, the user 130 can be a bank with prescreen credit card offers that the bank wants an ad network to distribute to targeted individuals.

[0033] FIG. 2 illustrates an exemplary flow environment 200 according to embodiments as described herein, in one regard. According to embodiments, the flow environment 200 illustrates techniques for leveraging data to assemble targeted advertisements. More particularly, the targeted advertisements can be credit-related prescreened offers, invitations to apply, and/or other types of offers or advertisements that are intended for placement or distribution to targeted individuals. Targeted individuals may be, for example, consumers and/or persons employed,

affiliated, and/or associated with a business, such as owners, executives, and/or employees of the business.

[0034] Referring to FIG. 2, a user 230 can request (1) a credit bureau 205 to create a custom data feed based on a set of criteria and/or an input list provided by the user 230. The user 230 may be, for example, buyers of advertising space, advertising businesses, and other advertisers. For example, the criteria can specify a set of targeted individuals, such as consumers, with a credit score of at least 740. In some embodiments, the user 230 can request an online data source 215 for the custom data feed, and the online data source 215 can interface with the credit bureau 205 to create the custom data feed. The credit bureau 205 can access a set of credit data related to a plurality of targeted individuals, such as various credit attributes or other offline data, and can generate the custom data feed by matching the targeted individuals that fulfill the criteria. In embodiments, the credit bureau 205 can generate the custom data feed by using credit-related data, such as credit header data, to match the offline data. Continuing with the example, the credit bureau 205 can examine the set of credit data to identify the targeted individuals having a credit score of at least 740. In embodiments, the custom data feed can comprise credit header data including information such as name, addresses, phone numbers, and/or other information.

[0035] After the credit bureau 205 generates the custom data feed, the credit bureau 205 can provide (2) the custom data feed to an offline data source 210. In some embodiments, the credit bureau 205 can depersonalize the custom data feed according various depersonalizing techniques. For example, the targeted individuals of the custom data feed can be grouped or categorized into locations according to ZIP+4 data, without identifying information. In this way,

an exemplary custom data set can comprise geographic locations or areas of qualifying targeted individuals without the names of the targeted individuals.

[0036] The offline data source 210 can interface with the online data source 215 (3) to share or exchange the custom data feed. Further, the online data source 215 can store and/or access online data associated with Internet browsing activities of a plurality of targeted individuals 225, such as consumers. In some cases, the online data can include cookie data that is collected when a targeted individual accesses a webpage. For example, if a consumer visits a travel site and searches for flights to Europe, the online data can be updated with preferences of the consumer (e.g., flight date, destination, etc.), and the online data source 215 can store the preferences in a data file associated with the targeted individual 225.

[0037] When the offline data source 210 interfaces with the online data source 215, the custom data feed received from the credit bureau 205 is matched to the online data of the plurality of targeted individuals 225. More particularly, the preference/cookie data of the plurality of targeted individuals 225 is matched to the custom data feed that identifies targeted individuals who quality for or meet the criteria of the user 230. Further, the online data source 215 can refine or update the online data such that the refined online data includes one or more of the targeted individuals 225 who quality for or meet the criteria of the user 230. In embodiments, the online data source 215 can depersonalize the refined online data such that the refined online data does not contain identifying information of targeted individuals.

[0038] In cases in which the credit bureau 205 depersonalizes the custom data feed, such as via ZIP+4 rules or techniques, the online data source 215 can match the depersonalized custom data feed to the online data of the plurality of targeted individuals 225 to geographically locate

one or more of the plurality of targeted individuals 225 who qualify for or meet the criteria of the user 230. More particularly, the online data source 215 can refine or update the online data such that the refined online data includes geographical information (e.g., ZIP+4 data) of one or more of the targeted individuals 225 who quality for or meet the criteria of the user 230.

[0039] According to embodiments, the online data source 215 can provide (4) the refined online data to a distributor 220. The distributor 220 can be an ad network or other entity with a relationship with the user 230 to deliver or provide advertisements of the user 230. Continuing with the above example, the user 230, such as a bank, can provide the distributor 220 with requirements and/or parameters for various credit-related offers or advertisements. In some cases, the advertisements can relate to prescreened or preapproved offers. In other cases, such as when the custom data feed is depersonalized, the advertisements can be offers that target targeted individuals in various ZIP code regions where the average resident meets certain criteria such as risk score, income level, and/or the like. Upon the distributor 220 purchasing a portion of the refined or matched online data from the online data source 215, the distributor 220 can have information on one or more of the targeted individuals 225 who may be interested in applying for the credit card, who would likely qualify for the credit card, or both. Continuing with the above example, the invitation to apply for the credit card can be tailored to targeted individuals with a credit score of at least 740. In particular, the credit card can offer a large percentage cash back on various purchases, concierge services, and/or other perks that may appeal to the target demographic.

[0040] The distributor 220 can provide (5) the advertisements to a website 222 to ultimately serve or provide (6) to the one or more of the targeted individuals 225. More particularly, the

website 222 can use the refined or matched online data, including cookie data, to provide the advertisements when the targeted individual is navigating or browsing to the website 222. In embodiments, the website 222 can be a specific website that has a partnership or relationship with the distributor 220. Continuing with the above example, the distributor 220 can purchase online data associated with a set of targeted individuals 225 that meet the user's 230 credit criteria. When one of the set of targeted individuals 225 navigates to the website 222, the distributor 220 can provide, via the website 222, the targeted individual 225 with, for example, an advertisement indicating that the targeted individual 225 has been preapproved or prescreened for a credit card offer. The targeted individual 225 can select the advertisement and be directed to a website of the user 230 that allows the targeted individual 225 to enter information to receive the credit card. In cases in which the custom data feed is depersonalized, the advertisement can be an invitation to apply for a credit-related offer, such as a mortgage, a credit card, a home equity loan, and/or the like. Similar to the prescreened offer, the targeted individual 225 can select the advertisement and be directed to a website of the user 230 that allows the targeted individual 225 to apply for the offer.

[0041] FIG. 3 illustrates an exemplary flow environment 300 according to embodiments as described herein, in one regard. According to embodiments, the flow environment 300 illustrates techniques for leveraging data to assemble targeted advertisements for targeted individuals, such as consumers and/or persons employed, affiliated, and/or associated with businesses, including owners, executives, and/or employees of the businesses. More particularly, the targeted advertisements can be credit-related invitations to apply and/or other types of business-related offers or advertisements.

[0042] Referring to FIG. 3, an offline data source 310 can provide (1), to a credit bureau 305, a set of data files including information on a plurality of targeted individuals. In some embodiments, a user such as, for example, a bank, can request the credit bureau 305 to compile a custom data feed based on a set of criteria, and the credit bureau 305 can request the set of data files from the offline data source 310. The user may be, for example, buyers of advertising space, advertising businesses, and other advertisers. The data files can include names, addresses, and other information about the plurality of targeted individuals. After the credit bureau 305 receives the data files, the credit bureau 305 can process the data files to align or match the data with available business data, such as small business data. In embodiments, the business data can include segments that indicate data such as a code identifying a type of business, as well as other data indicating business location, affiliates, number of employees, years in business, legal entity information, annual revenue, industry description, and/or other data.

[0043] The credit bureau 305 can generate a custom data feed that matches business owners, executives, and/or other targeted individuals included in the received data files to the business data. More particularly, the custom data feed can include identifications of targeted individuals and/or households, as well as business marketing segments (e.g., sales revenue, number of employees, etc.) that correspond to each of the targeted individuals and/or households. In embodiments, the custom data feed can be generated using credit-related data, such as credit header data, including information such as name, addresses, phone numbers, and/or other information. Further, the credit bureau 305 can depersonalize the custom data feed according to ZIP+4 rules or other depersonalizing techniques. More particularly, the targeted individuals of the custom data feed can be grouped or categorized into locations according to ZIP+4 data,

without identifying information. For example, an exemplary custom data set can comprise geographic locations or areas of qualifying targeted individuals without the names of the targeted individuals.

[0044] After the credit bureau 305 generates the custom data feed that matches targeted individuals to business marketing segments, the credit bureau 305 can provide (2) the custom data feed to the offline data source 310. The offline data source 310 can interface with an online data source 315 (3) to share or exchange the custom data feed. More particularly, the online data source 315 can store and/or access online data associated with Internet browsing activities of a plurality of targeted individuals 325. For example, the targeted individuals 325 can be small business owners or other individuals associated with businesses. In some cases, the online data can include cookie data that is collected when a targeted individual accesses a webpage, as discussed herein. More particularly, the online data source 315 can store the preferences identified from a browsing history in a data file associated with the targeted individual 325.

[0045] When the offline data source 310 interfaces with the online data source 315, the custom data feed received from the credit bureau 305 is matched to the online data of the plurality of targeted individuals 325. More particularly, the preference/cookie data of the plurality of targeted individuals 325 is matched to the custom data feed to identify targeted individuals who may be interested in applying for an offer or may otherwise be interested in other products or services. For example, the offer can be an invitation to apply for a small business loan. For further example, the offer can be for a service/sales agreement with a business supply company. In some cases, the custom data feed can be matched to the online data

of the plurality of targeted individuals 325 based on a set of criteria from a user such as, for example, a bank, a supply company, or other entity.

[0046] In embodiments, the online data source 315 can match the custom data feed to the online data of the plurality of targeted individuals 325 to generate refined online data. In some cases, the refined online data can be used to geographically segment one or more of the plurality of targeted individuals 325. More particularly, the online data source 315 can refine or update the online data such that the refined online data includes geographical information (e.g., ZIP+4 data) of targeted individuals 325 who can be targeted for advertisements. In embodiments, the online data source 315 can depersonalize the refined online data such that the refined online data does not contain identifying information of the targeted individuals 325.

[0047] According to embodiments, the online data source 315 can provide (4) the refined online data to a distributor 320. The distributor 320 can be an ad network or other entity with a relationship with a user to deliver or provide advertisements. For example, a user (e.g., a bank) can provide the distributor 320 with an advertisement to apply for a small business loan. It should be appreciated that other advertisements relating to invitations to apply and other credit-based advertisements are envisioned. In embodiments, the advertisements can relate to other business-related products and/or services. Upon the distributor 320 purchasing a portion of the refined online data from the online data source 315, the distributor 320 has information on one or more of the targeted individuals 325 who may be interested in what the advertisement is advertising. For example, the advertisement can be for a small business loan, and the refined browser data can contain data about a portion of the targeted individuals 325 who oversee business revenue below a certain threshold.

[0048] The distributor 320 can serve or otherwise provide (5) the advertisements to a website 322 to ultimately serve or provide (6) to the one or more of the targeted individuals 325. More particularly, the website 322 can use the refined online data, including cookie data, to provide the advertisements when the applicable targeted individual 325 is navigating or browsing to the website 322. In embodiments, the website 322 can be a specific website that has a partnership or relationship with the distributor 320. For example, the distributor 320 can purchase online data associated with a set of targeted individuals 325 that meet a certain market segment criteria. When one of the set of targeted individuals 325 navigates to the website 322, the distributor 320 can provide the targeted individual 325 with, for example, an advertisement that offers a discount for printing business cards. The targeted individual 325 can select the advertisement and be directed to a website associated with the advertisement that allows the targeted individual 325 to enter information related to the offer.

[0049] FIG. 4 is a flowchart of a method 400 for targeted marketing to targeted individuals using online data. In particular, the method 400 relates to matching criteria to credit-related data for a plurality of targeted individuals. The method 400 can result in a high matching confidence for efficiently targeting targeted individuals with various advertisements. Targeted individuals may be, for example, consumers and/or persons employed, affiliated, and/or associated with a business, such as owners, executives, and/or employees of the business.

[0050] The method begins with the credit bureau receiving 405 a request from a user for a set of data that matches a criteria. The user may be, for example, buyers of advertising space, advertising businesses, and other advertisers. In particular, the criteria can specify credit-related requirements for targeted individuals that the user would like to target. The credit bureau

accesses 410 credit-related data associated with a plurality of targeted individuals and matches 415 the credit-related data to the criteria to generate the set of data. More particularly, the credit-related data can be offline data, as discussed herein, and the set of data can include a listing of targeted individuals who qualify for the criteria, and can be generated using credit-related data, such as credit header data, associated with the qualifying targeted individuals. The credit bureau determines 420 whether to depersonalize the set of data. In embodiments, the credit bureau can depersonalize the data if the intended advertisements are invitations to apply or other similar offers. In depersonalizing the data, the credit bureau can append geographic information, such as ZIP+4 data, that can be used to segment groups of targeted individuals based on location. Further, the credit bureau can leave the data as-is if, for example, the intended advertisements are prescreened or preapproved offers.

[0051] If the credit bureau does not depersonalize the data ("NO"), the credit bureau can send the personalized data to a data processor entity. In embodiments, the data processor entity can include an offline data source or online data source, such as a matching partner, as discussed herein. If the credit bureau does depersonalize the data ("YES"), the credit bureau can send the depersonalized data to the data processor. The data processor matches 425 the appropriate set of data to online data of a plurality of targeted individuals to generate a set of matched data. For example, the online data can include cookie data associated with a browsing history for a plurality of targeted individuals, and the set of matched data can include consumer credit data appended or matched to the online data. In cases in which the data processor receives depersonalized data, the set of matched data can geographically locate one or more targeted individuals who meet the specified criteria of the user (from 405). The data processor further

removes 430 personally identifiable information from the set of matched data such that the set of matched data does not contain identifying information of the targeted individuals. The data processor delivers 435 targeted advertisements to a portion of the plurality of targeted individuals based on the set of matched data via a distributor and a website. For example, the distributor can be an ad network that serves advertisements of the user (from 405) to a plurality of targeted individuals according to the set of matched data. In some cases, the data processor can sell or otherwise provide the set of matched data to the distributor.

[0052] Referring to FIG. 11, a flowchart of a method 1100 for targeted marketing to targeted individuals using online data is shown. In particular, the method 1100 relates to matching specific criteria to credit-related data for a plurality of targeted individuals. The method 1100 can result in a high matching confidence for efficiently targeting targeted individuals with various advertisements. As seen in FIG. 11, a credit bureau 1105 can receive 1150 a request from a user 1130 for a set of data that matches specific criteria. The user may be, for example, buyers of advertising space, advertising businesses, and other advertisers. The user 1130 can have a set of advertisements or offers that the user 1130 wants a distributor 1120 to provide to the targeted individuals 1125. In particular, the criteria can specify credit-related requirements for targeted individuals that the user 1130 would like to target. The credit bureau 1105 can match 1152 offline data, such as data from the user 1130, to credit-related data or other data. The credit-related data may be accessed from a database, such as a credit data database 704 of the credit bureau 1105.

[0053] The matched user data can be sent to a data processor 1110, which can match 1154 a target population to the online data of the plurality of targeted individuals to generate a set of

matched data. Keys that link particular offline data records and particular online data records can be generated based on the set of matched data, and the keys can be stored in a key database 706. Based on the set of matched data, the distributor 1120 can provide advertisements to targeted individuals 1125 via a website 122 to which the targeted individuals can browse. More particularly, when the targeted individual 1125 navigates throughout or browses to various websites 1122, the distributor 1120 can serve targeted advertisements based on the key and/or the set of matched data.

[0054] FIG. 5 is a flowchart of a method 500 for targeted marketing to targeted individuals, such as persons employed, affiliated, and/or associated with a business, using online data. In particular, the method 500 relates to a credit bureau matching data to business marketing segments. Targeted individuals may be, for example, consumers and/or persons employed, affiliated, and/or associated with a business, such as owners, executives, and/or employees of the business.

[0055] The method begins with the credit bureau receiving 505 an input file including information on a plurality of targeted individuals. For example, the input file can be offline data including names and addresses of the plurality of targeted individuals. The credit bureau accesses 510 business data that includes business marketing segments. More particularly, the business marketing segments can relate to business location, affiliates, number of employees, years in business, legal entity information, annual revenue, industry description, and/or other data. The credit bureau matches 515 the input file to the business data to generate a custom data feed that matches targeted individuals, such as business owners, executives, and/or employees, included in the input file to the business data. The credit bureau determines 520 whether to

depersonalize the set of data. In embodiments, the credit bureau can depersonalize the data if the intended advertisements are invitations to apply or other similar offers. In depersonalizing the data, the credit bureau can append geographic information, such as ZIP+4 data, that can be used to segment groups of targeted individuals based on location. Further, the credit bureau can leave the data as-is if, for example, the intended advertisements are prescreened.

[0056] If the credit bureau does not aggregate and depersonalize the data ("NO"), the credit bureau can send the personalized data to a data processor entity. In embodiments, the data processor entity can include an offline data source or an online data source, such as a matching partner, as discussed herein. If the credit bureau does depersonalize the data ("YES"), the credit bureau can send the depersonalized data to the data processor. The data processor matches 525 the appropriate set of data to online data of a plurality of targeted individuals to generate a set of matched data. For example, the online data can include cookie data associated with a plurality of targeted individuals, and the set of matched data can include data that has the business segments matched to the browsing histories of targeted individuals. In cases where the data processor receives depersonalized data, the set of matched data can geographically locate one or more targeted individuals who meet the target business segments. The data processor further removes 530 personally identifiable information from the set of matched data such that the set of matched data does not contain identifying information of the targeted individuals. The data processor delivers 535 targeted advertisements to a portion of the plurality of targeted individuals based on the set of matched data via a distributor and a website. For example, the distributor can be an ad network that serves advertisements to the targeted individuals according to the set of matched

data. In some cases, the data processor can sell or otherwise provide the set of matched data to the distributor.

[0057] FIG. 6 is a block diagram of a computing device 600 housing executable software used to facilitate the systems and methods as described herein. One or more instances of the computing device 600 may be utilized to implement any, some, or all of the entities in the environment 100, including the credit bureau 105, offline data source 110, online data source 115, and/or distributor 120. One or more instances of the computing device 600 may be utilized to implement any, some, or all of the entities in the matching system 700, described below, including the matching engine 702. The computing device 600 includes a memory 604 that can include a computer readable medium for implementing the systems and methods as described herein, and for implementing particular embodiments. The computing device 600 also contains executable software, some of which may or may not be unique to the systems and methods.

[0058] In some embodiments, the systems and methods can be implemented in software, as an executable program, and can be executed by one or more special or general purpose digital computer(s), such as a mainframe computer, a personal computer (desktop, laptop or otherwise), personal digital assistant, or other handheld computing device. Therefore, the computing device 600 may be representative of any computer in which the systems and methods reside or partially reside.

[0059] Generally, in terms of hardware architecture as shown in FIG. 6, the computing device 600 includes a processor 602, the memory 604, and one or more input and/or output (I/O) devices 606 (or peripherals) that are communicatively coupled via an interface such as one or more buses or other wired or wireless connections, as is known in the art. The processor 602 can

be a hardware device for executing software, particularly software stored in the memory 604. Further, the processor 602 can interface with a database 603 that can store various amounts and types of data. For example, the database can store credit-related data and other types of data. The processor 602 can be any custom made or commercially available processor, such as, for example, a Core series or vPro processor made by Intel Corporation, or a Phenom, Athlon or Sempron processor made by Advanced Micro Devices, Inc. In the case where the computing device 600 is a server, the processor 602 may be, for example, a Xeon or Itanium processor from Intel, or an Opteron-series processor from Advanced Micro Devices, Inc. The processor 602 may also represent multiple parallel or distributed processors working in unison.

[0060] The memory 604 can include any one or a combination of volatile memory elements (*e.g.*, random access memory (RAM, such as DRAM, SRAM, SDRAM, etc.)) and nonvolatile memory elements (*e.g.*, ROM, hard drive, flash drive, CDROM, etc.). Further, the memory 604 may incorporate electronic, magnetic, optical, and/or other types of storage media and can have a distributed architecture where various components are situated remote from one another, but are still accessed by the processor 602. These other components may reside on devices located elsewhere on a network or in a cloud arrangement.

[0061] The software in the memory 604 may include one or more separate programs or applications 611. The separate applications 611 comprise ordered listings of executable instructions for implementing logical functions, such as functions relating to matching data, as discussed herein. In the example of FIG. 6, the software in the memory 604 may include a suitable operating system (O/S) 612. Examples of some operating systems 612 are Windows operating systems available from Microsoft Corporation, Mac OS X available from Apple

Computer, Inc., a Unix operating system from AT&T, or a Unix-derivative such as BSD or Linux. The type of the operating system 612 will depend on the type of the computing device 600. For example, if the computing device 600 is a PDA or handheld computer, the operating system 612 may be iOS for operating certain devices from Apple Computer, Inc., PalmOS for devices from Palm Computing, Inc., Windows Phone 8 from Microsoft Corporation, Android from Google, Inc., or Symbian from Nokia Corporation. The operating system 612 can control the execution of other computer programs, and can provide scheduling, input-output control, file and data management, memory management, and communication control and related services.

[0062] If the computing device 600 is an IBM PC compatible computer or the like, the software in the memory 604 may further include a basic input output system (BIOS). The BIOS is a set of essential software routines that initialize and test hardware at startup, start the operating system 612, and support the transfer of data among the hardware devices. The BIOS is stored in ROM so that the BIOS can be executed when the computing device 600 is activated.

[0063] Steps and/or elements, and/or portions thereof of the invention may be implemented using a source program, executable program (object code), script, or any other entity comprising a set of instructions to be performed. Furthermore, the software embodying the invention can be written as (a) an object oriented programming language, which has classes of data and methods, or (b) a procedural programming language, which has routines, subroutines, and/or functions, for example but not limited to, C, C++, C#, Pascal, Basic, Fortran, Cobol, Perl, Java, Ada, and Lua. Components and entities as discussed herein may also be written in a proprietary language developed to interact with these known languages.

[0064] The I/O device(s) 606 may include input devices such as a keyboard, a mouse, a scanner, a microphone, a touch screen, a bar code reader, or an infra-red reader. It may also include output devices such as a printer, a video display, an audio speaker or headphone port or a projector. The I/O device(s) 206 may also comprise devices that communicate with inputs or outputs, such as a short-range transceiver (RFID, Bluetooth, etc.), a telephonic interface, a cellular communication port, a router, or other types of network communication equipment. The I/O devices 606 may be internal to the computing device 600, or may be external and connected wirelessly or via connection cable, such as through a universal serial bus port.

[0065] When the computing device 600 is in operation, the processor 602 is configured to execute software stored within the memory 604, to communicate data to and from the memory 604, and to generally control operations of the computing device 600 pursuant to the software. The operating system 612, in whole or in part, may be read by the processor 602, buffered within the processor 602, and then executed.

[0066] In the context of this document, a "computer-readable medium" may be any means that can store, communicate, propagate, or transport data objects for use by or in connection with the systems and methods as described herein. The computer readable medium may be for example, an electronic, magnetic, optical, electromagnetic, infrared, or semiconductor system, apparatus, device, propagation medium, or any other device with similar functionality. More specific examples (a non-exhaustive list) of the computer-readable medium would include the following: an electrical connection (electronic) having one or more wires, a random access memory (RAM) (electronic), a read-only memory (ROM) (electronic), an erasable programmable read-only memory (EPROM, EEPROM, or Flash memory) (electronic), an

optical fiber (optical), and a portable compact disc read-only memory (CDROM) (optical). Note that the computer-readable medium could even be paper or another suitable medium upon which the program is printed, as the program can be electronically captured, via, for instance, optical scanning of the paper or other medium, then compiled, interpreted or otherwise processed in a suitable manner if necessary, and stored in a computer memory. The systems and methods can be embodied in any type of computer-readable medium for use by or in connection with an instruction execution system or apparatus, such as a computer.

[0067] For purposes of connecting to other computing devices, the computing device 600 is equipped with network communication equipment and circuitry, including a communication module 614. In embodiments, the network communication equipment includes a network card such as an Ethernet card, or a wireless connection card. In a preferred network environment, each of the plurality of computing devices 600 on the network is configured to use the Internet protocol suite (TCP/IP) to communicate with one another. It will be understood, however, that a variety of network protocols could also be employed, such as IEEE 802.11 Wi-Fi, address resolution protocol ARP, spanning-tree protocol STP, or fiber-distributed data interface FDDI. It will also be understood that while a preferred embodiment of the invention is for each computing device 600 to have a broadband or wireless connection to the Internet (such as DSL, Cable, Wireless, T-1, T-3, OC3 or satellite, etc.), the principles of the invention are also practicable with a dialup connection through a standard modem or other connection means. Wireless network connections are also contemplated, such as wireless Ethernet, satellite, infrared, radio frequency, Bluetooth, near field communication, and cellular networks.

[0068] FIG. 7 illustrates a matching system 700 for comparing and matching offline data and online data with credit-related data to identify matching targeted individuals, in accordance with one or more principles of the invention. The system 700 may utilize offline data received from an offline data source 750 and online data received from an online data source 752. The system 700 may also communicate with a user 756, such as buyers of advertising space, advertising businesses, and other advertisers, for receiving information or requests, or transmitting keys or other results, in some embodiments. The user 756 may also transmit a user input file that includes names and addresses of targeted individuals, for example, as offline data to the system 700, in some embodiments. Users may directly or indirectly purchase or otherwise obtain the advertising space from distributors, such as advertising networks and publishers, to distribute advertisements to the targeted individuals using data gleaned from the online activity of the targeted individuals. Targeted individuals may be, for example, consumers and/or persons employed, affiliated, and/or associated with a business, such as owners, executives, and/or employees of the business. Distributors may own the advertising space and/or represent another entity which owns the advertising space. Various components of the system 700 may be implemented using software executable by one or more servers or computers, such as a computing device 600 with a processor 602 and memory 604 as shown in FIG. 6, which is described above.

[0069] The matching system 700 may include a matching engine 702 for receiving, comparing, and matching the offline data and online data with credit-related data to identify matching targeted individuals. The matching engine 702 may be in communication with the offline data source 750, the online data source 752, and/or the user 756 through a data network,

such as the Internet. The matching engine 702 may also be in communication with a database, such as a credit data database 704, which includes the credit-related data, such as credit header data; a key database 706 for storing keys for linking offline data and online data; and/or a supplemental database 754 including supplemental information. In some embodiments, the credit data database 704 and the key database 706 may be included in the matching system 700 and the supplemental database 754 may be external to the matching system 700. In other embodiments, none, some, or all of the databases 704, 706 and 754 may be included in the matching system 700 or may be external to the matching system 700.

[0070] Offline data can be received from the offline data source 750 by the matching engine 702. The offline data may include data that is associated with non-Internet or non-online activity and that is separate from online data. For example and without limitation, offline data can be consumer- or business-related data, consumer identifying data, aggregated credit data, credit scores, pre-screen offers, business identifiers, product profits, estimated incomes, actual incomes, consumer behavioral data, wealth data, education data, vehicle ownership data, proprietary data, non-aggregated credit data, public records, and/or similar data. The offline data source 750 may include, for example, public records sources (e.g., business registration records, property records, etc.), customer records sources (e.g., registration information, etc.), credit records sources, and the like. The offline data may also include a user input file. The offline data can include one or more offline data records. In some embodiments, the offline data may include data at the level of the targeted individual, e.g., consumer-level data, and/or aggregated data applied to a targeted individual, e.g., census summary data for a particular targeted individual. In an embodiment, the offline data is depersonalized so that the identity of targeted individuals is not known.

[0071] Online data can be received from the online data source 752 by the matching engine 702. The online data may include data associated with Internet or online activity, such as, for example and without limitation, data associated with web browsing, click-through data, click stream data, cookies, e-mail account information, online registration data, online transaction data, online site usage data, IP addresses, electronic device identifiers, phone numbers, search result data, biometric data, network identifiers, Media Access Control addresses, and/or other similar data. The online data source 752 may include, for example, websites, e-mail providers, e-commerce entities, publishers, distributors, data partners, and the like. The online data can include one or more online data records. In an embodiment, the online data is depersonalized so that the identity of targeted individuals is not known.

[0072] The matching engine 702 may access the credit data database 704 and retrieve credit-related data. The credit-related data may include credit header data, such as identifying information for a plurality of targeted individuals, such as names, dates of birth, identification numbers (e.g., social security numbers, national identification numbers, etc.), street addresses, cities, states, zip codes, telephone numbers, account numbers (e.g., credit card account numbers, loan account numbers, etc.), and/or other identifying information. In some embodiments, the credit-related data may include historical data for the identifying information, such as previous addresses, telephone numbers, names, etc. for the targeted individuals. The credit-related data in the credit data database 704 may be maintained by a credit bureau, for example. In some embodiments, the credit-related data in the credit data database 704 may include data sourced or originated from a credit bureau, a credit reporting company, and/or another entity.

[0073] The matching engine 702 may compare the credit-related data with the offline data records, and compare the credit-related data with the online data records. The offline data and the online data may be compared to the credit-related data in order to determine whether a particular offline data record and/or particular online data records corresponds to a particular matching targeted individual. In particular, the offline data records may be matched to the identifying information in the credit-related data for the particular matching targeted individual, and the online data records may be matched to the identifying information in the credit-related data for the particular matching targeted individual. If an offline data record matches the identifying information for a matching targeted individual, then the matching engine 702 can designate that the offline data record corresponds to the matching targeted individual. Similarly, if an online data record matches the identifying information for a matching targeted individual, then the matching engine 702 can designate that the online data record corresponds to the matching targeted individual. In this way, the offline data record and the online data record can be independently compared to the credit-related data to ensure that accuracy and completeness of the matching. In other words, a matching targeted individual can be determined by separately comparing offline data to the credit-related data, and online data to the credit-related data.

[0074] In some embodiments, the matching engine 702 can compare the offline data records and/or the online data records to supplemental data and/or the credit-related data. The matching engine 702 may access a supplemental database 754 to retrieve the supplemental data. This may be the case, for example, when a particular offline data record or online data record by itself is insufficient to match a particular targeted individual. In this case, the data record may need to be cross-referenced with supplemental data to achieve a successful match with identifying

information in the credit-related data for a particular targeted individual. In an embodiment, the supplemental data may be appended to an offline data record and/or an online data record to improve the matching performed by the matching engine 702. Accordingly, if the supplemental data and/or the identifying information for a matching targeted individual matches a particular offline or online data record, the matching engine 702 can designate that the data record corresponds to the matching targeted individual.

[0075] If both an offline data record corresponds to a matching targeted individual and an online data record corresponds to the matching targeted individual, then the matching engine 702 can generate a key to link the offline data record and the online data record. The key may be stored by the matching engine 702 in a key database 706. The key may be alphabetic, numeric, alphanumeric, and/or in another format. In one embodiment, the key includes one or more identifiers or references to the offline data record and/or the online data records that correspond to the matching targeted individual. In another embodiment, the key includes the offline data record and the online data record corresponding to the matching targeted individual. In a further embodiment, the key includes the offline data record corresponding to the matching targeted individual and a link or reference to the online data record corresponding to the matching targeted individual. In another embodiment, the key includes the online data record corresponding to the matching targeted individual and a link or reference to the offline data record corresponding to the matching targeted individual. Keys may also be transmitted from the matching engine 702 to the user 756 or another entity. The user 756 may utilize the keys to target advertisements, push notifications, and the like to the particular matching targeted

individuals. In particular, the keys may assist the user 756 in knowing that a particular online user is the matching targeted individual, based on the offline data and the online data.

[0076] As an example, the offline data may include information from product warranty cards, such as the names, addresses, phone numbers, and email addresses for a particular set of targeted individuals. The online data may include the registration and transaction information for a retail e-commerce website that includes the names, addresses, and purchase history for another set of targeted individuals. The matching engine 702 may receive these offline data records and online data records, and then access the credit data database 704 to retrieve credit-related data. The matching engine 702 may compare identifying information from the credit-related data to the offline data, and separately compare identifying information from the credit-related data to the online data. If a particular offline data record and a particular online data record both match the same matching targeted individual, based on the comparisons with the credit-related data, the matching engine 702 may designate that the particular offline data record and the particular online data record correspond to that matching targeted individual. The matching engine 702 may generate a key that links the particular offline data record and the particular online data record for that matching targeted individual. The key may be stored by the matching engine 702 in a key database 706.

[0077] An embodiment of a process 800 for comparing and matching offline data and online data with credit-related data to identify matching targeted individuals is shown in FIG. 8, in accordance with one or more principles of the invention. The process 800 may result in the generation, storage, and transmission of a key linking offline data and online data to a matching targeted individual. The matching engine 702 may perform all or part of the process 800, and

the process 800 can utilize the credit data database 704, the key database 706, and/or the supplemental database 754.

[0078] At step 802, offline data may be received from an offline data source 750. The offline data may include data that is associated with non-Internet or non-online activity and that is separate from online data. For example, offline data can be consumer- or business-related data, consumer identifying data, aggregated credit data, credit scores, pre-screen offers, business identifiers, product profits, estimated incomes, actual incomes, consumer behavioral data, wealth data, education data, vehicle ownership data, proprietary data, non-aggregated credit data, public records, and/or similar data. Online data may be received at step 804 from an online data source 752. The online data may include data associated with Internet or online activity, such as data associated with web browsing, click-through data, click stream data, cookies, e-mail account information, online registration data, online transaction data, online site usage data, IP addresses, electronic device identifiers, phone numbers, search result data, biometric data, network identifiers, Media Access Control addresses, and/or other similar data.

[0079] Credit-related data may be retrieved at step 806 from a database, such as a credit data database 704. The credit-related data may include identifying information for a plurality of targeted individuals, such as names, dates of birth, identification numbers, street addresses, cities, states, zip codes, telephone numbers, account numbers, and/or other identifying information. In some embodiments, the credit-related data may include historical data for the identifying information, such as previous addresses, telephone numbers, names, etc. for the targeted individuals.

[0080] At step 808, the offline data records in the offline data may be compared to the credit-related data. The online data records in the online data may be compared to the credit-related data at step 810. The offline data and the online data may be compared at steps 808 and 810 to the credit-related data in order to determine whether a particular offline data record and/or particular online data records corresponds to a particular matching targeted individual. In some embodiments, the offline data records and/or the online data records may be compared at steps 808 and 810, respectively, with the credit-related data and with non-credit-related data. Further details regarding steps 808 and 810 are described below with reference to FIGs. 9 and 10.

[0081] It may be determined at step 812 whether an offline data record corresponds to a matching targeted individual and an online data record corresponds to the same matching targeted individual. If the offline data record does not correspond to a matching targeted individual and/or an online data record does not correspond to the same matching targeted individual at step 812, then the process 800 may be complete. However, if both the offline data record corresponds to a matching targeted individual and an online data record corresponds to the same matching targeted individual at step 812, then the process 800 continues to step 814. At step 814, a key may be generated to link the offline data record and the online data record for the matching targeted individual. The key may be stored at step 816 in a key database 706. The key may also be transmitted at step 818, such as to a user or another entity. The user or other entity may utilize the key to target advertisements, push notifications, and the like to the particular matching targeted individuals.

[0082] An embodiment of a process 900 for comparing data to credit-related data is shown in FIG. 9, in accordance with one or more principles of the invention. The process 900 may

correspond to step 808 for comparing offline data and/or step 810 for comparing online data of the process 800 described above. At step 902, an offline data record or an online data record may be matched to the identifying information in the credit-related header for a particular matching targeted individual. It may be determined at step 904 whether the offline data record or the online data record matches the identifying information. If the offline data record or online data record matches the identifying information at step 904, then the process 900 continues to step 906 to designate that the offline data record or online data record corresponds to the matching targeted individual. However, if the offline data record or online data record does not match the identifying information at step 904, then the process 900 continues to step 908 to designate that the offline data record or online data record does not correspond to the matching targeted individual.

[0083] An embodiment of a process 1000 for comparing data to credit-related data is shown in FIG. 10, in accordance with one or more principles of the invention. The process 1000 may correspond to step 808 for comparing offline data and/or step 810 for comparing online data of the process 800 described above. At step 1002, supplementary data may be retrieved from a supplementary database. At step 1004, an offline data record or an online data record may be matched to the supplementary data and/or the identifying information in the credit-related header for a particular matching targeted individual. It may be determined at step 1006 whether the offline data record or the online data record matches the supplementary data and/or the identifying information. If the offline data record or online data record matches the supplementary data and/or the identifying information at step 1006, then the process 1000 continues to step 1008 to designate that the offline data record or online data record corresponds

to the matching targeted individual. However, if the offline data record or online data record does not match the identifying information at step 1006, then the process 1000 continues to step 1010 to designate that the offline data record or online data record does not correspond to the matching targeted individual.

[0084] Any process descriptions or blocks in figures should be understood as representing modules, segments, or portions of code which include one or more executable instructions for implementing specific logical functions or steps in the process, and alternate implementations are included within the scope of the embodiments of the invention in which functions may be executed out of order from that shown or discussed, including substantially concurrently or in reverse order, depending on the functionality involved, as would be understood by those having ordinary skill in the art.

[0085] It should be emphasized that the above-described embodiments of the invention, particularly, any "preferred" embodiments, are possible examples of implementations, merely set forth for a clear understanding of the principles of the invention. Many variations and modifications may be made to the above-described embodiment(s) of the invention without substantially departing from the spirit and principles of the invention. All such modifications are intended to be included herein within the scope of this disclosure and the invention and protected by the following claims.

Claims

What is claimed is:

1. A method for matching of offline data and online data, using a processor, the method comprising:

receiving the offline data at the processor, the offline data comprising at least one offline data record;

receiving the online data at the processor, the online data comprising at least one online data record;

retrieving credit-related data from a database using the processor, the credit-related data comprising identifying information for a plurality of targeted individuals;

comparing the at least one offline data record to the credit-related data, using the processor, to determine whether the at least one offline data record corresponds to a matching targeted individual of the plurality of targeted individuals;

comparing the at least one online data record to the credit-related data, using the processor, to determine whether the at least one online data record corresponds to the matching targeted individual;

if the at least one offline data record corresponds to the matching targeted individual and the at least one online data record corresponds to the matching targeted individual:

generating a key linking the at least one offline data record and the at least one online data record, using the processor; and

storing the key in a key database, using the processor.

2. The method of claim 1, wherein:

the identifying information for the plurality of targeted individuals comprises first identifying information for the matching targeted individual; and

comparing the at least one offline data record comprises:

matching the at least one offline data record to the first identifying information for the matching targeted individual, using the processor; and

designating that the at least one offline data record corresponds to the matching targeted individual, using the processor, if the at least one offline data record matches the first identifying information for the matching targeted individual.

3. The method of claim 1, wherein:

the identifying information for the plurality of targeted individuals comprises second identifying information for the matching targeted individual;

comparing the at least one online data record comprises:

matching the at least one online data record to the second identifying information for the matching targeted individual, using the processor; and

designating that the at least one online data record corresponds to the matching targeted individual, using the processor, if the at least one online data record matches the second identifying information for the matching targeted individual.

4. The method of claim 1, wherein the offline data is associated with non-Internet activity and comprises one or more of aggregated credit data, consumer identifying data, a credit score, a

pre-screen offer, a business identifier, a product profit, an estimated income, an actual income, consumer behavioral data, wealth data, education data, vehicle ownership data, proprietary data, non-aggregated credit data, or a public record.

5. The method of claim 1, wherein the online data is associated with Internet activity and comprises one or more of a cookie, click-through data, click stream data, e-mail account information, online registration data, online transaction data, online site usage data, an IP address, an electronic device identifier, search result data, biometric data, a network identifier, or a Media Access Control address.

6. The method of claim 1, wherein the identifying information for the plurality of targeted individuals comprises one or more of a name, a date of birth, an identification number, a street address, a city, a state, a zip code, a telephone number, or an account number.

7. The method of claim 1, wherein the identifying information for the plurality of targeted individuals comprises one or more of a name history, a street address history, a city history, a state history, a zip code history, a telephone number history, or an account number history.

8. The method of claim 1, wherein comparing the at least one online data record comprises:

retrieving supplemental data from a supplemental database, using the processor; and

comparing the at least one online data record to one or more of the supplemental data or the credit-related data, using the processor, to determine whether the at least one online data record corresponds to the matching targeted individual.

9. The method of claim 8, wherein:

the identifying information for the plurality of targeted individuals comprises third identifying information for the matching targeted individual; and

comparing the at least one online data record to one or more of the supplemental data or the credit-related data comprises:

matching the at least one online data record to one or more of the supplemental data or the third identifying information for the matching targeted individual, using the processor; and

designating that the at least one online data record corresponds to the matching targeted individual, using the processor, if the at least one online data record matches one or more of the supplemental data or the third identifying information for the matching targeted individual.

10. The method of claim 1, further comprising transmitting the key from the processor, if the at least one offline data record corresponds to the matching targeted individual and the at least one online data record corresponds to the matching targeted individual.

11. The method of claim 1, wherein the credit-related data comprises credit header data.

12. A system for matching of offline data and online data, the system comprising:

a processor in communication with a network;

a memory in communication with the processor, the memory for storing:

a database comprising credit-related data;

a key database for storing a key;

a matching engine for:

receiving the offline data, the offline data comprising at least one offline data record;

receiving the online data, the online data comprising at least one online data record;

retrieving credit-related data from the database, the credit-related data comprising identifying information for a plurality of targeted individuals;

comparing the at least one offline data record to the credit-related data to determine whether the at least one offline data record corresponds to a matching targeted individual of the plurality of targeted individuals;

comparing the at least one online data record to the credit-related data to determine whether the at least one online data record corresponds to the matching targeted individual;

if the at least one offline data record corresponds to the matching targeted individual and the at least one online data record corresponds to the matching targeted individual:

generating the key linking the at least one offline data record and the at least one online data record; and

storing the key in the key database.

13. The system of claim 12, wherein:

the identifying information for the plurality of targeted individuals comprises first identifying information for the matching targeted individual; and

the matching engine compares the at least one offline data record by:

matching the at least one offline data record to the first identifying information for the matching targeted individual; and

designating that the at least one offline data record corresponds to the matching targeted individual, if the at least one offline data record matches the first identifying information for the matching targeted individual.

14. The system of claim 12, wherein:

the identifying information for the plurality of targeted individuals comprises second identifying information for the matching targeted individual;

the matching engine compares the at least one online data record by:

matching the at least one online data record to the second identifying information for the matching targeted individual; and

designating that the at least one online data record corresponds to the matching targeted individual, if the at least one online data record matches the second identifying information for the matching targeted individual.

15. The system of claim 12, wherein the offline data is associated with non-Internet activity and comprises one or more of aggregated credit data, consumer identifying data, a credit score, a pre-screen offer, a business identifier, a product profit, an estimated income, an actual income, consumer behavioral data, wealth data, education data, vehicle ownership data, proprietary data, non-aggregated credit data, or a public record.

16. The system of claim 12, wherein the online data is associated with Internet activity and comprises one or more of a cookie, click-through data, click stream data, e-mail account information, online registration data, online transaction data, online site usage data, an IP address, an electronic device identifier, search result data, biometric data, a network identifier, or a Media Access Control address.

17. The system of claim 12, wherein the identifying information for the plurality of targeted individuals comprises one or more of a name, a date of birth, an identification number, a street address, a city, a state, a zip code, a telephone number, or an account number.

18. The system of claim 12, wherein the identifying information for the plurality of targeted individuals comprises one or more of a name history, a street address history, a city history, a state history, a zip code history, a telephone number history, or an account number history.

19. The system of claim 12, wherein the matching engine compares the at least one online data record by:

retrieving supplemental data from a supplemental database; and

comparing the at least one online data record to one or more of the supplemental data or the credit-related data to determine whether the at least one online data record corresponds to the matching targeted individual.

20. The system of claim 19, wherein:

the identifying information for the plurality of targeted individuals comprises third identifying information for the matching targeted individual; and

the matching engine compares the at least one online data record to one or more of the supplemental data or the credit-related data by:

matching the at least one online data record to one or more of the supplemental data or the third identifying information for the matching targeted individual; and

designating that the at least one online data record corresponds to the matching targeted individual if the at least one online data record matches one or more of the supplemental data or the third identifying information for the matching targeted individual.

21. The system of claim 12, wherein the matching engine is further for transmitting the key, if the at least one offline data record corresponds to the matching targeted individual and the at least one online data record corresponds to the matching targeted individual.

5

22. The system of claim 12, wherein the credit-related data comprises credit header data.

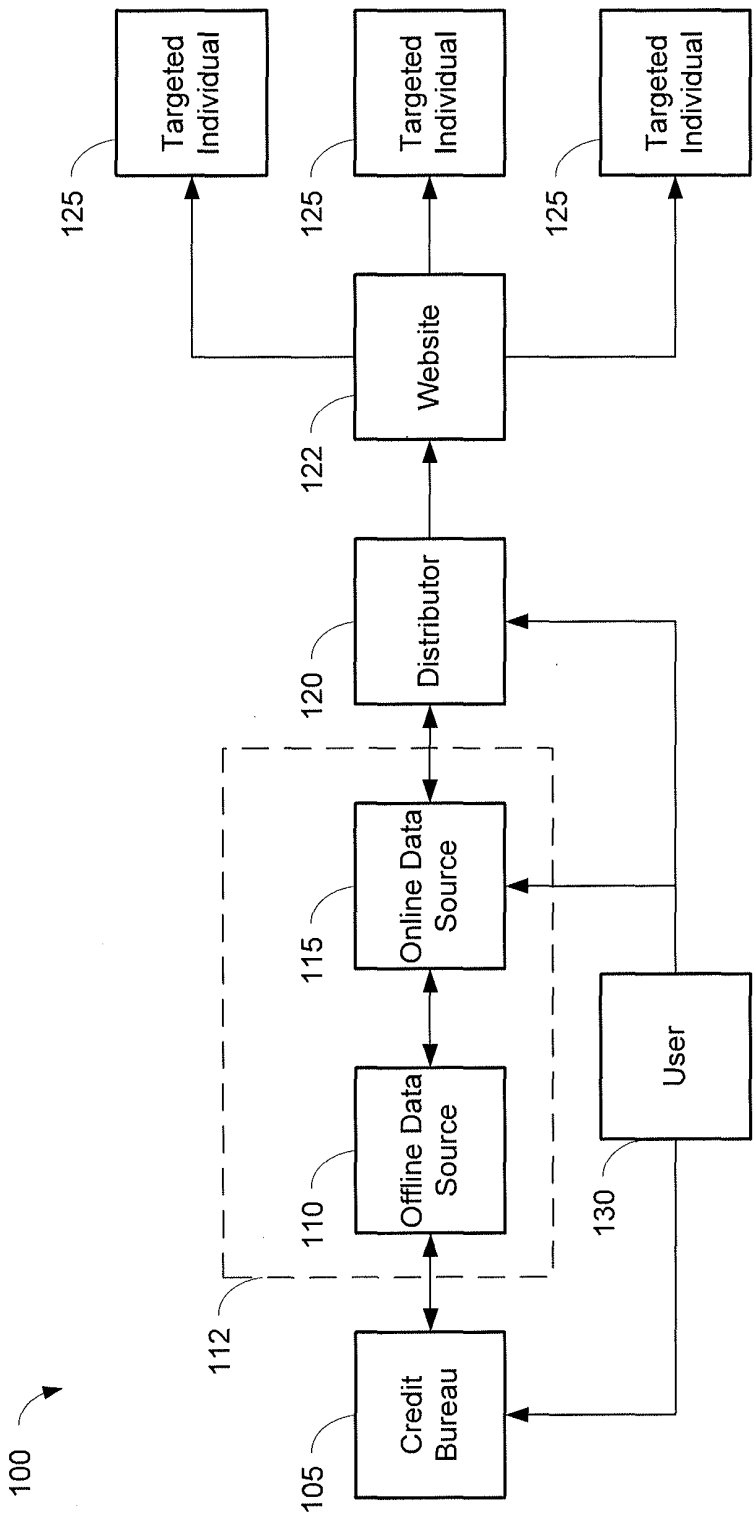
Targeted Individual
Targeted Individual
Targeted Individual
125
125
125
Website
122
Distributor
120
Online Data Source
115
Offline Data Source
110
User
130
Credit Bureau
105
112
100

FIG. 1

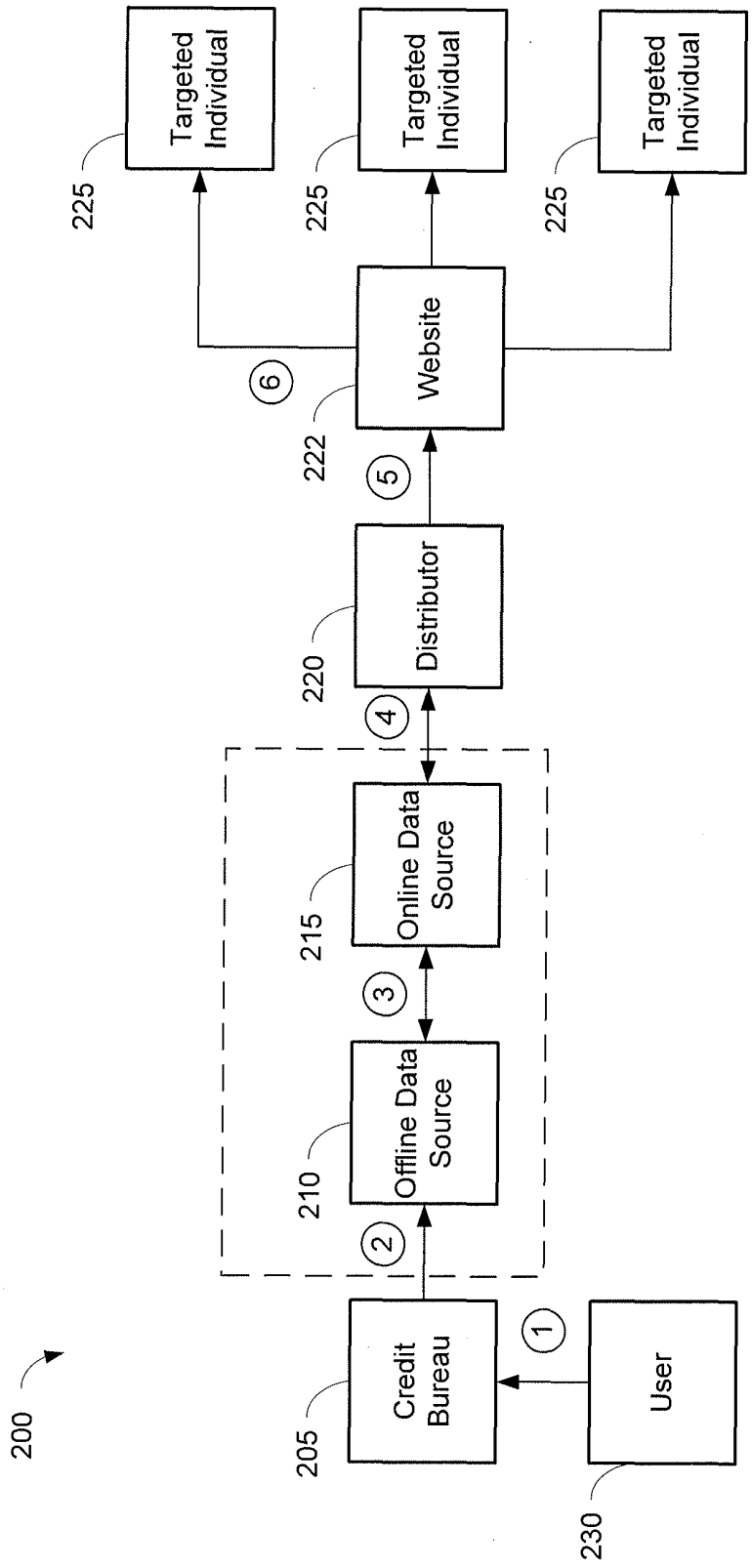
200
User
230
Credit Bureau
205
1
Offline Data Source
210
2
Online Data Source
215
3
Distributor
220
4
Website
222
5
6
Targeted Individual
225
Targeted Individual
225
Targeted Individual
225

FIG. 2

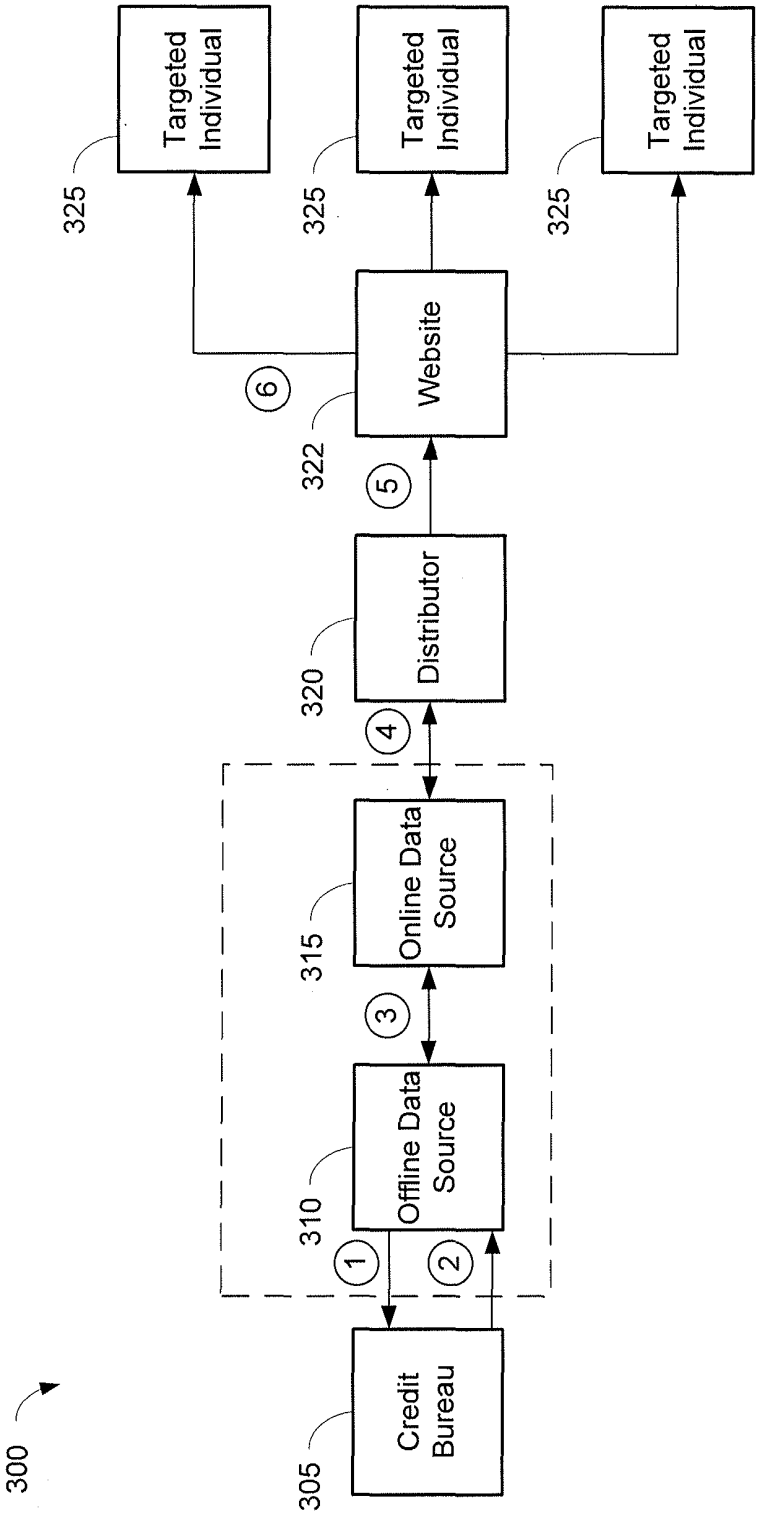
300
Credit Bureau
305
Offline Data Source
310
Online Data Source
315
Distributor
320
Website
322
Targeted Individual
325
Targeted Individual
325
Targeted Individual
325
1
2
3
4
5
6

FIG. 3

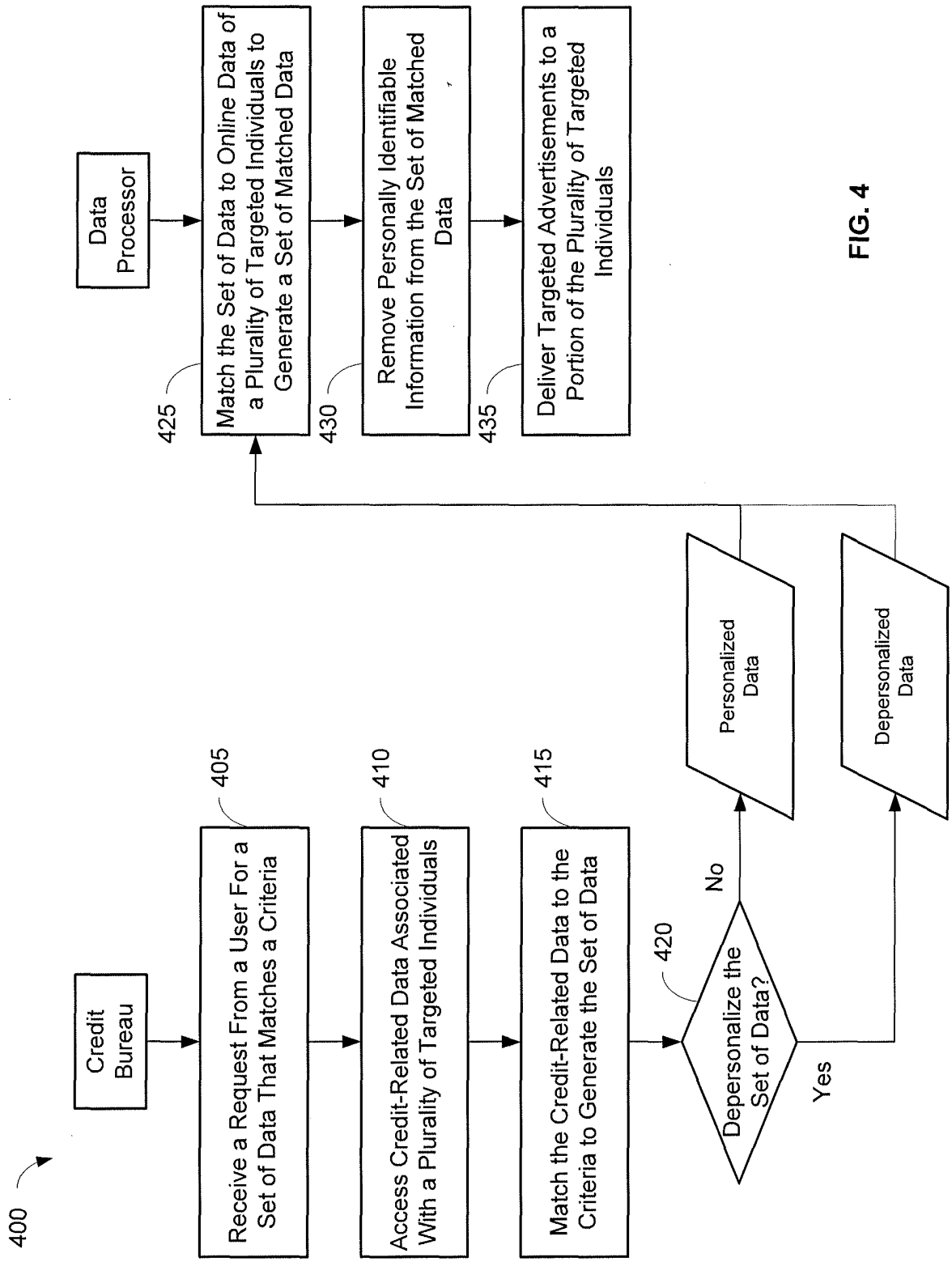
400
Credit Bureau
Receive a Request From a User For a Set of Data That Matches a Criteria
405
Access Credit-Related Data Associated With a Plurality of Targeted Individuals
410
Match the Credit-Related Data to the Criteria to Generate the Set of Data
415
420
Depersonalize the Set of Data?
No
Yes
Personalized Data
Depersonalized Data
Data Processor
425
Match the Set of Data to Online Data of a Plurality of Targeted Individuals to Generate a Set of Matched Data
430
Remove Personally Identifiable Information from the Set of Matched Data
435
Deliver Targeted Advertisements to a Portion of the Plurality of Targeted Individuals

FIG. 4

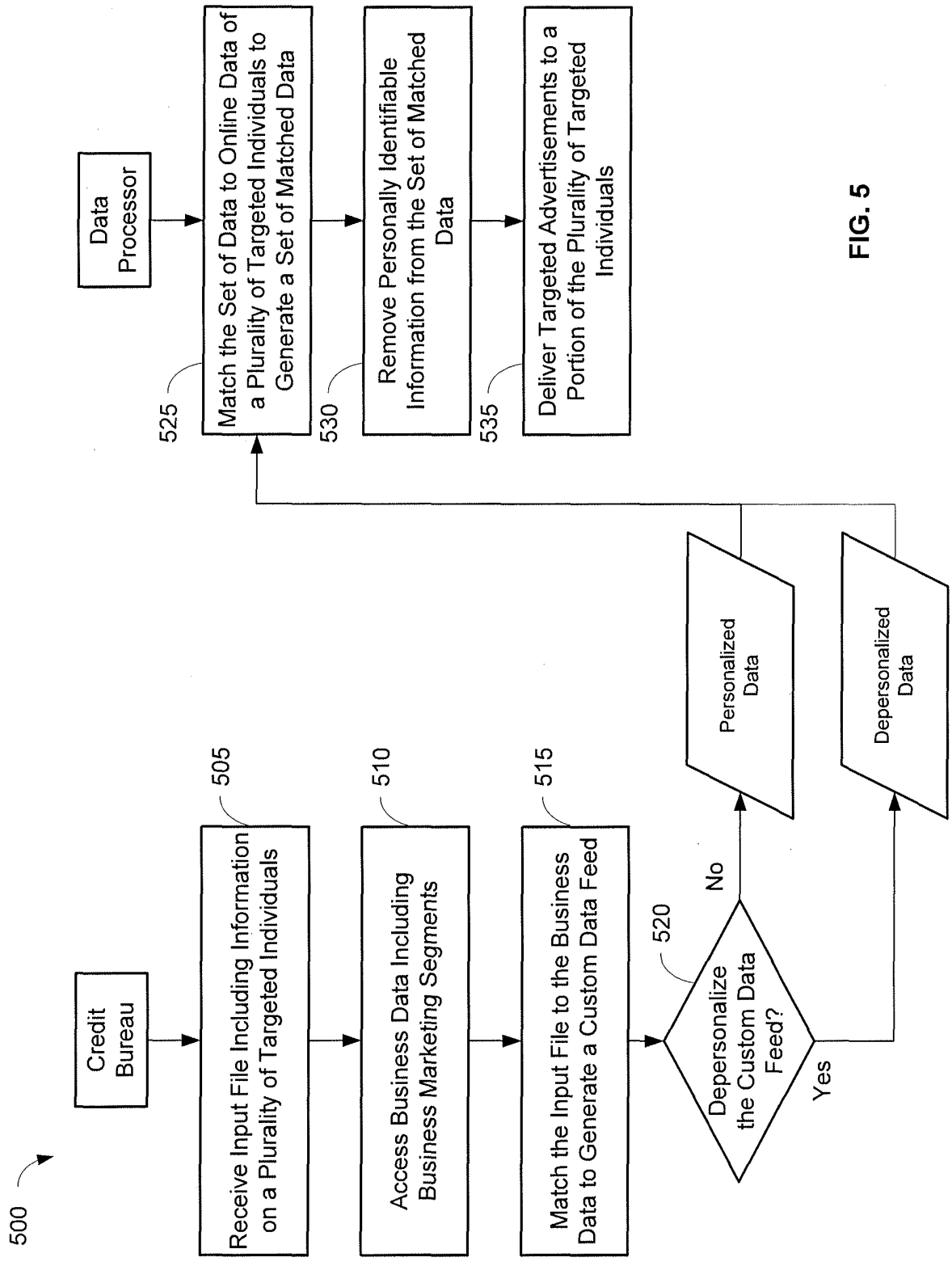
500
Credit Bureau
Receive Input File Including Information on a Plurality of Targeted Individuals
505
Access Business Data Including Business Marketing Segments
510
Match the Input File to the Business Data to Generate a Custom Data Feed
515
Depersonalize the Custom Data Feed?
520
No
Yes
Personalized Data
Depersonalized Data
Data Processor
Match the Set of Data to Online Data of a Plurality of Targeted Individuals to Generate a Set of Matched Data
525
Remove Personally Identifiable Information from the Set of Matched Data
530
Deliver Targeted Advertisements to a Portion of the Plurality of Targeted Individuals
535

FIG. 5

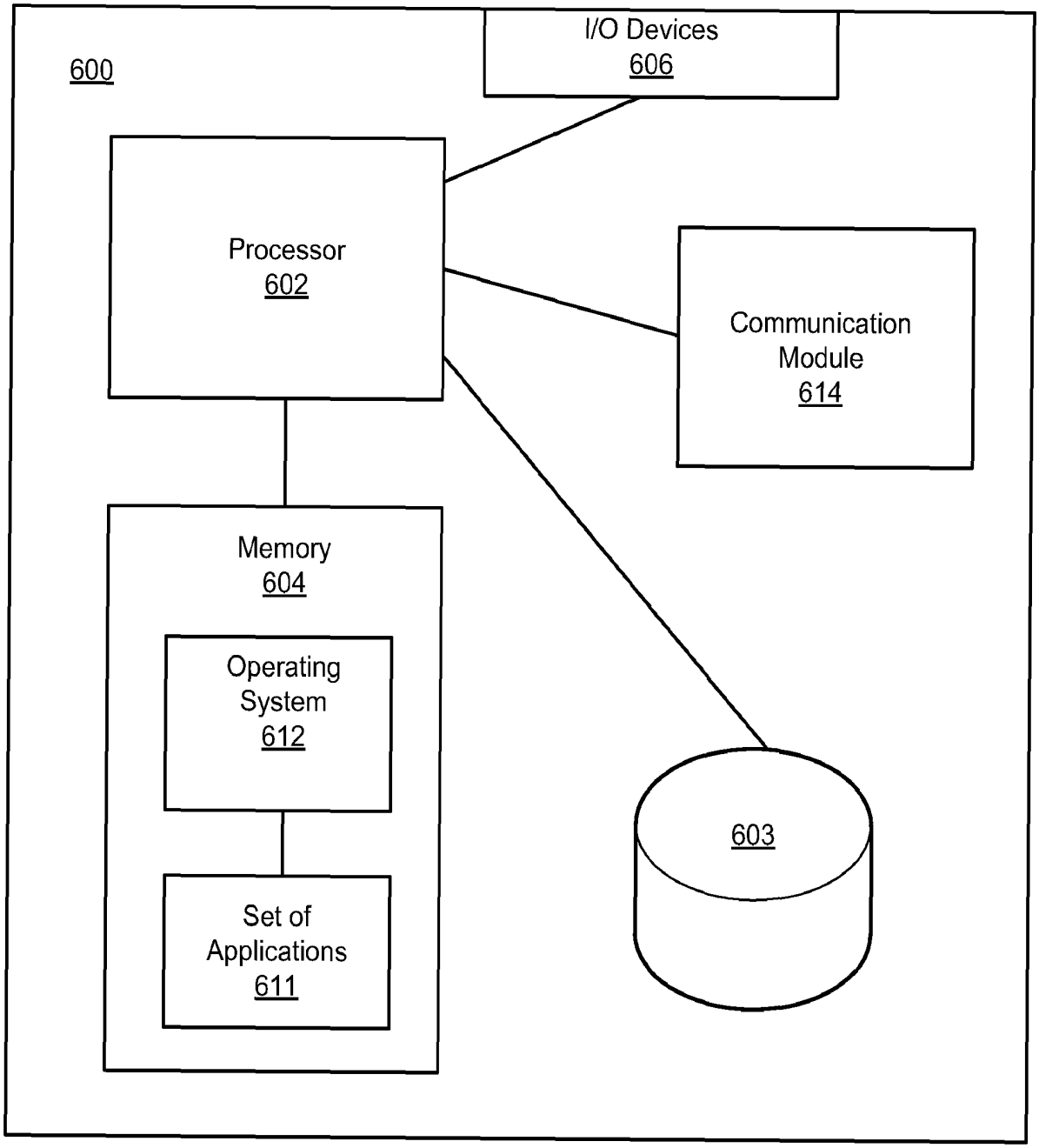
600
I/O Devices
606
Processor
602
Communication
Module
614
Memory
604
Operating
System
612
Set of
Applications
611
603

FIG. 6

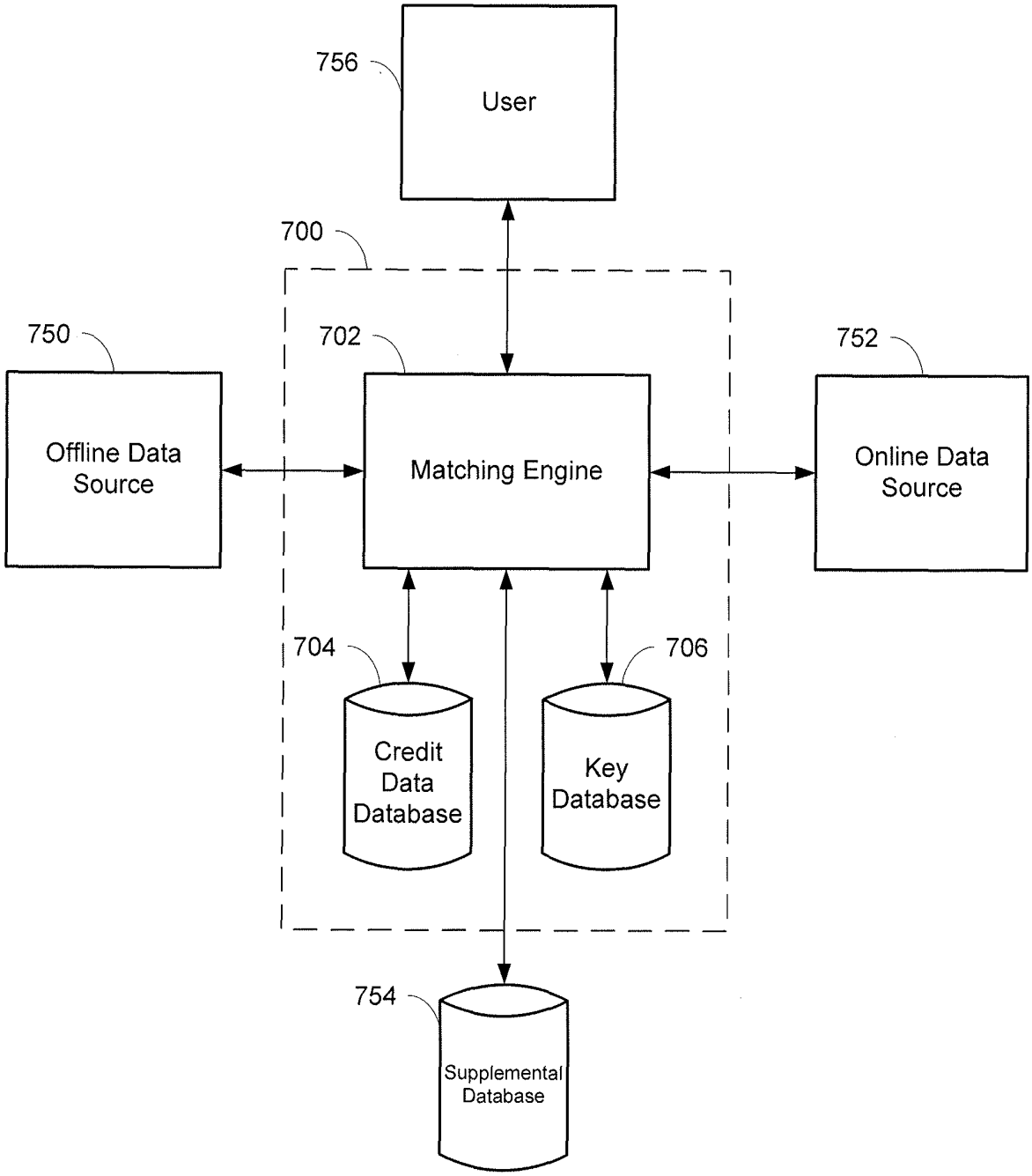
756
User
700
750
702
752
Offline Data Source
Matching Engine
Online Data Source
704
706
Credit Data Database
Key Database
754
Supplemental Database

FIG. 7

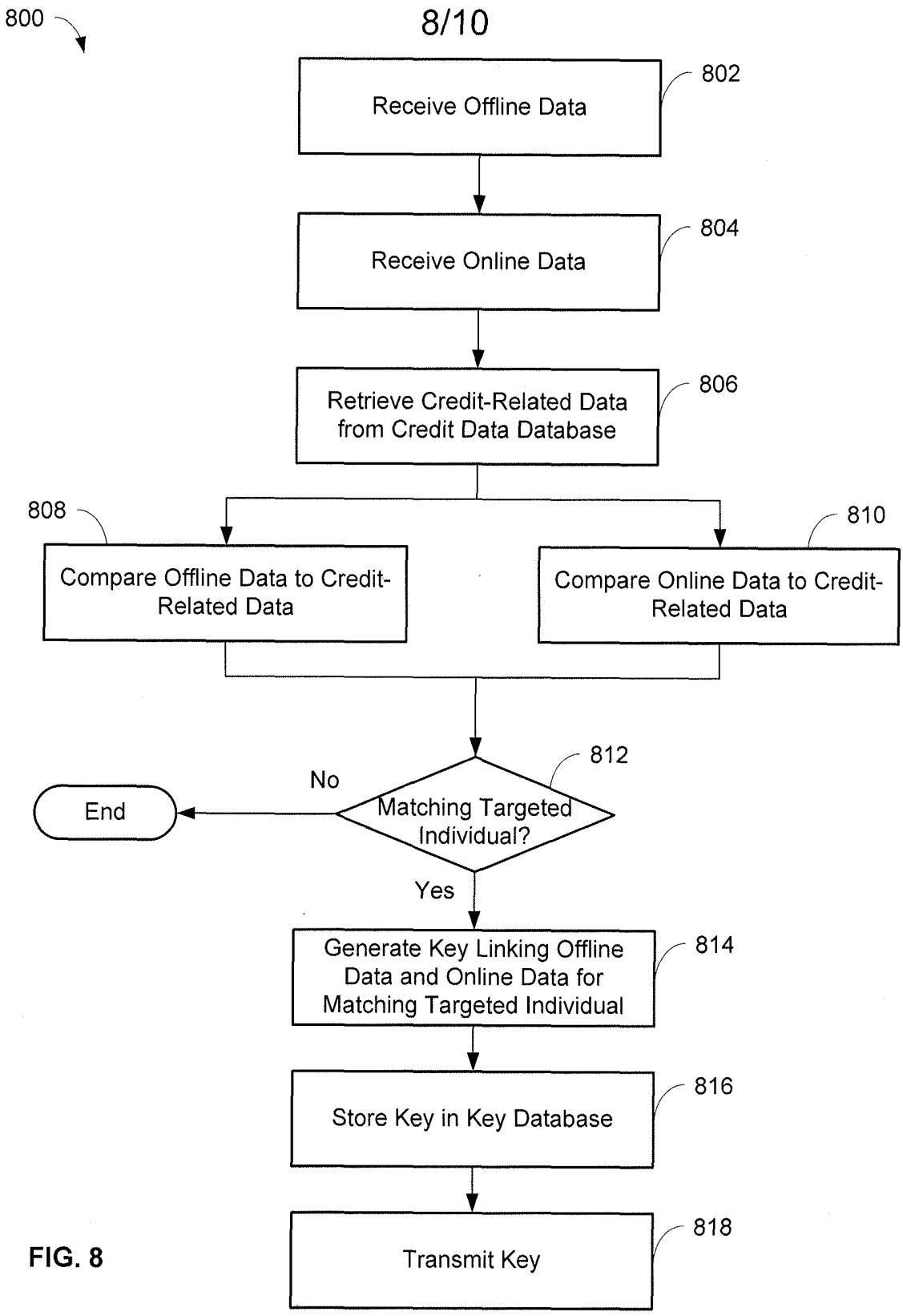
800
Receive Offline Data
802
Receive Online Data
804
Retrieve Credit-Related Data from Credit Data Database
806
808
Compare Offline Data to Credit-Related Data
810
Compare Online Data to Credit-Related Data
812
No
End
Matching Targeted Individual?
Yes
Generate Key Linking Offline Data and Online Data for Matching Targeted Individual
814
Store Key in Key Database
816
Transmit Key
818

FIG. 8

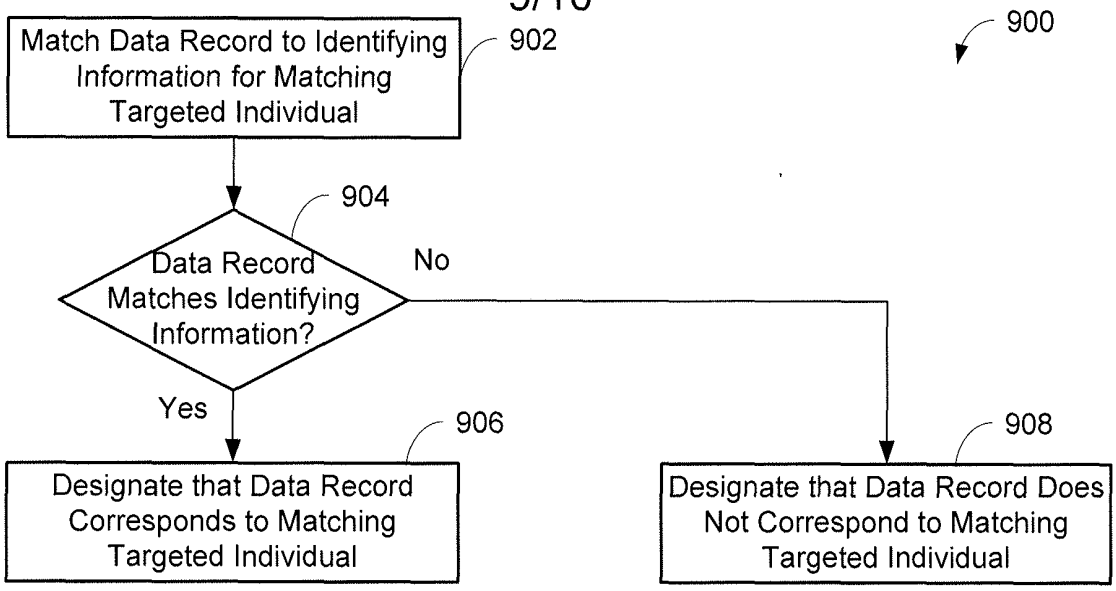
900
Match Data Record to Identifying Information for Matching Targeted Individual
902
904
Data Record Matches Identifying Information?
No
Yes
906
908
Designate that Data Record Corresponds to Matching Targeted Individual
Designate that Data Record Does Not Correspond to Matching Targeted Individual

FIG. 9

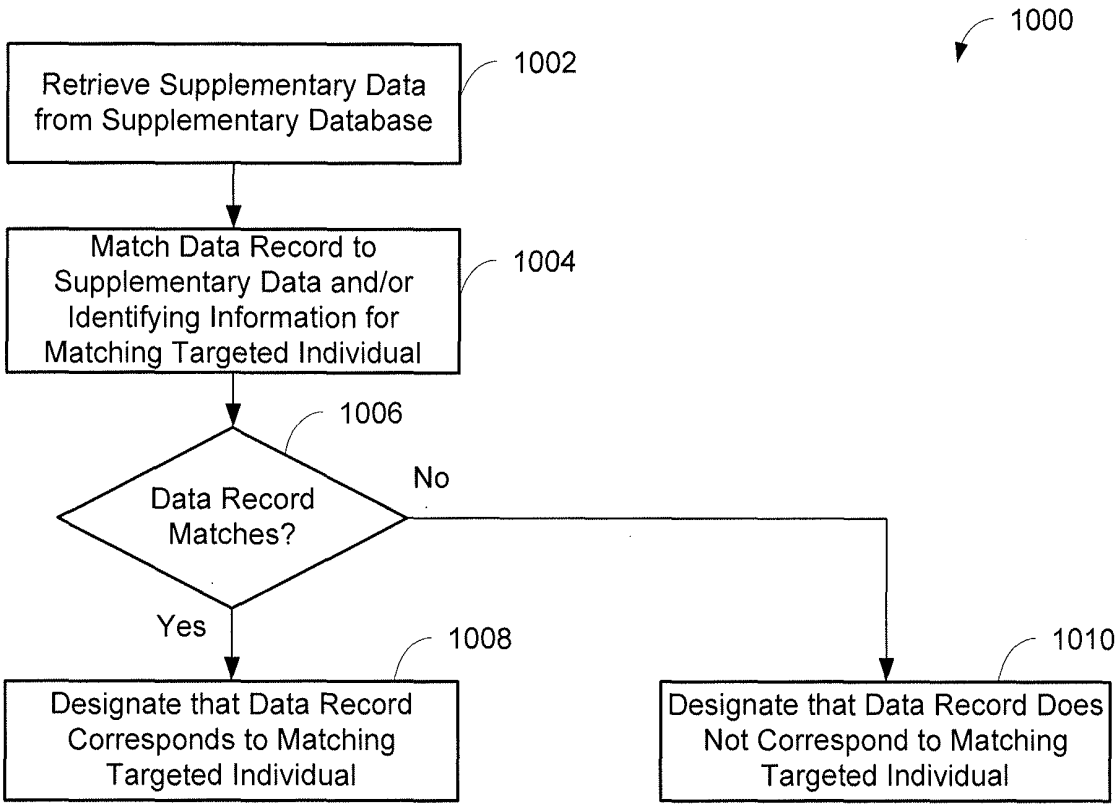
1000
Retrieve Supplementary Data from Supplementary Database
1002
Match Data Record to Supplementary Data and/or Identifying Information for Matching Targeted Individual
1004
1006
Data Record Matches?
No
Yes
1008
1010
Designate that Data Record Corresponds to Matching Targeted Individual
Designate that Data Record Does Not Correspond to Matching Targeted Individual

FIG. 10

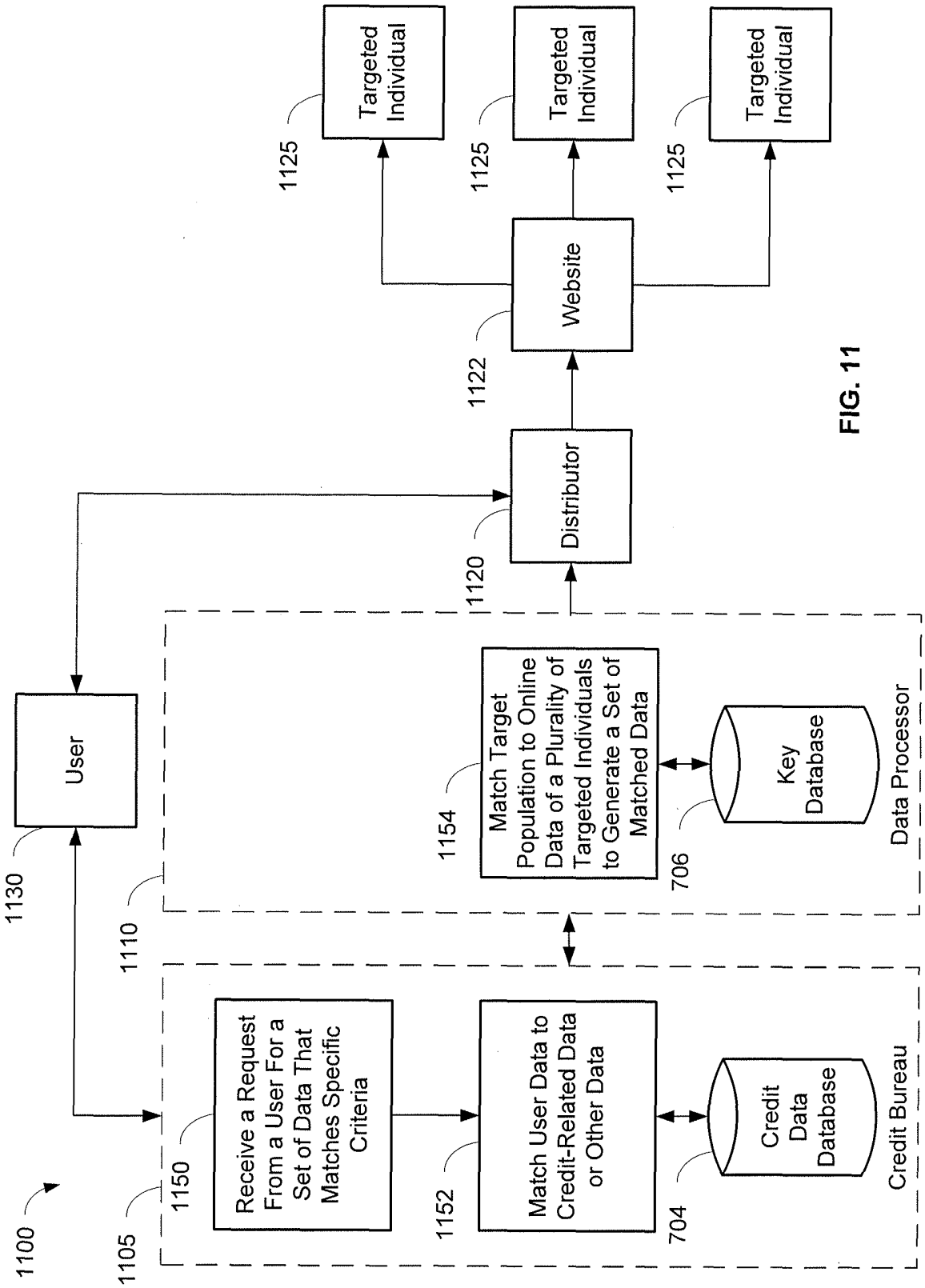
1100
1105
Credit Bureau
1150
Receive a Request From a User For a Set of Data That Matches Specific Criteria
1152
Match User Data to Credit-Related Data or Other Data
704
Credit Data Database
1110
Data Processor
1154
Match Target Population to Online Data of a Plurality of Targeted Individuals to Generate a Set of Matched Data
706
Key Database
1120
Distributor
1122
Website
1125
Targeted Individual
1125
Targeted Individual
1125
Targeted Individual
1130
User

FIG. 11

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2013/032484

A. CLASSIFICATION OF SUBJECT MATTER

G06Q 30/02(2012.01)i, G06Q 50/10(2012.01)i

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
G06Q 30/02; G06F 15/16; G06Q 30/00; H04N 21/2668; G06K 9/00; G06Q 90/00; G06Q 10/00; G06Q 50/10

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Korean utility models and applications for utility models
Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
eKOMPASS(KIPO internal) & keywords: offline data, online data, credit-related data, key, marketing

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2011-0066705 A1 (JOSEPH G. WILSON) 17 March 2011 See abstract, paragraphs [0021]-[0022], claims 1-23 and figures 2-6.	1-22
Y	US 2008-0199042 A1 (LINDA M. SMITH) 21 August 2008 See abstract, claims 1-16 and figures 4-7, 10-12.	1-22
A	US 2009-0063284 A1 (ANDREW MARTIN TURPIN et al.) 09 September 2009 See abstract, claims 1, 7, 9-10 and figures 1-5.	1-22
A	US 2011-0119111 A1 (KEITH J. HANNA) 19 May 2009 See abstract, claims 1-8 and figures 1-5.	1-22
A	KR 10-2010-0062524 A (ALTICAST CO., LTD.) 10 June 2010 See abstract, claims 1-9 and figures 1-5.	1-22

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier application or patent but published on or after the international filing date
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed
"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents,such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
25 June 2013 (25.06.2013)	**28 June 2013 (28.06.2013)**

Name and mailing address of the ISA/KR
Korean Intellectual Property Office
189 Cheongsa-ro, Seo-gu, Daejeon Metropolitan City, 302-701, Republic of Korea
Facsimile No. 82-42-472-7140

Authorized officer
OH, Eung Gie
Telephone No. 82-42-481-8744

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/US2013/032484

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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US 2009-0063284 A1	05.03.2009	US 2008-189169 A1	07.08.2008
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US 2011-0119111 A1	19.05.2011	US 2012-0239458 A9	20.09.2012
KR 10-2010-0062524 A	10.06.2010	None	

(19)中华人民共和国国家知识产权局

(12)发明专利申请

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(43)申请公布日 2015.04.15

(21)申请号 201380026335.4
(22)申请日 2013.03.15
(30)优先权数据
61/618,747 2012.03.31 US
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2014.11.20
(86)PCT国际申请的申请数据
PCT/US2013/032484 2013.03.15
(87)PCT国际申请的公布数据
WO2013/148356 EN 2013.10.03
(71)申请人 环联公司
地址 美国伊利诺伊州
(72)发明人 克雷格·F·拉沙佩勒
克利夫顿·H·伯恩斯
塔米·P·米切尔 帕特里克·怀特
史蒂文·M·沙乌齐
(74)专利代理机构 北京律盟知识产权代理有限责任公司 11287
代理人 路勇
(51)Int.Cl.
G06Q 30/02(2006.01)
G06Q 50/10(2006.01)

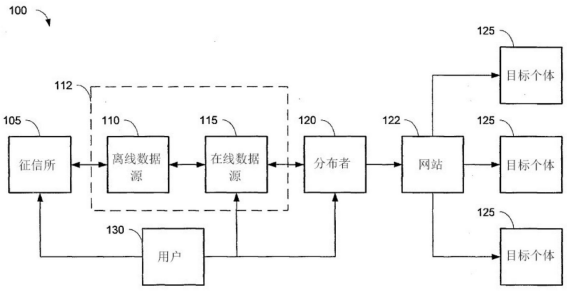
权利要求书4页 说明书15页 附图10页

(54)发明名称

用于基于离线、在线及信用相关数据的目标因特网营销的系统及方法

(57)摘要

本发明揭示用于通过使用信用相关数据将离线数据与在线数据进行比较而匹配离线数据与在线数据的系统及方法。所述系统及方法接收离线数据及在线数据且检索具有目标个体的识别信息的信用相关数据。将离线数据记录及在线数据记录与所述信用相关数据独立地进行比较以确定所述数据记录是否对应于匹配目标个体。如果离线数据记录及在线数据记录两者均对应于匹配目标个体，那么产生链接所述离线数据记录与所述在线数据记录的密钥。可将所述密钥存储于密钥数据库中。可利用所述密钥来对所述匹配目标个体进行目标营销。离线数据与在线数据的所述匹配可是较准确且完整的。



CN 104520886 A

1. 一种用于使用处理器来匹配离线数据与在线数据的方法，所述方法包括：

在所述处理器处接收所述离线数据，所述离线数据包括至少一个离线数据记录；

在所述处理器处接收所述在线数据，所述在线数据包括至少一个在线数据记录；

使用所述处理器从数据库检索信用相关数据，所述信用相关数据包括多个目标个体的识别信息；

使用所述处理器将所述至少一个离线数据记录与所述信用相关数据进行比较以确定所述至少一个离线数据记录是否对应于所述多个目标个体中的匹配目标个体；

使用所述处理器将所述至少一个在线数据记录与所述信用相关数据进行比较以确定所述至少一个在线数据记录是否对应于所述匹配目标个体；

如果所述至少一个离线数据记录对应于所述匹配目标个体且所述至少一个在线数据记录对应于所述匹配目标个体：

那么使用所述处理器来产生链接所述至少一个离线数据记录与所述至少一个在线数据记录的密钥；及

使用所述处理器将所述密钥存储于密钥数据库中。

2. 根据权利要求 1 所述的方法，其中：

所述多个目标个体的所述识别信息包括所述匹配目标个体的第一识别信息；且比较所述至少一个离线数据记录包括：

使用所述处理器将所述至少一个离线数据记录与所述匹配目标个体的所述第一识别信息进行匹配；及

如果所述至少一个离线数据记录匹配所述匹配目标个体的所述第一识别信息，那么使用所述处理器来指定所述至少一个离线数据记录对应于所述匹配目标个体。

3. 根据权利要求 1 所述的方法，其中：

所述多个目标个体的所述识别信息包括所述匹配目标个体的第二识别信息；

比较所述至少一个在线数据记录包括：

使用所述处理器将所述至少一个在线数据记录与所述匹配目标个体的所述第二识别信息进行匹配；及

如果所述至少一个在线数据记录匹配所述匹配目标个体的所述第二识别信息，那么使用所述处理器来指定所述至少一个在线数据记录对应于所述匹配目标个体。

4. 根据权利要求 1 所述的方法，其中所述离线数据与非因特网活动相关联且包括以下各项中的一或多者：聚合信用数据、消费者识别数据、信用评分、预审推广、业务识别符、产品利润、估计收入、实际收入、消费者行为数据、财富数据、教育数据、车辆所有权数据、专有数据、非聚合信用数据或公共记录。

5. 根据权利要求 1 所述的方法，其中所述在线数据与因特网活动相关联且包括以下各项中的一或多者：网上信息块、点击率数据、点击流数据、电子邮件账户信息、在线注册数据、在线交易数据、在线站点使用数据、IP 地址、电子装置识别符、搜索结果数据、生物计量数据、网络识别符或媒体接入控制地址。

6. 根据权利要求 1 所述的方法，其中所述多个目标个体的所述识别信息包括以下各项中的一或多者：名称、出生日期、身份证号、街道地址、城市、州、邮政编码、电话号码或账号。

7. 根据权利要求 1 所述的方法，其中所述多个目标个体的所述识别信息包括以下各项

中的一或多者 :名称历史、街道地址历史、城市历史、州历史、邮政编码历史、电话号码历史或账号历史。

8. 根据权利要求 1 所述的方法,其中比较所述至少一个在线数据记录包括 :

使用所述处理器从补充数据库检索补充数据 ;及

使用所述处理器将所述至少一个在线数据记录与所述补充数据或所述信用相关数据中的一或多者进行比较以确定所述至少一个在线数据记录是否对应于所述匹配目标个体。

9. 根据权利要求 8 所述的方法,其中 :

所述多个目标个体的所述识别信息包括所述匹配目标个体的第三识别信息 ;且

将所述至少一个在线数据记录与所述补充数据或所述信用相关数据中的一或多者进行比较包括 :

使用所述处理器将所述至少一个在线数据记录与所述补充数据或所述匹配目标个体的所述第三识别信息中的一或多者进行匹配 ;及

如果所述至少一个在线数据记录匹配所述补充数据或所述匹配目标个体的所述第三识别信息中的一或多者,那么使用所述处理器来指定所述至少一个在线数据记录对应于所述匹配目标个体。

10. 根据权利要求 1 所述的方法,其进一步包括 :如果所述至少一个离线数据记录对应于所述匹配目标个体且所述至少一个在线数据记录对应于所述匹配目标个体,那么从所述处理器发射所述密钥。

11. 根据权利要求 1 所述的方法,其中所述信用相关数据包括信用标头数据。

12. 一种用于匹配离线数据与在线数据的系统,所述系统包括 :

处理器,其与网络通信 ;

存储器,其与所述处理器通信,所述存储器用于存储 :

数据库,其包括信用相关数据 ;

密钥数据库,其用于存储密钥 ;

匹配引擎,其用于 :

接收所述离线数据,所述离线数据包括至少一个离线数据记录 ;

接收所述在线数据,所述在线数据包括至少一个在线数据记录 ;

从所述数据库检索信用相关数据,所述信用相关数据包括多个目标个体的识别信息 ;

将所述至少一个离线数据记录与所述信用相关数据进行比较以确定所述至少一个离线数据记录是否对应于所述多个目标个体中的匹配目标个体 ;

将所述至少一个在线数据记录与所述信用相关数据进行比较以确定所述至少一个在线数据记录是否对应于所述匹配目标个体 ;

如果所述至少一个离线数据记录对应于所述匹配目标个体且所述至少一个在线数据记录对应于所述匹配目标个体 :

那么产生链接所述至少一个离线数据记录与所述至少一个在线数据记录的所述密钥 ;及

将所述密钥存储于所述密钥数据库中。

13. 根据权利要求 12 所述的系统,其中 :

所述多个目标个体的所述识别信息包括所述匹配目标个体的第一识别信息 ;且

所述匹配引擎通过以下方式比较所述至少一个离线数据记录：

将所述至少一个离线数据记录与所述匹配目标个体的所述第一识别信息进行匹配；及

如果所述至少一个离线数据记录匹配所述匹配目标个体的所述第一识别信息，那么指定所述至少一个离线数据记录对应于所述匹配目标个体。

14. 根据权利要求 12 所述的系统，其中：

所述多个目标个体的所述识别信息包括所述匹配目标个体的第二识别信息；

所述匹配引擎通过以下方式比较所述至少一个在线数据记录：

将所述至少一个在线数据记录与所述匹配目标个体的所述第二识别信息进行匹配；及

如果所述至少一个在线数据记录匹配所述匹配目标个体的所述第二识别信息，那么指定所述至少一个在线数据记录对应于所述匹配目标个体。

15. 根据权利要求 12 所述的系统，其中所述离线数据与非因特网活动相关联且包括以下各项中的一或多者：聚合信用数据、消费者识别数据、信用评分、预审推广、业务识别符、产品利润、估计收入、实际收入、消费者行为数据、财富数据、教育数据、车辆所有权数据、专有数据、非聚合信用数据或公共记录。

16. 根据权利要求 12 所述的系统，其中所述在线数据与因特网活动相关联且包括以下各项中的一或多者：网上信息块、点击率数据、点击流数据、电子邮件账户信息、在线注册数据、在线交易数据、在线站点使用数据、IP 地址、电子装置识别符、搜索结果数据、生物计量数据、网络识别符或媒体接入控制地址。

17. 根据权利要求 12 所述的系统，其中所述多个目标个体的所述识别信息包括以下各项中的一或多者：名称、出生日期、身份证号、街道地址、城市、州、邮政编码、电话号码或账号。

18. 根据权利要求 12 所述的系统，其中所述多个目标个体的所述识别信息包括以下各项中的一或多者：名称历史、街道地址历史、城市历史、州历史、邮政编码历史、电话号码历史或账号历史。

19. 根据权利要求 12 所述的系统，其中所述匹配引擎通过以下方式比较所述至少一个在线数据记录：

从补充数据库检索补充数据；及

将所述至少一个在线数据记录与所述补充数据或所述信用相关数据中的一或多者进行比较以确定所述至少一个在线数据记录是否对应于所述匹配目标个体。

20. 根据权利要求 19 所述的系统，其中：

所述多个目标个体的所述识别信息包括所述匹配目标个体的第三识别信息；且

所述匹配引擎通过以下方式将所述至少一个在线数据记录与所述补充数据或所述信用相关数据中的一或多者进行比较：

将所述至少一个在线数据记录与所述补充数据或所述匹配目标个体的所述第三识别信息中的一或多者进行匹配；及

如果所述至少一个在线数据记录匹配所述补充数据或所述匹配目标个体的所述第三识别信息中的一或多者，那么指定所述至少一个在线数据记录对应于所述匹配目标个体。

21. 根据权利要求 12 所述的系统，其中如果所述至少一个离线数据记录对应于所述匹配目标个体且所述至少一个在线数据记录对应于所述匹配目标个体，那么所述匹配引擎进

一步用于发射所述密钥。

22. 根据权利要求 12 所述的系统，其中所述信用相关数据包括信用标头数据。

用于基于离线、在线及信用相关数据的目标因特网营销的系统及方法

[0001] 相关申请案的交叉参考

[0002] 本国际申请案主张 2012 年 3 月 31 日提出申请的美国临时申请案第 61/618,747 号的优先权，所述美国临时申请案以其全文引用的方式并入本文中。

技术领域

[0003] 本发明通常涉及因特网营销行业，且更明确地说，涉及用于使用信用相关数据来匹配在线数据与离线数据以便支持目标因特网营销的系统及方法。

背景技术

[0004] 在当前因特网营销系统中，用户（例如广告空间的购买者、广告企业及其它广告商）直接或间接购买或者以其它方式从分布者（例如广告网络及发布者）获得广告空间以使用从目标个体的在线活动搜集的数据而将广告置于或以其它方式分布到目标个体。举例来说，目标个体可为消费者及 / 或企业所雇用、隶属于企业及 / 或与企业相关联的人员，例如企业的所有者、管理人员及 / 或雇员。分布者可拥有广告空间及 / 或表示拥有广告空间的另一实体。举例来说，如果消费者导航到旅游网站且键入期望假期的参数，那么所述参数可存储为消费者的浏览数据的一部分。此外，分布者可获得浏览数据并使用所述浏览数据来识别适于各种参数的广告，且在消费者导航到各种网站时将所述广告供应给消费者。

[0005] 然而，当前目标营销平台存在缺陷。明确地说，用户及分布者在识别目标个体及以充分准确性将各种数据与目标个体及 / 或聚合池进行匹配中具有限制。举例来说，与目标个体有关的数据可包含消费者相关数据及 / 或商业相关数据。因此，用户在关于信用相关、服务相关或产品相关广告及推广识别目标个体中具有有限视野，举例来说，所述广告及推广例如信用卡申请、小商业贷款、车辆推广、非金融服务推广、与改进企业运营有关的推广及 / 或其它类似广告及推广。

[0006] 此外，当前系统通常将离线数据与在线数据直接进行匹配以确定目标营销到目标个体的精确匹配。在线数据包含与因特网或其它电信网络上的活动有关的数据，且可包含（举例来说且不加限制地）与 web 浏览相关联的数据、点击率数据、点击流数据、网上信息块、电子邮件账户信息、在线注册数据、交易数据及 / 或类似数据。离线数据包含并非在线数据的数据且可包含（举例来说且不加限制地）消费者相关或商业相关数据、公共记录及 / 或类似数据。出于目标营销目的而将离线数据与在线数据直接进行匹配可是不完整的或不准确的，特别在任一或两种类型的数据不包含足以使彼此成功地匹配的信息的情况下更是如此。如果匹配是不完整的或不准确的，那么基于匹配的目标营销活动的效用可被降低或为无效的。举例来说，匹配可产生漏报，例如，某些消费者或企业所有者在其原本应为目标时可能不被作为目标；或产生误报，例如，其它消费者或企业所有者在其原本不应为目标时可能被作为目标。当匹配产生漏报或误报时，来自分布者的广告空间可是价值较低的，且用户可能浪费或无效地分配广告及营销开销。

[0007] 因此，存在关于可较完整且准确地匹配及链接离线数据与在线数据以便尤其提供广告及营销开销的较好导引及较有效管理的经改进系统及方法的机会。

发明内容

[0008] 本发明打算通过提供用于使用来自数据库（例如信用数据数据库）的信息（例如信用相关数据）来匹配离线数据与在线数据的系统及方法而解决上述问题。所述系统及方法经设计以尤其：(1) 接收离线数据及在线数据；(2) 检索信用相关数据；(3) 将离线数据记录与所述信用相关数据进行比较以确定所述离线数据记录是否对应于匹配目标个体；(3) 将在线数据记录与所述信用相关数据进行比较以确定所述在线数据记录是否对应于匹配目标个体；及 (4) 如果离线数据记录及在线数据记录两者均对应于匹配目标个体，那么产生链接所述离线数据记录与所述在线数据记录的密钥并将所述密钥存储于密钥数据库中。此系统及方法利用各种数据段（例如信用文件内的名称及地址）的深度及数量以及匹配算法的能力来管理数据的变化以构建所述离线数据与所述在线数据之间的链接。

[0009] 在特定实施例中，可接收包含至少一个离线数据记录的离线数据及包含至少一个在线数据记录的在线数据。信用相关数据可从数据库（例如信用数据数据库）检索且可包含用于多个目标个体的识别信息。可将所述离线数据记录与所述信用相关数据进行比较以确定所述离线数据记录是否对应于所述多个目标个体中的匹配目标个体。可将所述在线数据记录与所述信用相关数据进行比较以确定所述在线数据记录是否对应于所述匹配目标个体。如果所述离线数据记录及所述在线数据记录两者均对应于所述匹配目标个体，那么可产生链接所述离线数据记录与所述在线数据记录的密钥。可将所述密钥存储于密钥数据库中。

[0010] 在另一实施例中，系统可包含与网络通信的处理器及与所述处理器通信的存储器。所述存储器可包含数据库，例如信用数据数据库及密钥数据库。所述存储器还可包含用于接收包含至少一个离线数据记录的离线数据及包含至少一个在线数据记录的在线数据的匹配引擎。所述匹配引擎可从所述数据库检索信用相关数据，且所述信用相关数据可包含多个目标个体的识别信息。可通过所述匹配引擎来将所述离线记录与所述信用相关数据进行比较以确定所述离线数据记录是否对应于所述多个目标个体中的匹配目标个体。可通过所述匹配引擎来将所述在线数据记录与所述信用相关数据进行比较以确定所述在线数据记录是否对应于所述匹配目标个体。如果所述离线数据记录及所述在线数据记录两者均对应于所述匹配目标个体，那么所述匹配引擎可产生链接所述离线数据记录与所述在线数据记录的密钥。所述密钥可通过所述匹配引擎而存储于密钥数据库中。

[0011] 所述系统及方法还包含将来自离线数据源的一组数据与相关联在线数据进行匹配，其中所述组数据包括关于目标个体（例如多个消费者及/或企业所雇用、隶属于企业及/或与企业相关联的多个人员）的信息。所述系统及方法进一步包含检查所述组数据以产生一组经匹配数据，且将所述组经匹配数据与所述相关联在线数据进行比较以针对目标广告推广识别满足所述组经匹配数据的准则的所述目标个体的至少一部分。在一些实施例中，所述目标广告推广可是基于由推广所述广告的用户指定的准则。

[0012] 如本文中所描述的所述系统及方法提供优于现有平台的各种优点。举例来说，通过将离线数据与在线数据（例如，网上信息块）进行匹配，用户可关于经预审或其它信用相

关推广（例如申请邀请（ITA））而以满足准则的消费者为目标。此外，用户可关于基于满足或匹配特定商业营销细分的商业的推广或广告而以企业所雇用、隶属于企业及／或与企业相关联的人员为目标。仍进一步，可使用如本文中所论述的技术以较有效且高效方式将所述离线数据与所述在线数据进行匹配。应了解，如本文中所描述的实施例设想其它优点及改进。

[0013] 依据以下详细说明及附图将明了且较透彻地理解这些及其它实施例以及各种置换及方面，所述详细说明及附图陈述指示其中可采用本发明的原理的各种方式的说明性实施例。

附图说明

[0014] 图 1 是根据本文中所描述的一或多个方面的示范性环境及相关联功能性的示意图。

[0015] 图 2 是根据本文中所描述的一或多个方面的示范性功能性的图表。

[0016] 图 3 是根据本文中所描述的一或多个方面的示范性功能性的图表。

[0017] 图 4 是根据本文中所描述的一或多个方面的示范性方法的流程图。

[0018] 图 5 是根据本文中所描述的一或多个方面的示范性方法的流程图。

[0019] 图 6 是能够支持并促进本文中所描述的一或多个方面的示范性装置的示意图。

[0020] 图 7 是图解说明用于借助信用相关数据来匹配离线数据与在线数据的系统的框图。

[0021] 图 8 是用于借助信用相关数据来匹配离线数据与在线数据的示范性方法的流程图。

[0022] 图 9 是用于将数据与信用相关数据进行比较的示范性方法的流程图。

[0023] 图 10 是用于将数据与信用相关数据进行比较的另一示范性方法的流程图。

[0024] 图 11 是根据本文中所描述的一或多个方面的另一示范性方法的流程图。

具体实施方式

[0025] 以下描述的说明图解说明且例示根据其原理的一或多个实施例。此说明并非经提供以限制本文中所描述的实施例，而是阐释及教示实施例的原理，以此方式使得所属领域的技术人员能够理解这些原理且在所述理解下能够应用所述原理来不仅实践本文中所描述的实施例，而且实践根据这些原理可想到的其它实施例。所述实施例的范围打算涵盖照字面或在等效物的原则下可属于所附权利要求书的范围内的所有此些实施例。

[0026] 应注意，在说明及图式中，可用相同元件符号标示相似或实质上类似元件。然而，有时可用不同数字标示这些元件，举例来说，例如在其中此标示促进说明书的说教目的的情形中。另外，本文中所陈述的图式未必按比例绘制，且在一些例子中，比例可已扩大以较清楚地描绘某些特征。此标示及图式实践未必暗示潜在实质性目的。如上文所述，本说明书打算作为一个整体且根据如本文中所教示且所属领域的技术人员所理解的实施例的原理而解释。

[0027] 相对于本文中所描述及所图解说明的示范性系统、组件及架构，还应理解，所述实施例可由众多配置及组件体现或可在众多配置及组件中采用所述实施例，所述众多配置及

组件包含一或多个系统、硬件、软件或固件配置或组件或者其任何组合，如由所属领域的技术人员所理解。因此，虽然图式图解说明包含用于本文中所涵盖的实施例中的一或多者的组件的示范性系统，但应理解，相对于每一实施例，一或多个组件可不存在于或不必在所述系统中。

[0028] 如本文中所使用，术语“在线数据”可是指与因特网或在线活动相关联的数据，举例来说且不加限制地，例如与 web 浏览相关联的数据、点击率数据、点击流数据、网上信息块、电子邮件账户信息（例如，电子邮件地址、名称等）、在线注册数据（例如，名称、地址、电话号码等）、在线交易数据、在线站点使用数据（例如，社交网络使用数据等）、IP 地址、电子装置识别符（例如，IMEI、IMSI、UDID、Android ID、电话号码等）、搜索结果数据、生物计量数据、网络识别符、媒体接入控制地址及 / 或其它类似数据。在线数据还可包含与对电子装置执行的移动申请相关联的数据、SMS 消息、即时消息等等。此外，如本文中所使用，术语“离线数据”可是指与非因特网或非在线活动相关联且与在线数据分离的任何数据。举例来说且不加限制地，离线数据可为消费者相关或商业相关数据、消费者识别数据、聚合信用数据、信用评分、预审推广、业务识别符、产品利润、估计收入、实际收入、消费者行为数据、财富数据、教育数据、车辆所有权数据、专有数据、非聚合信用数据、公共记录及 / 或类似数据。

[0029] 还应注意，此说明书中做出的揭示内容是根据打算在专利法下在其最广泛范围内揭示或解释的实施例的原理，且虽然此揭示内容可描述或以其它方式涵盖可受其它现有法律或法规（包含但不限于公平信用报告法 (FCRA) 或平等信用机会法 (ECOA)）管制的标的物，但此揭示内容中的任何内容均不打算表明或暗示受让人不符合任何此类法律或法规。还应注意，此揭示内容中的任何内容均不打算表明或暗示可使用聚合信用数据来确定个体消费者及 / 或目标个体的信用或保险资格。

[0030] 参考图 1，图解说明其中可实施系统及方法的示范性环境 100。应了解，环境 100 仅是示范性的且可包括组件的其它各种组合，如本文中所论述。

[0031] 如图 1 中所展示，环境 100 包含经配置以与离线数据源 110 及 / 或在线数据源 115（例如匹配伙伴或数据集市）介接的征信所 105。在实施例中，离线数据源 110 可与在线数据源 115 介接以交换数据且可组合到单个处理实体 112 中。征信所 105 可为从各种源收集信息或数据并将关于目标个体（例如消费者）的信息提供到其它实体供用于多种用途（举例来说，例如评估信用价值、确定贷款理律及 / 或执行其它用途）的任何公司或实体。举例来说，目标个体可为消费者及 / 或企业所雇用、隶属于企业及 / 或与企业相关联的人员，例如企业的所有者、管理人员及 / 或雇员。所述信息及数据可包含金融相关信息以及非金融相关及识别信息，例如存在于信用相关数据中的信息，包含信用标头数据，举例来说，例如名称、地址、电话号码、位置信息（例如 ZIP+4 数据）及 / 或其它数据。数据的变化包含但不限于昵称、名称变更、部分名称、曾用名称及先前地址。此外，离线数据源 110 可为可聚合、收集及存储营销数据（例如购买数据、交易数据等等）的任何公司、实体或组件。离线数据源 110 可基于人口统计资料（例如，位置、收入等）及因特网浏览习惯将数据聚合到池中。

[0032] 在线数据源 115 可从网站（例如电子商务站点）聚合匿名行为且将所述行为分类。根据实施例，分布者 120 可从在线数据源 115 购买在线数据以用于经由所述组目标个

体 125 可浏览到的网站 122 将广告提供到目标个体 125（例如一组消费者）的目的。分布者 120 可为任何类型的数据交换、营销者、广告网络、发布者及 / 或可使用所购买数据来经由网站 122 提供与目标个体 125 有关的广告的类似物。分布者 120 可为可将数据（例如在线数据、意图数据及 / 或类似数据）提供、拍卖或以其它方式出售到个体或实体的任何公司、实体或系统。在实施例中，数据的交换或出售可在实时基础上发生。更明确地说，当目标个体 125 导航到或浏览到各种网站 122 时，分布者 120 可基于从在线数据源 115 购买的数据而提供目标广告。目标广告可显示于目标个体 125 浏览到的网站 122 上。在一些实施例中，网站 122 可利用 web 标签来致使 web 浏览器显示一或多个广告或以其它方式收集待提供到分布者 120 的数据。

[0033] 如图 1 中所展示，环境 100 进一步包含可与征信所 105、在线数据源 115 及分布者 120 中的任一者具有关系的用户 130。举例来说，用户 130 可为广告空间的购买者、广告企业及其它广告商。更明确地说，用户 130 可具有用户 130 希望分布者 120 提供到目标个体 125 的一组广告或推广。举例来说，用户 130 可为具有银行希望广告网络分布到目标个体的预审信用卡推广的银行。

[0034] 在一个方面，图 2 图解说明根据如本文中所描述的实施例的示范性流程环境 200。根据实施例，流程环境 200 图解说明用于利用数据来汇集目标广告的技术。更明确地说，目标广告可为信用相关经预审推广、申请邀请及 / 或打算置于或分布到目标个体的其它类型的推广或广告。举例来说，目标个体可为消费者及 / 或企业所雇用、隶属于企业及 / 或与企业相关联的人员，例如企业的所有者、管理人员及 / 或雇员。

[0035] 参考图 2，用户 230 可请求 (1) 征信所 205 基于一组准则及 / 或由用户 230 提供的输入列表而创建定制数据馈送。举例来说，用户 230 可为广告空间的购买者、广告企业及其它广告商。举例来说，准则可指定具有至少 740 的信用评分的一组目标个体，例如消费者。在一些实施例中，用户 230 可向在线数据源 215 请求定制数据馈送，且在线数据源 215 可与征信所 205 介接以创建定制数据馈送。征信所 205 可存取与多个目标个体有关的一组信用数据，例如各种信用属性或其它离线数据，且可通过匹配满足所述准则的目标个体而产生定制数据馈送。在实施例中，征信所 205 可通过使用信用相关数据（例如信用标头数据）来匹配离线数据而产生定制数据馈送。继续所述实例，征信所 205 可检查所述组信用数据以识别具有至少 740 的信用评分的目标个体。在实施例中，定制数据馈送可包括包含例如名称、地址、电话号码及 / 或其它信息的信息的信用标头数据。

[0036] 在征信所 205 产生定制数据馈送之后，征信所 205 可将定制数据馈送提供 (2) 到离线数据源 210。在一些实施例中，征信所 205 可根据各种去个性化技术使定制数据馈送去个性化。举例来说，定制数据馈送的目标个体可在不具有识别信息的情况下根据 ZIP+4 数据而分组或分类到若干位置中。以此方式，示范性定制数据集可包括在不具有目标个体的名称的情况下使目标个体取得资格的地理位置或区域。

[0037] 离线数据源 210 可与在线数据源 215 介接 (3) 以共享或交换定制数据馈送。此外，在线数据源 215 可存储及 / 或存取与多个目标个体 225（例如消费者）的因特网浏览活动相关联的在线数据。在一些情形中，在线数据可包含在目标个体访问网页时所收集的网上信息块数据。举例来说，如果消费者访问旅游站点并搜索到欧洲的航班，那么在线数据可依据消费者的偏好（例如，航班日期、目的地等）而更新，且在线数据源 215 可将所述偏好存

储于与目标个体 225 相关联的数据文件中。

[0038] 当离线数据源 210 与在线数据源 215 介接时，将从征信所 205 接收的定制数据馈送与多个目标个体 225 的在线数据进行匹配。更明确地说，将多个目标个体 225 的偏好 / 网上信息块数据与识别符合或满足用户 230 的准则的目标个体的定制数据馈送进行匹配。此外，在线数据源 215 可细化或更新在线数据，使得经细化在线数据包含符合或满足用户 230 的准则的目标个体 225 中的一或多者。在实施例中，在线数据源 215 可使经细化在线数据去个性化，使得经细化在线数据不含有目标个体的识别信息。

[0039] 在其中征信所 205（例如）经由 ZIP+4 规则或技术而使定制数据馈送去个性化的情形中，在线数据源 215 可将经去个性化定制数据馈送与多个目标个体 225 的在线数据进行匹配以在地理上定位符合或满足用户 230 的准则的多个目标个体 225 中的一或多者。更明确地说，在线数据源 215 可细化或更新在线数据，使得经细化在线数据包含符合或满足用户 230 的准则的目标个体 225 中的一或多者的地理信息（例如，ZIP+4 数据）。

[0040] 根据实施例，在线数据源 215 可将经细化在线数据提供 (4) 到分布者 220。分布者 220 可为广告网络或与用户 230 具有关系的其它实体以递送或提供用户 230 的广告。继续上述实例，用户 230（例如银行）可向分布者 220 提供关于各种信用相关推广或广告的要求及 / 或参数。在一些情形中，广告可与经预审或经预批推广有关。在其它情形中，例如在使定制数据馈送去个性化时，广告可为以其中普通居民满足例如风险评分、收入水平及 / 或类似内容的特定准则的各种邮政编码区中的目标个体为目标的推广。在分布者 220 从在线数据源 215 购买经细化或经匹配在线数据的一部分后，分布者 220 可即刻具有关于可能有兴趣申请信用卡、可能有资格申请信用卡或两者的目标个体 225 中的一或多者的信息。继续上述实例，申请信用卡的邀请可适于具有至少 740 的信用评分的目标个体。明确地说，信用卡可对各种购买、门房服务及 / 或可吸引目标人群的其它小费提供大量现金返还。

[0041] 分布者 220 可将广告提供 (5) 到网站 222 以最终供应或提供 (6) 到目标个体 225 中的一或多者。更明确地说，当目标个体导航或浏览到网站 222 时，网站 222 可使用经细化或经匹配在线数据（包含网上信息块数据）来提供广告。在实施例中，网站 222 可为与分布者 220 具有伙伴关系或关系的特定网站。继续上述实例，分布者 220 可购买与满足用户 230 的信用准则的一组目标个体 225 相关联的在线数据。当所述组目标个体 225 中的一者导航到网站 222 时，分布者 220 可经由网站 222 向目标个体 225 提供（举例来说）指示针对信用卡推广已预批或预审目标个体 225 的广告。目标个体 225 可选择广告并直接进入到允许目标个体 225 键入信息以接收信用卡的用户 230 的网站。在其中使定制数据馈送去个性化的情形中，广告可为申请信用相关推广的邀请，例如抵押、信用卡、房屋净值贷款及 / 或类似内容。类似于经预审推广，目标个体 225 可选择广告并直接进入到允许目标个体 225 申请推广的用户 230 的网站。

[0042] 在一个方面，图 3 图解说明根据如本文中所描述的实施例的示范性流程环境 300。根据实施例，流程环境 300 图解说明用于利用数据来汇集针对目标个体的目标广告的技术，所述目标个体例如消费者及 / 或企业所雇用、隶属于企业及 / 或与企业相关联的人员，包含企业的所有者、管理人员及 / 或雇员。更明确地说，目标广告可为信用相关申请邀请及 / 或其它类型的商业相关推广或广告。

[0043] 参考图 3，离线数据源 310 可将包含关于多个目标个体的信息的一组数据文件提

供 (1) 到征信所 305。在一些实施例中，用户（举例来说，例如银行）可请求征信所 305 基于一组准则而编制定制数据馈送，且征信所 305 可从离线数据源 310 请求所述组数据文件。举例来说，用户可为广告空间的购买者、广告企业及其它广告商。数据文件可包含关于多个目标个体的名称、地址及其它信息。在征信所 305 接收数据文件之后，征信所 305 可处理所述数据文件以将数据与可获得商业数据（例如小商业数据）对准或进行匹配。在实施例中，商业数据可包含若干部分，所述若干部分指示识别企业类型的数据（例如代码）以及指示企业位置、成员组织、雇员数目、企业年份、法律实体信息、年度收益、行业说明及 / 或其它数据的其它数据。

[0044] 征信所 305 可产生将企业所有者、管理人员及 / 或所接收数据文件中所包含的其它目标个体与商业数据进行匹配的定制数据馈送。更明确地说，定制数据馈送可包含目标个体及 / 或家庭的标识以及对应于目标个体及 / 或家庭中的每一者的商业营销细分（例如，销售收益、雇员数目等）。在实施例中，定制数据馈送可使用信用相关数据而产生，所述信用相关数据例如信用标头数据，包含例如名称、地址、电话号码及 / 或其它信息的信息。此外，征信所 305 可根据 ZIP+4 规则或其它去个性化技术使定制数据馈送去个性化。更明确地说，定制数据馈送的目标个体可在不具有识别信息的情况下根据 ZIP+4 数据而分组或分类到若干位置中。举例来说，示范性定制数据集可包括在不具有目标个体的名称的情况下使目标个体取得资格的地理位置或区域。

[0045] 在征信所 305 产生将目标个体与商业营销细分进行匹配的定制数据馈送之后，征信所 305 可将定制数据馈送提供 (2) 到离线数据源 310。离线数据源 310 可与在线数据源 315 介接 (3) 以共享或交换定制数据馈送。更明确地说，在线数据源 315 可存储及 / 或存取与多个目标个体 325 的因特网浏览活动相关联的在线数据。举例来说，目标个体 325 可为小企业所有者或与企业相关联的其它个体。在一些情形中，在线数据可包含在目标个体访问网页时所收集的网上信息块数据，如本文中所论述。更明确地说，在线数据源 315 可存储从与目标个体 325 相关联的数据文件中的浏览历史识别的偏好。

[0046] 当离线数据源 310 与在线数据源 315 介接时，将从征信所 305 接收的定制数据馈送与多个目标个体 325 的在线数据进行匹配。更明确地说，将多个目标个体 325 的偏好 / 网上信息块数据与定制数据馈送进行匹配以识别可能有兴趣申请推广或可能另外对其它产品或服务感兴趣的目标个体。举例来说，推广可为申请小商业贷款的邀请。对于进一步实例，推广可用于与业务供应公司的服务 / 销售合约。在一些情形中，定制数据馈送可基于来自用户（举例来说，例如银行、供应公司或其它实体）的一组准则而与多个目标个体 325 的在线数据进行匹配。

[0047] 在实施例中，在线数据源 315 可将定制数据馈送与多个目标个体 325 的在线数据进行匹配以产生经细化在线数据。在一些情形中，经细化在线数据可用于在地理上细分多个目标个体 325 中的一或多者。更明确地说，在线数据源 315 可细化或更新在线数据，使得经细化在线数据包含可为用于广告的目标的目标个体 325 的地理信息（例如，ZIP+4 数据）。在实施例中，在线数据源 315 可使经细化在线数据去个性化，使得经细化在线数据不含有目标个体 325 的识别信息。

[0048] 根据实施例，在线数据源 315 可将经细化在线数据提供 (4) 到分布者 320。分布者 320 可为广告网络或与用户具有关系的其它实体以递送或提供广告。举例来说，用户（例

如，银行）可向分布者 320 提供关于申请小商业贷款的广告。应了解，设想与申请邀请有关的其它广告及其它基于信用的广告。在实施例中，广告可与其它商业相关产品及 / 或服务有关。在分布者 320 从在线数据源 315 购买经细化在线数据的一部分后，分布者 320 即刻具有关于可能对广告正做广告的内容感兴趣的目标个体 325 中的一或多者的信息。举例来说，广告可是针对小商业贷款，且经细化浏览器数据可含有关于审查低于特定阈值的商业收益的目标个体 325 的一部分的数据。

[0049] 分布者 320 可将广告供应或以其它方式提供 (5) 到网站 322 以最终供应或提供 (6) 到目标个体 325 中的一或多者。更明确地说，网站 322 可使用经细化在线数据（包含网上信息块数据）来在可适用目标个体 325 导航或浏览到网站 322 时提供广告。在实施例中，网站 322 可为与分布者 320 具有伙伴关系或关系的特定网站。举例来说，分布者 320 可购买与满足特定市场细分准则的一组目标个体 325 相关联的在线数据。当所述组目标个体 325 中的一者导航到网站 322 时，分布者 320 可向目标个体 325 提供（举例来说）推广打印企业名片的折扣的广告。目标个体 325 可选择所述广告并直接进入到与允许目标个体 325 键入关于所述推广的信息的所述广告相关联的网站。

[0050] 图 4 是用于使用在线数据对目标个体进行目标营销的方法 400 的流程图。明确地说，方法 400 与将准则与多个目标个体的信用相关数据进行匹配有关。方法 400 可产生用于借助各种广告高效地以目标个体为目标的高匹配信任。举例来说，目标个体可为消费者及 / 或企业所雇用、隶属于企业及 / 或与企业相关联的人员，例如企业的所有者、管理人员及 / 或雇员。

[0051] 方法以征信所从用户接收 405 关于匹配准则的一组数据的请求开始。举例来说，用户可为广告空间的购买者、广告企业及其它广告商。明确地说，准则可针对用户将想要为目标的目标个体指定信用相关要求。征信所存取 410 与多个目标个体相关联的信用相关数据且将信用相关数据匹配 415 到所述准则以产生所述组数据。更明确地说，信用相关数据可为离线数据，如本文中所论述，且所述组数据可包含符合准则的一列目标个体且可使用与有资格目标个体相关联的信用相关数据（例如信用标头数据）而产生。征信所确定 420 是否使所述组数据去个性化。在实施例中，如果所打算广告为申请邀请或其它类似推广，那么征信所可使数据去个性化。在使数据去个性化中，征信所可附加可用于基于位置而细分目标个体的群组的地理信息，例如 ZIP+4 数据。此外，举例来说，如果所打算广告是经预审或经预批推广，那么征信所可按原样留下数据。

[0052] 如果征信所不使数据去个性化（“否”），那么征信所可将经个性化数据发送到数据处理器实体。在实施例中，数据处理器实体可包含离线数据源或在线数据源，例如匹配伙伴，如本文中所论述。如果征信所使数据去个性化（“是”），那么征信所可将经去个性化数据发送到数据处理器。数据处理器将一组适当数据匹配 425 到多个目标个体的在线数据以产生一组经匹配数据。举例来说，在线数据可包含与用于多个目标个体的浏览历史相关联的网上信息块数据，且所述组经匹配数据可包含附加到在线数据或与在线数据进行匹配的消费者信用数据。在其中数据处理器接收经去个性化数据的情形中，所述组经匹配数据可在地理上定位满足用户的指定准则（来自 405）的一或多个目标个体。数据处理器进一步从所述组经匹配数据移除 430 人员可识别信息，使得所述组经匹配数据不含有目标个体的识别信息。数据处理器经由分布者及网站基于所述组经匹配数据而将目标广告递送 435 到

多个目标个体的一部分。举例来说，分布者可为根据所述组经匹配数据将用户（来自 405）的广告供应到多个目标个体的广告网络。在一些情形中，数据处理器可将所述组经匹配数据出售或以其它方式提供给分布者。

[0053] 参考图 11，展示用于使用在线数据对目标个体进行目标营销的方法 1100 的流程图。明确地说，方法 1100 与将特定准则与多个目标个体的信用相关数据进行匹配有关。方法 1100 可产生用于借助各种广告高效地以目标个体为目标的高匹配信任。如在图 11 中可见，征信所 1105 可从用户 1130 接收 1150 关于匹配特定准则的一组数据的请求。举例来说，用户可为广告空间的购买者、广告企业及其它广告商。用户 1130 可具有用户 1130 希望分布者 1120 提供到目标个体 1125 的一组广告或推广。明确地说，准则可针对用户 1130 将想要为目标的目标个体指定信用相关要求。征信所 1105 可将离线数据（例如来自用户 1130 的数据）匹配 1152 到信用相关数据或其它数据。可从数据库（例如征信所 1105 的信用数据数据库 704）存取信用相关数据。

[0054] 可将经匹配用户数据发送到数据处理器 1110，所述数据处理器可将目标人群匹配 1154 到多个目标个体的在线数据以产生一组经匹配数据。可基于所述组经匹配数据而产生链接特定离线数据记录与特定在线数据记录的密钥，且可将所述密钥存储于密钥数据库 706 中。基于所述组经匹配数据，分布者 1120 可经由目标个体可浏览到的网站 122 将广告提供到目标个体 1125。更明确地说，当目标个体 1125 导航到或浏览到各种网站 1122 时，分布者 1120 可基于密钥及 / 或所述组经匹配数据而供应目标广告。

[0055] 图 5 是用于使用在线数据对目标个体进行目标营销的方法 500 的流程图，所述目标个体例如企业所雇用、隶属于企业及 / 或与企业相关联的人员。明确地说，方法 500 与将数据与商业营销细分进行匹配的征信所有关。举例来说，目标个体可为消费者及 / 或企业所雇用、隶属于企业及 / 或与企业相关联的人员，例如企业的所有者、管理人员及 / 或雇员。

[0056] 所述方法以征信所接收 505 包含关于多个目标个体的信息的输入文件开始。举例来说，输入文件可为包含多个目标个体的名称及地址的离线数据。征信所存取 510 包含商业营销细分的商业数据。更明确地说，商业营销细分可与企业位置、成员组织、雇员数目、企业年份、法律实体信息、年度收益、行业说明及 / 或其它数据有关。征信所将输入文件匹配 515 到商业数据以产生将输入文件中所包含的目标个体（例如企业所有者、管理人员及 / 或雇员）与商业数据进行匹配的定制数据馈送。征信所确定 520 是否使所述组数据去个性化。在实施例中，如果所打算广告为申请邀请或其它类似推广，那么征信所可使数据去个性化。在使数据去个性化中，征信所可附加可用于基于位置而细分目标个体的群组的地理信息，例如 ZIP+4 数据。此外，举例来说，如果预审所打算广告，那么征信所可按原样留下数据。

[0057] 如果征信所不聚合数据且不使数据去个性化（“否”），那么征信所可将经个性化数据发送到数据处理器实体。在实施例中，数据处理器实体可包含离线数据源或在线数据源，例如匹配伙伴，如本文中所论述。如果征信所使数据去个性化（“是”），那么征信所可将经去个性化数据发送到数据处理器。数据处理器将一组适当数据匹配 525 到多个目标个体的在线数据以产生一组经匹配数据。举例来说，在线数据可包含与多个目标个体相关联的网上信息块数据，且所述组经匹配数据可包含具有与目标个体的浏览历史进行匹配的商业细分的数据。在其中数据处理器接收经去个性化数据的情形中，所述组经匹配数据可在

地理上定位满足目标商业细分的一或多个目标个体。数据处理器进一步从所述组经匹配数据移除 530 人员可识别信息，使得所述组经匹配数据不含有目标个体的识别信息。数据处理器经由分布者及网站基于所述组经匹配数据而将目标广告递送 535 到多个目标个体的一部分。举例来说，分布者可为根据所述组经匹配数据将广告供应到目标个体的广告网络。在一些情形中，数据处理器可将所述组经匹配数据出售或以其它方式提供给分布者。

[0058] 图 6 是容纳用于促进如本文中所描述的系统及方法的可执行软件的计算装置 600 的框图。可利用计算装置 600 的一或多个例子来实施环境 100 中的实体中的任一实体、一些实体或全部实体，包含征信所 105、离线数据源 110、在线数据源 115 及 / 或分布者 120。可利用计算装置 600 的一或多个例子来实施下文所描述的匹配系统 700 中的实体中的任一实体、一些实体或全部实体，包含匹配引擎 702。计算装置 600 包含存储器 604，所述存储器可包含用于实施如本文中所描述的系统及方法且用于实施特定实施例的计算机可读媒体。计算装置 600 还含有可执行软件，所述可执行软件中的一些可执行软件可或可不为所述系统及方法特有的。

[0059] 在一些实施例中，系统及方法可作为可执行程序实施于软件中，且可由一或多个专用或通用数字计算机执行，例如大型计算机、个人计算机（桌上型、膝上型或其它）、个人数字助理或其它手持式计算装置。因此，计算装置 600 可表示系统及方法驻存或部分地驻存于其中的任何计算机。

[0060] 通常，就如图 6 中所展示的硬件架构来说，计算装置 600 包含处理器 602、存储器 604 及一或多个输入及 / 或输出 (I/O) 装置 606（或外围设备），所述 I/O 装置经由例如一或多个总线或其它有线或无线连接的接口而以通信方式耦合，如此项技术中所已知。处理器 602 可为用于执行软件（明确地说存储于存储器 604 中的软件）的硬件装置。此外，处理器 602 可与可存储各种量及类型的数据的数据库 603 介接。举例来说，数据库可存储信用相关数据及其它类型的数据。处理器 602 可为任何定制或商业上可获得处理器，举例来说，例如由英特尔公司 (Intel Corporation) 制成的酷睿 (Core) 系列或 vPro 处理器、或由超微公司 (Advanced Micro Devices, Inc.) 制成的羿龙 (Phenom)、速龙 (Athlon) 或闪龙 (Sempron) 处理器。在其中计算装置 600 为服务器的情形中，举例来说，处理器 602 可为来自英特尔公司的至强 (Xeon) 或安腾 (Itanium) 处理器或来自超微公司的皓龙 (Opteron) 系列处理器。处理器 602 还可表示和谐地工作的多个并行或分布式处理器。

[0061] 存储器 604 可包含易失性存储器元件（例如，随机存取存储器 (RAM，例如 DRAM、SRAM、SDRAM 等)）与非易失性存储器元件（例如，ROM、硬盘驱动器、快闪驱动器、CDROM 等）中的任一者或其组合。此外，存储器 604 可并入有电子、磁性、光学及 / 或其它类型的存储媒体且可具有其中各种组件彼此远离地定位但仍由处理器 602 存取的分布式架构。这些其它组件可驻存于位于网络上或云布置中的其它地方的装置上。

[0062] 存储器 604 中的软件可包含一或多个单独程序或应用程序 611。单独应用程序 611 包括用于实施逻辑功能（例如与匹配数据有关的功能）的可执行指令的有序列表，如本文中所论述。在图 6 的实例中，存储器 604 中的软件可包含适合操作系统 (O/S)612。一些操作系统 612 的实例为从微软公司 (Microsoft Corporation) 购得的 Windows 操作系统、从苹果计算机公司 (Apple Computer, Inc.) 购得的 Mac OS X、来自美国电话电报公司 (AT&T) 的 Unix 操作系统或 Unix 衍生系统，例如 BSD 或 Linux。操作系统 612 的类型将取决于计算装

置 600 的类型。举例来说，如果计算装置 600 为 PDA 或手持式计算机，那么操作系统 612 可为来自苹果计算机公司的用于操作特定装置的 iOS、来自奔迈公司 (Palm Computing，Inc.) 的用于若干装置的 PalmOS、来自微软公司的 Windows Phone 8、来自谷歌公司 (Google，Inc.) 的安卓操作系统 (Android) 或来自诺基亚公司 (Nokia Corporation) 的塞班操作系统 (Symbian)。操作系统 612 可控制其它计算机程序的执行且可提供调度、输入 - 输出控制、文件及数据管理、存储器管理以及通信控制及相关服务。

[0063] 如果计算装置 600 为 IBM PC 可兼容计算机或类似物，那么存储器 604 中的软件可进一步包含基本输入输出系统 (BIOS)。BIOS 是在启动时使硬件初始化并测试硬件、开始操作系统 612 且支持数据在硬件装置当中的传送的一组基本软件例程。BIOS 存储于 ROM 中，使得可在启动计算装置 600 时执行 BIOS。

[0064] 本发明的步骤及 / 或元件及 / 或其部分可使用源程序、可执行程序 (目标代码)、脚本或包括待执行的一组指令的任何其它实体而实施。此外，体现本发明的软件可写入为 : (a) 对象导向编程语言，其具有若干种类的数据及方法 ；或 (b) 程序编程语言，其具有例程、子例程及 / 或功能，举例来说但不限于 C、C++、C#、Pascal、Basic、Fortran、Cobol、Perl、Java、Ada 及 Lua。如本文中所论书的组件及实体还可以经开发以与这些已知语言交互的专有语言写入。

[0065] I/O 装置 606 可包含输入装置，例如键盘、鼠标、扫描机、麦克风、触摸屏、条形码阅读器或红外阅读器。其还可包含输出装置，例如打印机、视频显示器、音频扬声器或耳机插口或者投影仪。I/O 装置 206 还可包括与输入或输出通信的装置，例如短程收发器 (RFID、蓝牙等)、电话接口、蜂窝式通信端口、路由器或其它类型的网络通信设备。I/O 装置 606 可在计算装置 600 的内部或可在外部且无线地或经由连接缆线 (例如经由通用串行总线端口) 而连接。

[0066] 当计算装置 600 在操作中时，处理器 602 经配置以执行存储于存储器 604 内的软件以将数据传递到存储器 604 且从存储器 604 传递数据，且通常依据所述软件而控制计算装置 600 的操作。操作系统 612 可全部或部分地由处理器 602 读取、在处理器 602 内缓冲且接着被执行。

[0067] 在此文档的上下文中，“计算机可读媒体”可为可存储、传递、传播或传送数据对象以供由如本文中所描述的系统及方法使用或连同如本文中所描述的系统及方法一起使用的任何构件。举例来说，计算机可读媒体可为电子、磁性、光学、电磁、红外或半导体系统、设备、装置、传播媒体或具有类似功能性的任何其它装置。所述计算机可读媒体的更多具体实例 (非穷尽性列表) 可包含以下各项 : 具有一或多个导线的电连接 (电子)、随机存取存储器 (RAM)(电子)、只读存储器 (ROM)(电子)、可擦除可编程只读存储器 (EPROM、EEPROM 或快闪存储器)(电子)、光纤 (光学) 及便携式光盘只读存储器 (CDROM)(光学)。注意，所述计算机可读媒体可甚至为纸或其上印刷有程序的另一适合媒体，因为所述程序可经由 (举例来说) 对所述纸或其它媒体的光学扫描而以电子方式捕获、接着经编译、解译或以适合方式另外处理 (如果需要) 且存储于计算机存储器中。所述系统及方法可体现于任何类型的计算机可读媒体中以供由指令执行系统或设备 (例如计算机) 使用或连同指令执行系统或设备 (例如计算机) 一起使用。

[0068] 出于连接到其它计算装置的目的，计算装置 600 配备有网络通信设备及电路，包

含通信模块 614。在实施例中，网络通信设备包含网卡，例如以太网卡或无线连接卡。在优选网络环境中，网络上的多个计算装置 600 中的每一者经配置以使用因特网协议组 (TCP/IP) 来彼此通信。然而，将理解，还可采用多种网络协议，例如 IEEE 802.11 Wi-Fi、地址解析协议 ARP、生成树协议 STP 或光纤分布式数据接口 FDDI。还将理解，虽然本发明的优选实施例是针对将具有到因特网的宽带或无线连接（例如 DSL、缆线、无线、T-1、T-3、OC3 或卫星等）的每一计算装置 600，但本发明的原理借助经由标准调制解调器或其它连接构件的拨号连接也是可行的。还涵盖无线网络连接，例如无线以太网、卫星、红外、射频、蓝牙、近场通信及蜂窝式网络。

[0069] 图 7 图解说明根据本发明的一或多个原理的用于将离线数据及在线数据与信用相关数据进行比较及匹配以识别匹配目标个体的匹配系统 700。系统 700 可利用从离线数据源 750 接收的离线数据及从在线数据源 752 接收的在线数据。在一些实施例中，系统 700 还可与用户 756（例如广告空间的购买者、广告企业及其它广告商）通信以用于接收信息或请求或者发射密钥或其它结果。在一些实施例中，用户 756 还可将包含目标个体的名称及地址的用户输入文件（举例来说，作为离线数据）发射到系统 700。用户可从分布者（例如广告网络及发布者）直接或间接购买或者以其它方式获得广告空间以使用从目标个体的在线活动搜集的数据来将广告分布到目标个体。举例来说，目标个体可为消费者及 / 或企业所雇用、隶属于企业及 / 或与企业相关联的人员，例如企业的所有者、管理人员及 / 或雇员。分布者可拥有广告空间及 / 或表示拥有广告空间的另一实体。系统 700 的各种组件可使用可由一或多个服务器或计算机执行的软件而实施，所述一或多个服务器或计算机例如具有处理器 602 及存储器 604 的计算装置 600，如上文所描述的图 6 中所展示。

[0070] 匹配系统 700 可包含用于接收、比较及匹配离线数据及在线数据与信用相关数据以识别匹配目标个体的匹配引擎 702。匹配引擎 702 可经由数据网络（例如因特网）与离线数据源 750、在线数据源 752 及 / 或用户 756 通信。匹配引擎 702 还可与数据库通信，例如 ：信用数据数据库 704，其包含信用相关数据，例如信用标头数据 ；密钥数据库 706，其用于存储用于链接离线数据与在线数据的密钥 ；及 / 或补充数据库 754，其包含补充信息。在一些实施例中，信用数据数据库 704 及密钥数据库 706 可包含于匹配系统 700 中，且补充数据库 754 可在匹配系统 700 外部。在其它实施例中，数据库 704、706 及 754 中没有一者、数据库 704、706 及 754 中的一些或全部数据库可包含于匹配系统 700 中或可在匹配系统 700 外部。

[0071] 匹配引擎 702 可从离线数据源 750 接收离线数据。离线数据可包含与非因特网或非在线活动相关联且与在线数据分离的数据。举例来说且不加限制地，离线数据可为消费者相关或商业相关数据、消费者识别数据、聚合信用数据、信用评分、预审推广、业务识别符、产品利润、估计收入、实际收入、消费者行为数据、财富数据、教育数据、车辆所有权数据、专有数据、非聚合信用数据、公共记录及 / 或类似数据。举例来说，离线数据源 750 可包含公共记录源（例如，企业注册记录、财产记录等）、客户记录源（例如，注册信息等）、信用记录源等等。离线数据还可包含用户输入文件。离线数据可包含一或多个离线数据记录。在一些实施例中，离线数据可包含处于目标个体水平的数据（例如，消费者水平数据）及 / 或应用于目标个体的聚合数据，例如针对特定目标个体的人口普查总结数据。在实施例中，使离线数据去个性化，使得不知晓目标个体的身份。

[0072] 匹配引擎 702 可从在线数据源 752 接收在线数据。在线数据可包含与因特网或在线活动相关联的数据，举例来说且不加限制地，例如与 web 浏览相关联的数据、点击率数据、点击流数据、网上信息块、电子邮件账户信息、在线注册数据、在线交易数据、在线站点使用数据、IP 地址、电子装置识别符、电话号码、搜索结果数据、生物计量数据、网络识别符、媒体接入控制地址及 / 或其它类似数据。举例来说，在线数据源 752 可包含网站、电子邮件提供者、电子商务实体、发布者、分布者、数据伙伴等等。在线数据可包含一或多个在线数据记录。在实施例中，使在线数据去个性化，使得不知晓目标个体的身份。

[0073] 匹配引擎 702 可存取信用数据数据库 704 且检索信用相关数据。信用相关数据可包含信用标头数据，例如多个目标个体的识别信息，例如名称、出生日期、身份证号（例如，社会安全号码、国民身份证号等）、街道地址、城市、州、邮政编码、电话号码、账号（例如，信用卡账号、贷款账号等）及 / 或其它识别信息。在一些实施例中，信用相关数据可包含目标个体的识别信息的历史数据，例如先前地址、电话号码、名称等。举例来说，信用数据数据库 704 中的信用相关数据可由征信所维持。在一些实施例中，信用数据数据库 704 中的信用相关数据可包含来自或源自征信所、信用报告公司及 / 或另一实体的数据。

[0074] 匹配引擎 702 可将信用相关数据与离线数据记录进行比较，且将信用相关数据与在线数据记录进行比较。可将离线数据及在线数据与信用相关数据进行比较以便确定特定离线数据记录及 / 或特定在线数据记录是否对应于特定匹配目标个体。明确地说，可将离线数据记录与信用相关数据中的特定匹配目标个体的识别信息进行匹配，且可将在线数据记录与信用相关数据中的特定匹配目标个体的识别信息进行匹配。如果离线数据记录匹配匹配目标个体的识别信息，那么匹配引擎 702 可指定离线数据记录对应于匹配目标个体。类似地，如果在线数据记录匹配匹配目标个体的识别信息，那么匹配引擎 702 可指定在线数据记录对应于匹配目标个体。以此方式，可将离线数据记录及在线数据记录与信用相关数据独立地进行比较以确保匹配的准确性及完整性。换句话说，可通过将离线数据与信用相关数据及将在线数据与信用相关数据单独地进行比较而确定匹配目标个体。

[0075] 在一些实施例中，匹配引擎 702 可将离线数据记录及 / 或在线数据记录与补充数据及 / 或信用相关数据进行比较。匹配引擎 702 可存取补充数据库 754 以检索补充数据。举例来说，当特定离线数据记录或在线数据记录自身不足以匹配特定目标个体时，此可为所述情形。在此情形中，数据记录可需要与补充数据进行交叉参考以实现与信用相关数据中的特定目标个体的识别信息的成功匹配。在实施例中，可将补充数据附加到离线数据记录及 / 或在线数据记录以改进由匹配引擎 702 执行的匹配。因此，如果补充数据及 / 或匹配目标个体的识别信息匹配特定离线或在线数据记录，那么匹配引擎 702 可指定数据记录对应于匹配目标个体。

[0076] 如果离线数据记录对应于匹配目标个体且在线数据记录也对应于匹配目标个体，那么匹配引擎 702 可产生用以链接离线数据记录与在线数据记录的密钥。密钥可由匹配引擎 702 存储于密钥数据库 706 中。密钥可为字母的、数字的、字母数字的及 / 或呈另一格式。在一个实施例中，密钥包含关于对应于匹配目标个体的离线数据记录及 / 或在线数据记录的一或多个识别符或参考。在另一实施例中，密钥包含对应于匹配目标个体的离线数据记录及在线数据记录。在进一步实施例中，密钥包含对应于匹配目标个体的离线数据记录及关于对应于匹配目标个体的在线数据记录的链接或参考。在另一实施例中，密钥包含对应

于匹配目标个体的在线数据记录及关于对应于匹配目标个体的离线数据记录的链接或参考。还可将密钥从匹配引擎 702 发射到用户 756 或另一实体。用户 756 可利用关于目标广告的密钥、推送通知及关于特定匹配目标个体的类似物。明确地说，密钥可辅助用户 756 基于离线数据及在线数据而知晓特定在线用户是匹配目标个体。

[0077] 作为实例，离线数据可包含来自产品保修卡的信息，例如一组特定目标个体的名称、地址、电话号码及邮件地址。在线数据可包含零售电子商务网站的注册及交易信息，包含另一组目标个体的名称、地址及购买历史。匹配引擎 702 可接收这些离线数据记录及在线数据记录，且接着存取信用数据数据库 704 以检索信用相关数据。匹配引擎 702 可将来自信用相关数据的识别信息与离线数据进行比较，且单独地将来自信用相关数据的识别信息与在线数据进行比较。如果基于与信用相关数据的所述比较，特定离线数据记录及特定在线数据记录两者匹配相同匹配目标个体，那么匹配引擎 702 可指定特定离线数据记录及特定在线数据记录对应于所述匹配目标个体。匹配引擎 702 可产生链接所述匹配目标个体的特定离线数据记录与特定在线数据记录的密钥。密钥可由匹配引擎 702 存储于密钥数据库 706 中。

[0078] 图 8 中展示根据本发明的一或多个原理的用于将离线数据及在线数据与信用相关数据进行比较及匹配以识别匹配目标个体的过程 800 的实施例。过程 800 可导致将离线数据及在线数据链接到匹配目标个体的密钥的产生、存储及发射。匹配引擎 702 可执行过程 800 的全部或部分，且过程 800 可利用信用数据数据库 704、密钥数据库 706 及 / 或补充数据库 754。

[0079] 在步骤 802 处，可从离线数据源 750 接收离线数据。离线数据可包含与非因特网或非在线活动相关联且与在线数据分离的数据。举例来说，离线数据可为消费者相关或商业相关数据、消费者识别数据、聚合信用数据、信用评分、预审推广、业务识别符、产品利润、估计收入、实际收入、消费者行为数据、财富数据、教育数据、车辆所有权数据、专有数据、非聚合信用数据、公共记录及 / 或类似数据。在步骤 804 处，可从在线数据源 752 接收在线数据。在线数据可包含与因特网或在线活动相关联的数据，例如与 web 浏览相关联的数据、点击率数据、点击流数据、网上信息块、电子邮件账户信息、在线注册数据、在线交易数据、在线站点使用数据、IP 地址、电子装置识别符、电话号码、搜索结果数据、生物计量数据、网络识别符、媒体接入控制地址及 / 或其它类似数据。

[0080] 在步骤 806 处，可从数据库（例如信用数据数据库 704）检索信用相关数据。信用相关数据可包含多个目标个体的识别信息，例如名称、出生日期、身份证号、街道地址、城市、州、邮政编码、电话号码、账号及 / 或其它识别信息。在一些实施例中，信用相关数据可包含目标个体的识别信息的历史数据，例如先前地址、电话号码、名称等。

[0081] 在步骤 808 处，可将离线数据中的离线数据记录与信用相关数据进行比较。在步骤 810 处，可将在线数据中的在线数据记录与信用相关数据进行比较。在步骤 808 及 810 处，可将离线数据及在线数据与信用相关数据进行比较以便确定特定离线数据记录及 / 或特定在线数据记录是否对应于特定匹配目标个体。在一些实施例中，在步骤 808 及 810 处，可将离线数据记录及 / 或在线数据记录分别与信用相关数据及非信用相关数据进行比较。下文参考图 9 及 10 描述关于步骤 808 及 810 的进一步细节。

[0082] 在步骤 812 处，可确定离线数据记录是否对应于匹配目标个体及在线数据记录是

否对应于相同匹配目标个体。如果在步骤812处，离线数据记录不对应于匹配目标个体及/或在线数据记录不对应于相同匹配目标个体，那么过程800可完成。然而，如果在步骤812处，离线数据记录对应于匹配目标个体且在线数据记录也对应于相同匹配目标个体，那么过程800继续进行到步骤814。在步骤814处，可产生用以链接匹配目标个体的离线数据记录与在线数据记录的密钥。在步骤816处，可将密钥存储于密钥数据库706中。在步骤818处，还可将密钥发射（例如）到用户或另一实体。用户或另一实体可利用关于目标广告的密钥、推送通知及关于特定匹配目标个体的类似物。

[0083] 图9中展示根据本发明的一或多个原理的用于将数据与信用相关数据进行比较的过程900的实施例。过程900可对应于上文所描述的过程800中的用于比较离线数据的步骤808及/或用于比较在线数据的步骤810。在步骤902处，可将离线数据记录或在线数据记录与信用相关标头中的特定匹配目标个体的识别信息进行匹配。在步骤904处，可确定离线数据记录或在线数据记录是否匹配识别信息。如果在步骤904处，离线数据记录或在线数据记录匹配识别信息，那么过程900继续进行到步骤906以指定离线数据记录或在线数据记录对应于匹配目标个体。然而，如果在步骤904处，离线数据记录或在线数据记录不匹配识别信息，那么过程900继续进行到步骤908以指定离线数据记录或在线数据记录不对应于匹配目标个体。

[0084] 图10中展示根据本发明的一或多个原理的用于将数据与信用相关数据进行比较的过程1000的实施例。过程1000可对应于上文所描述的过程800中的用于比较离线数据的步骤808及/或用于比较在线数据的步骤810。在步骤1002处，可从补充数据库检索补充数据。在步骤1004处，可将离线数据记录或在线数据记录与补充数据及/或信用相关标头中的特定匹配目标个体的识别信息进行匹配。在步骤1006处，可确定离线数据记录或在线数据记录是否匹配补充数据及/或识别信息。如果在步骤1006处，离线数据记录或在线数据记录匹配补充数据及/或识别信息，那么过程1000继续进行到步骤1008以指定离线数据记录或在线数据记录对应于匹配目标个体。然而，如果在步骤1006处，离线数据记录或在线数据记录不匹配识别信息，那么过程1000继续进行到步骤1010以指定离线数据记录或在线数据记录不对应于匹配目标个体。

[0085] 各图中的任何过程描述或框应理解为表示包含用于实施特定逻辑功能或过程中的若干步骤的一或多个可执行指令的代码的模块、段或部分，且替代实施方案包含于本发明的实施例的范围内，其中取决于所涉及的功能性，可不按所展示或所论述的过程的次序执行功能，包含实质上同时执行或以颠倒次序执行，如所属领域的技术人员所理解。

[0086] 应强调，本发明的以上所描述实施例（明确地说，任何“优选”实施例）是仅出于本发明的原理的清楚理解目的而陈述的实施方案的可能实例。可在不实质上背离本发明的精神及原理的情况下对本发明的以上所描述实施例做出许多变化及修改。所有此些修改在本文中打算包含于此揭示内容及本发明的范围内且受所附权利要求书保护。

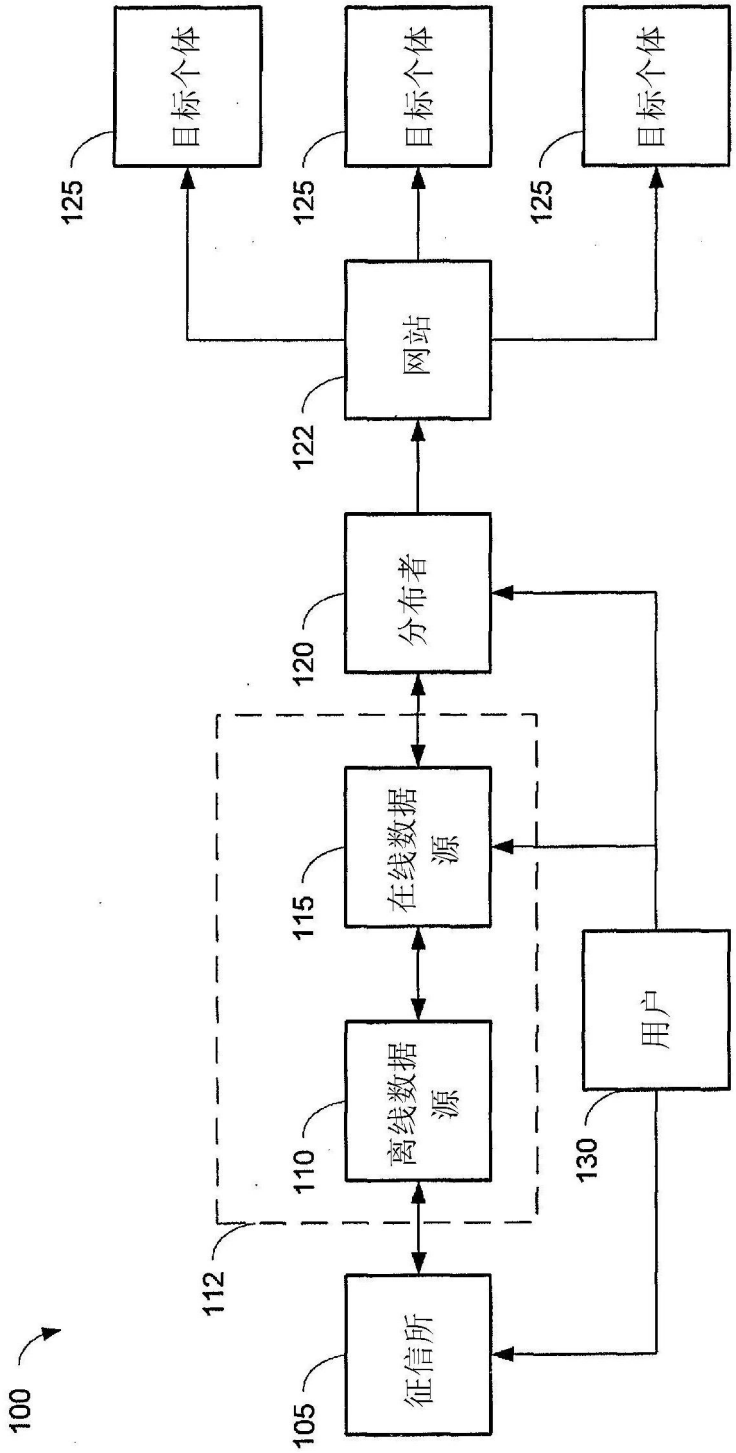

目标个体
目标个体
目标个体
125
125
125
网站
122
分布者
120
在线数据源
115
离线数据源
110
用户
130
征信所
105
112
100

图 1

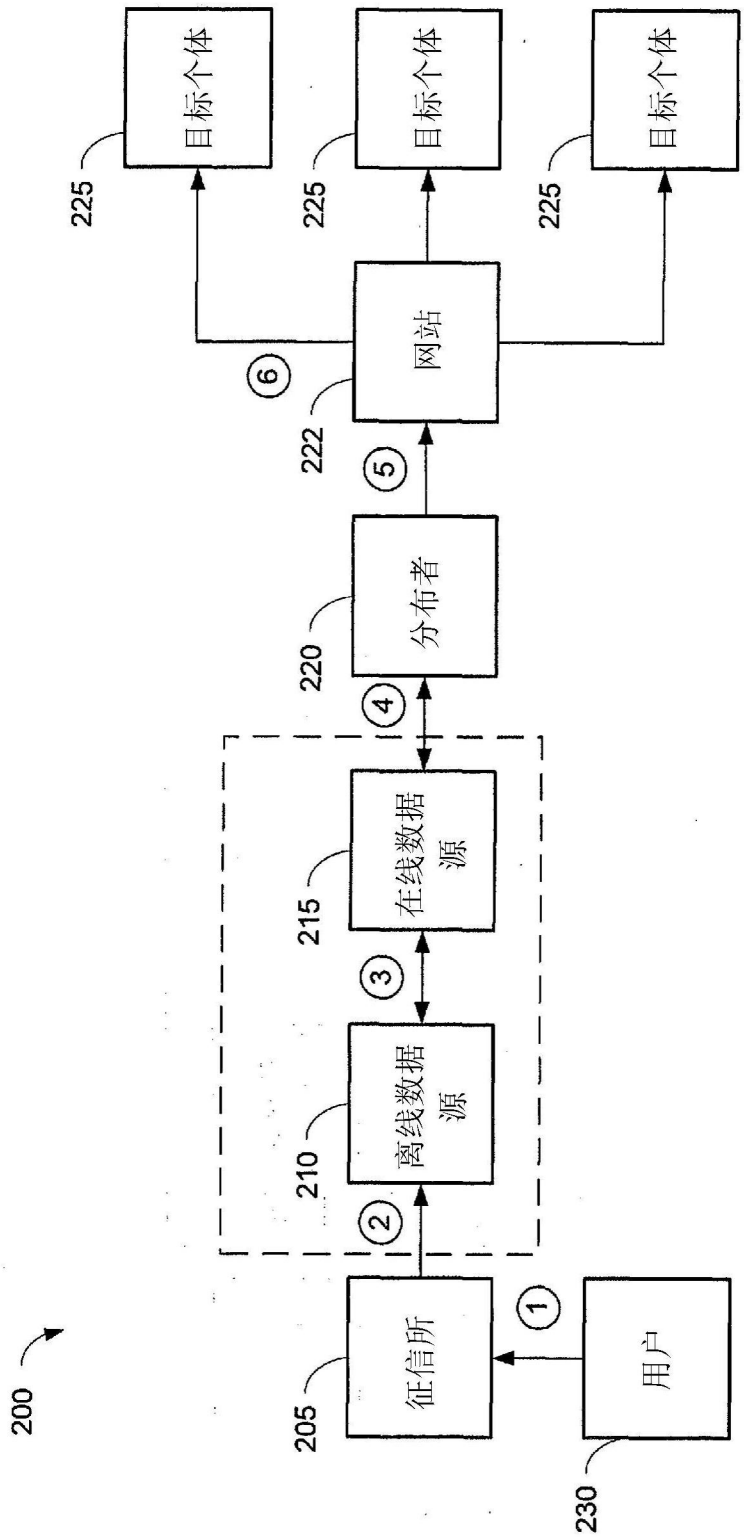

200
征信所
205
用户
230
离线数据源
210
在线数据源
215
分布者
220
网站
222
目标个体
225
目标个体
225
目标个体
225
1
2
3
4
5
6

图 2

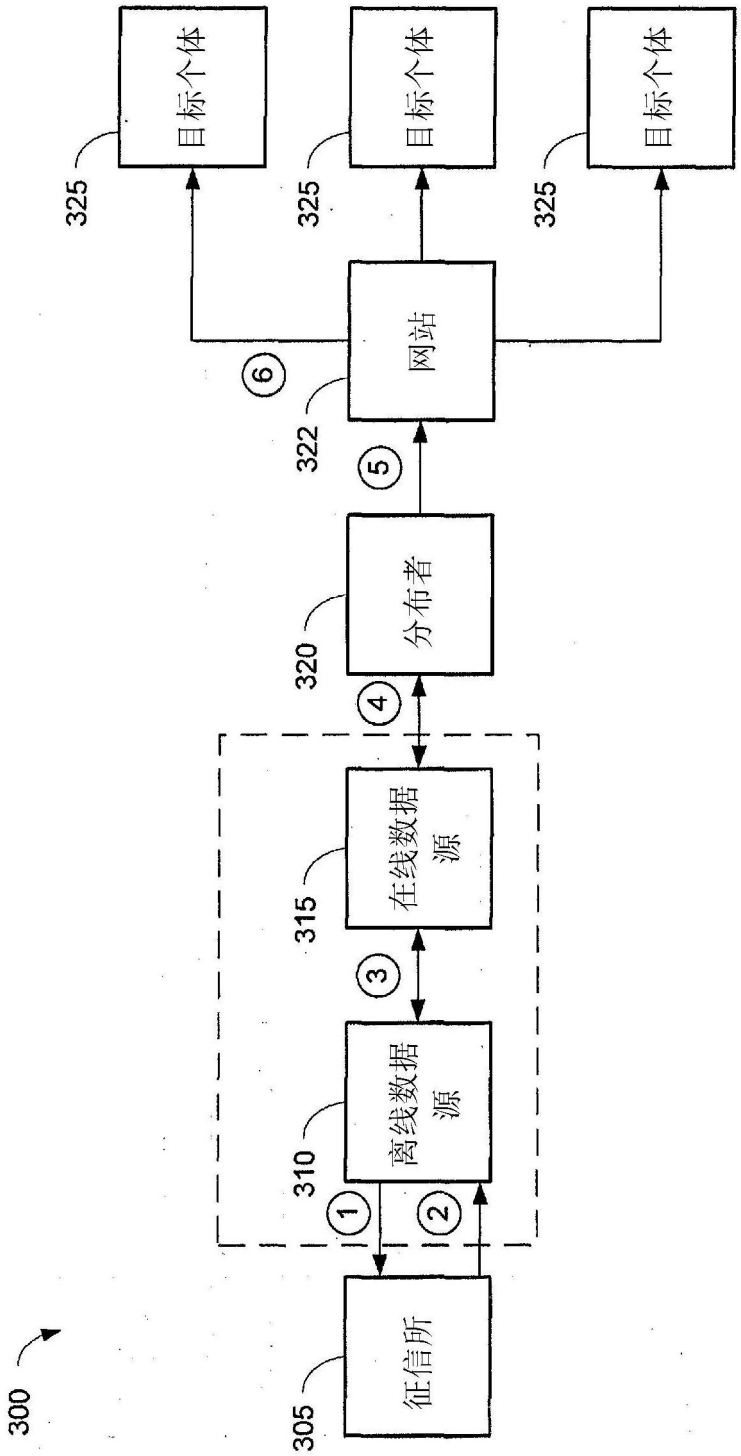

目标个体
目标个体
目标个体
325
325
325
网站
322
6
5
分布者
320
4
在线数据源
315
3
离线数据源
310
1
2
征信所
305
300

图 3

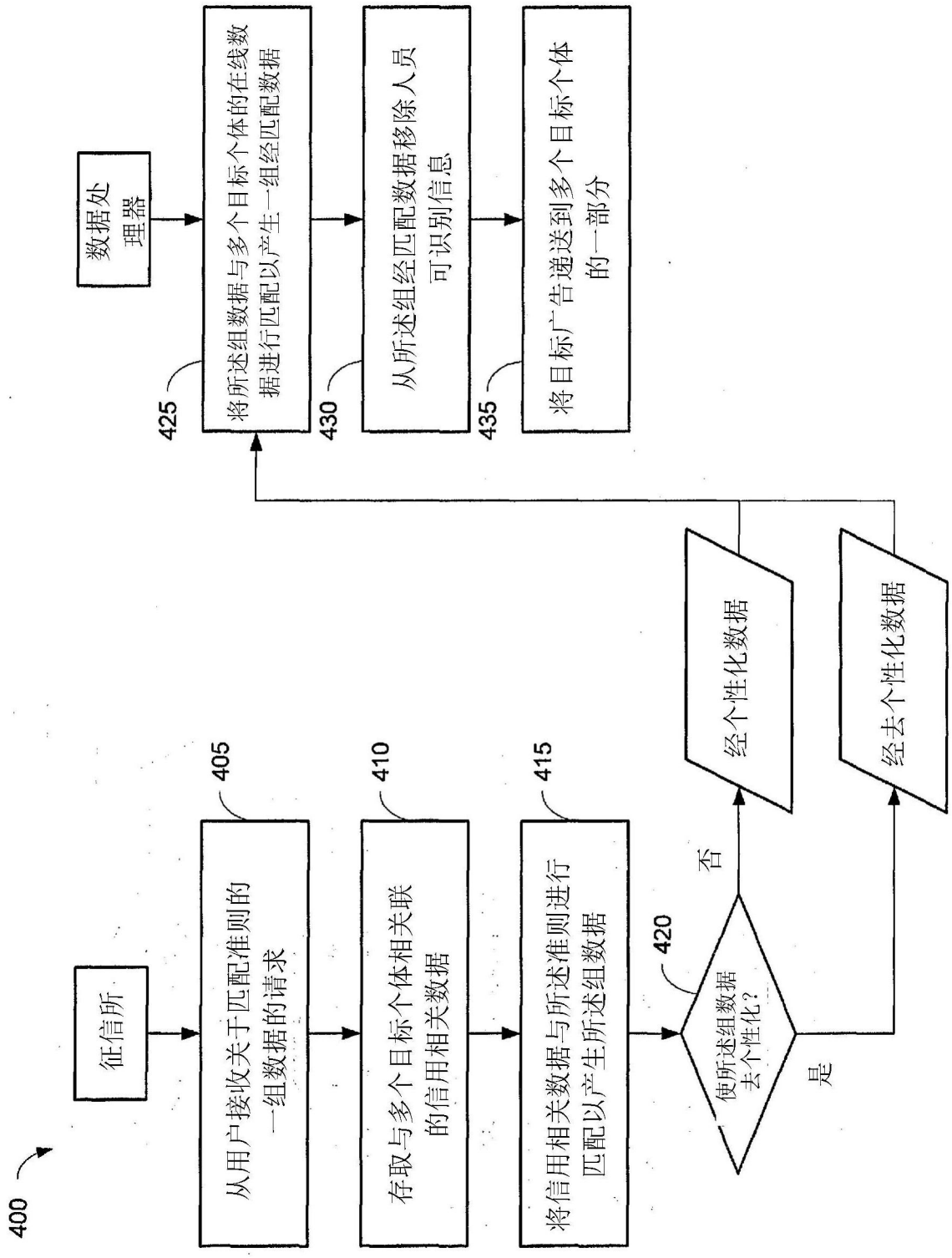

400
征信所
从用户接收关于匹配准则的一组数据的请求
405
存取与多个目标个体相关联的信用相关数据
410
将信用相关数据与所述准则进行匹配以产生所述组数据
415
420
使所述组数据去个性化?
否
是
经个性化数据
经去个性化数据
数据处理器
将所述组数据与多个目标个体的在线数据进行匹配以产生一组经匹配数据
425
从所述组经匹配数据移除人员可识别信息
430
将目标广告递送到多个目标个体的一部分
435

图 4

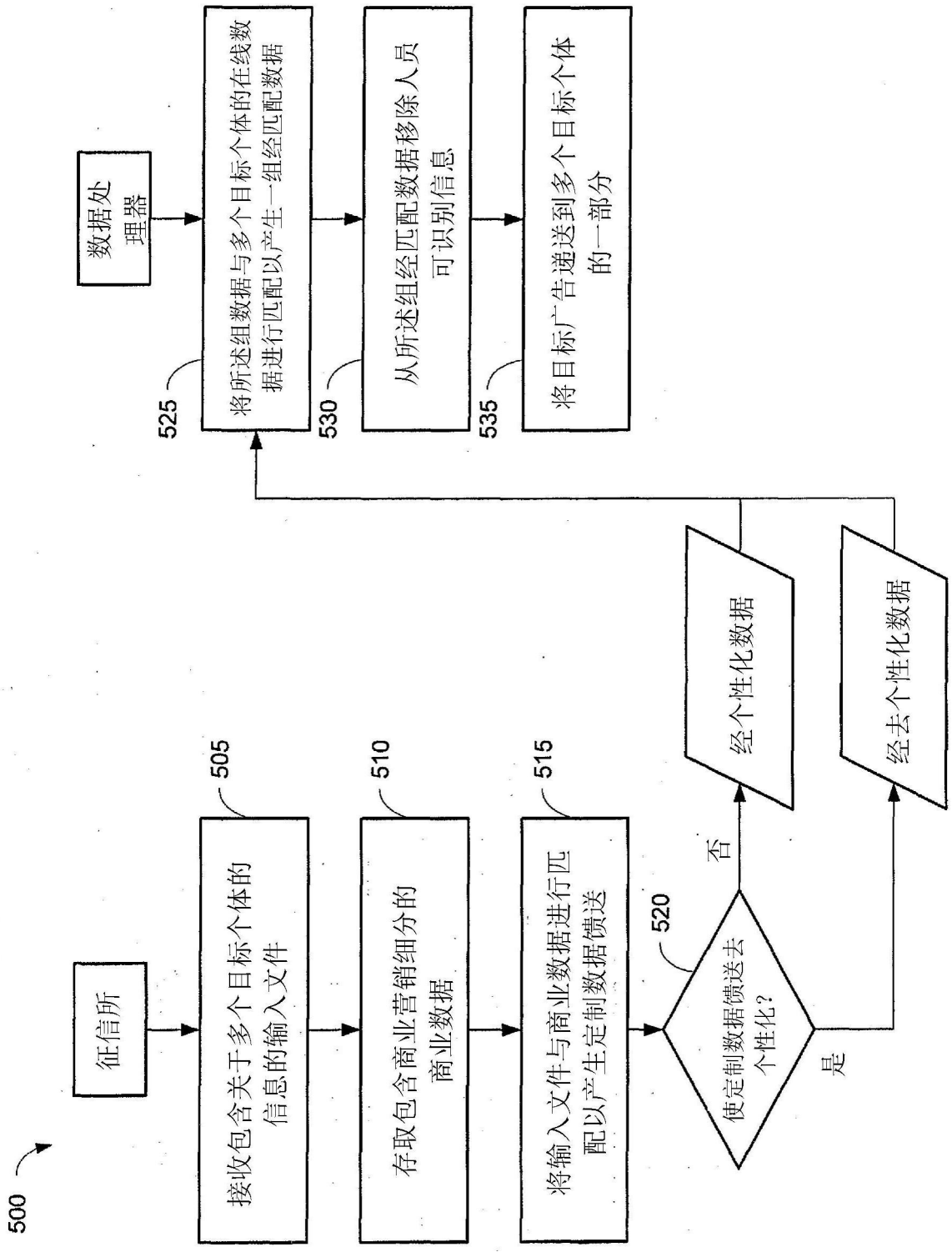

500
征信所
接收包含关于多个目标个体的信息的输入文件
505
存取包含商业营销细分的商业数据
510
将输入文件与商业数据进行匹配以产生定制数据馈送
515
使定制数据馈送去个性化？
520
否
是
经个性化数据
经去个性化数据
数据处理器
将所述组数据与多个目标个体的在线数据进行匹配以产生一组经匹配数据
525
从所述组经匹配数据移除人员可识别信息
530
将目标广告递送到多个目标个体的一部分
535

图 5

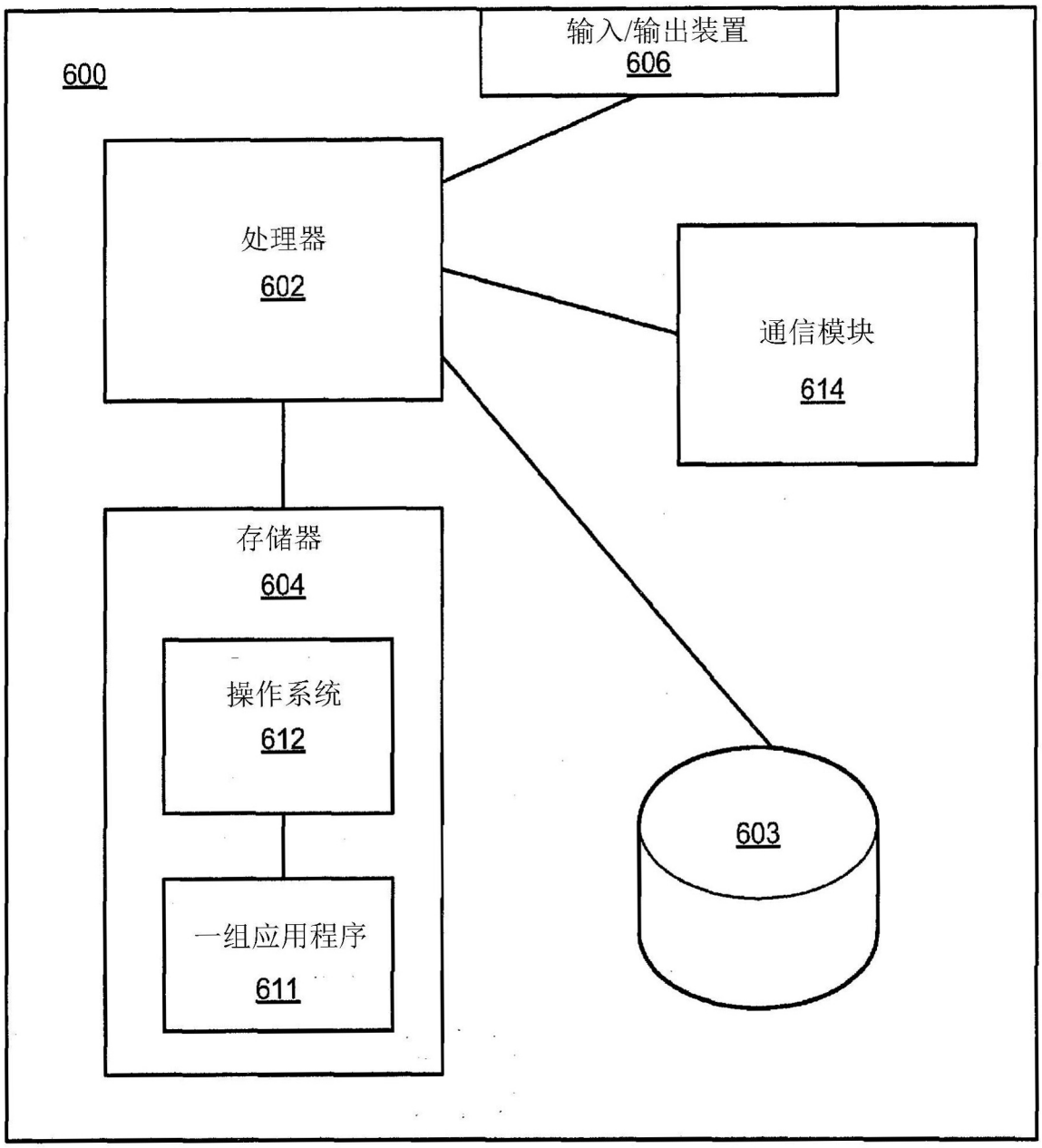

600
输入/输出装置
606
处理器
602
通信模块
614
存储器
604
操作系统
612
一组应用程序
611
603

图 6

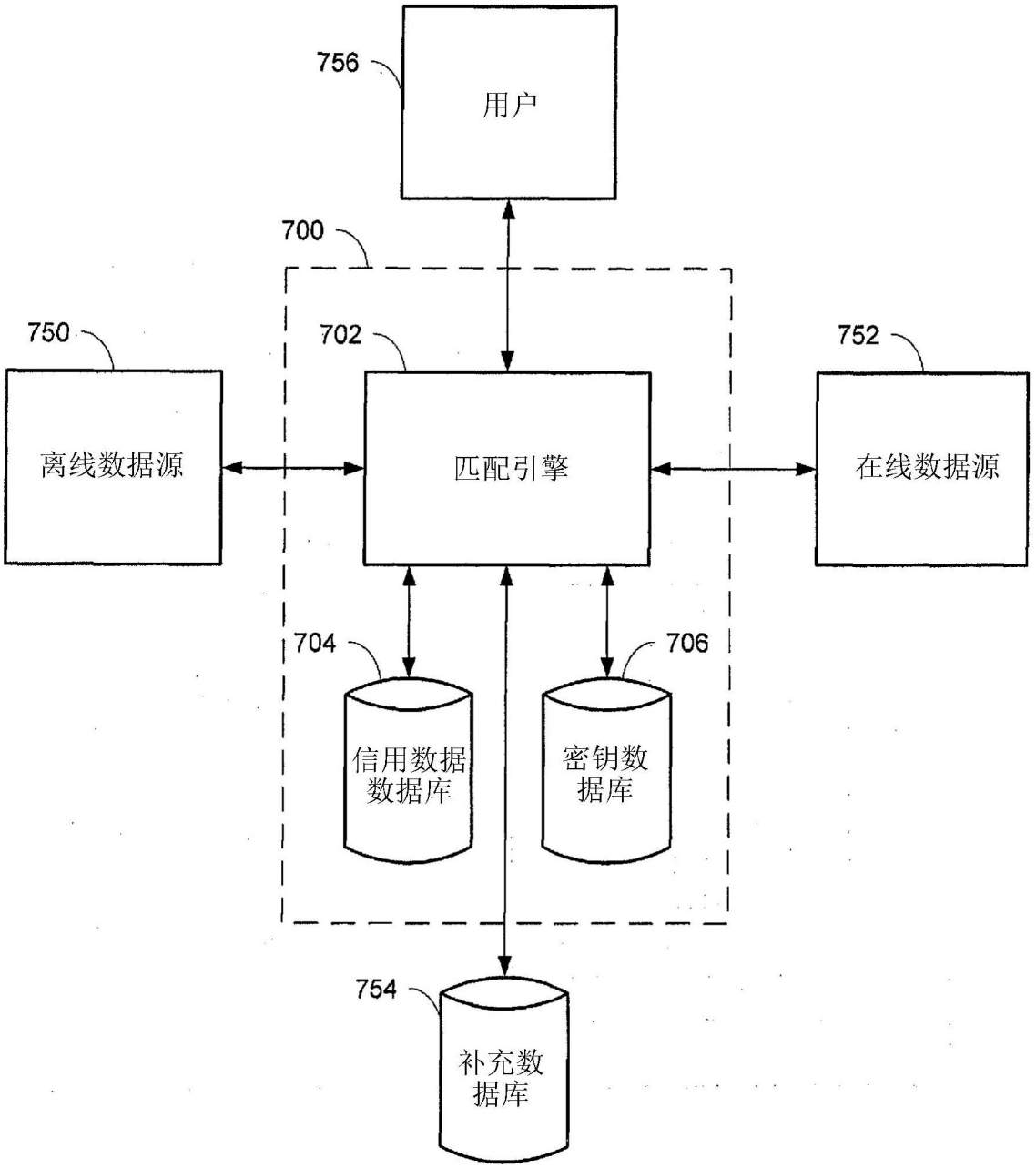

756
用户
700
750
离线数据源
702
匹配引擎
752
在线数据源
704
信用数据数据库
706
密钥数据库
754
补充数据库

图 7

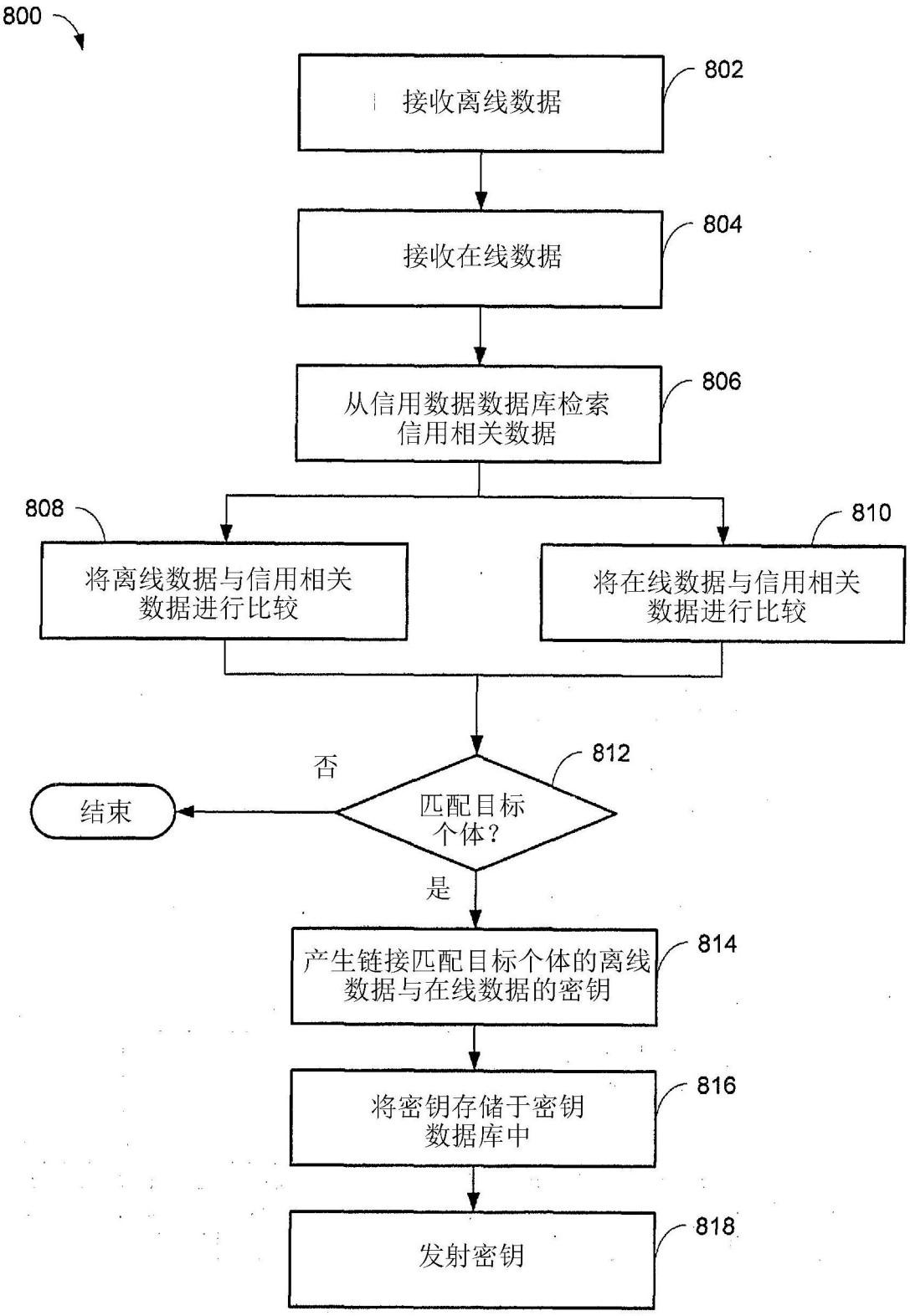

800
接收离线数据
802
接收在线数据
804
从信用数据数据库检索信用相关数据
806
808
将离线数据与信用相关数据进行比较
810
将在线数据与信用相关数据进行比较
812
否
结束
匹配目标个体?
是
产生链接匹配目标个体的离线数据与在线数据的密钥
814
将密钥存储于密钥数据库中
816
发射密钥
818

图 8

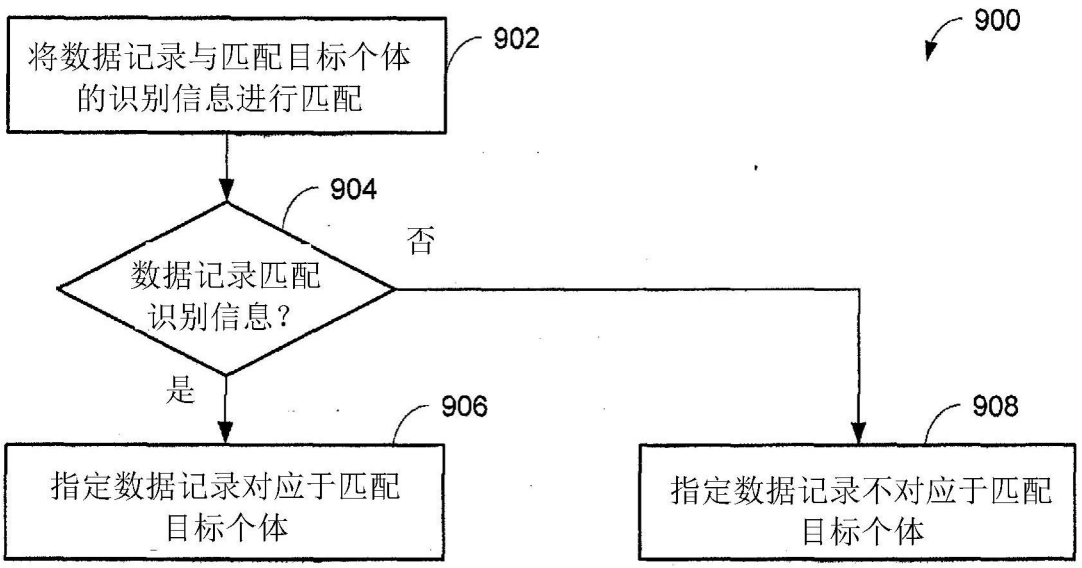

900
将数据记录与匹配目标个体的识别信息进行匹配
902
904
数据记录匹配识别信息？
否
是
906
指定数据记录对应于匹配目标个体
908
指定数据记录不对应于匹配目标个体

图 9

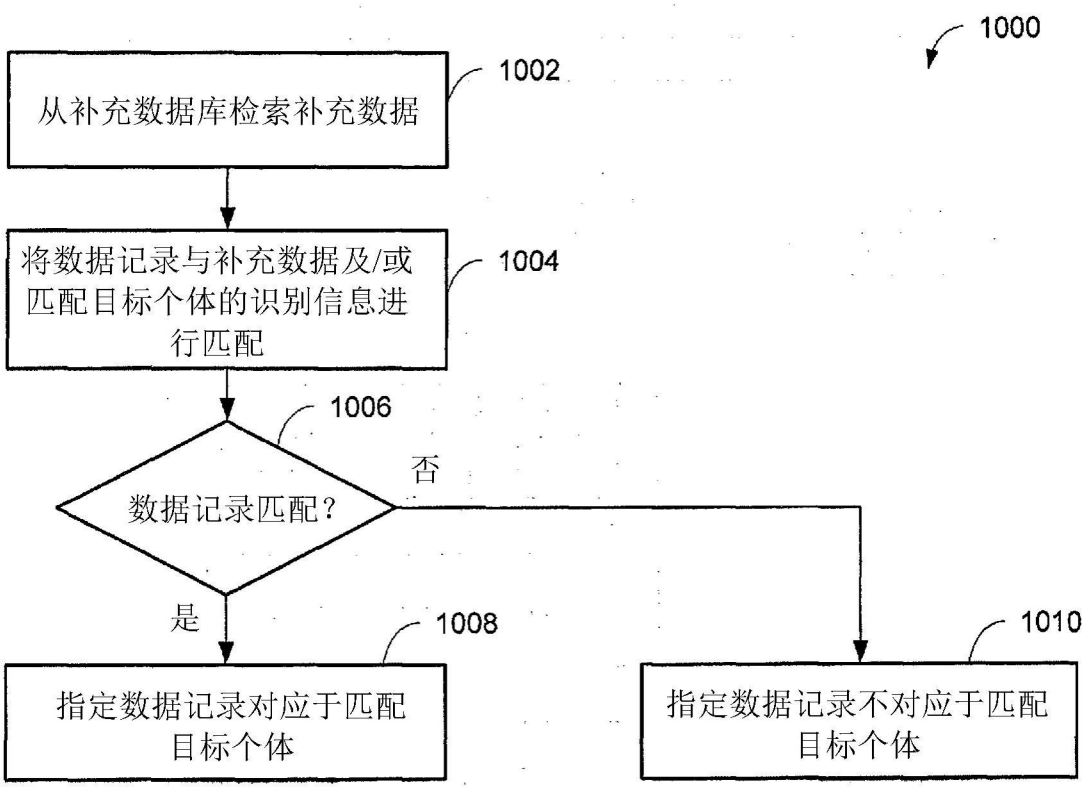

1000
从补充数据库检索补充数据
1002
将数据记录与补充数据及/或匹配目标个体的识别信息进行匹配
1004
1006
数据记录匹配？
否
是
1008
指定数据记录对应于匹配目标个体
1010
指定数据记录不对应于匹配目标个体

图 10

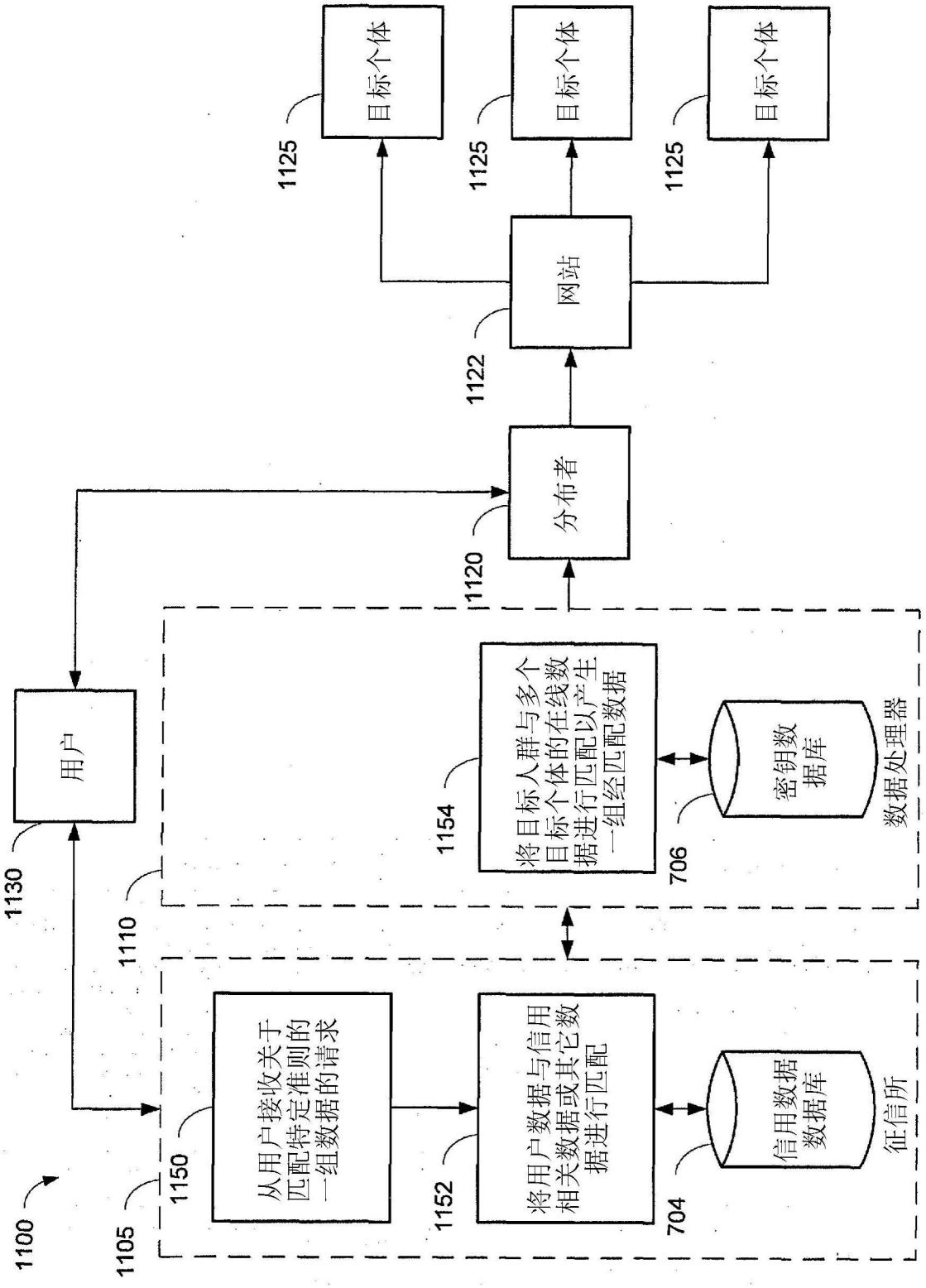

目标个体
目标个体
目标个体
1125
1125
1125
网站
1122
分布者
1120
用户
1130
1110
将目标人群与多个目标个体的在线数据进行匹配以产生一组经匹配数据
1154
密钥数据库
706
数据处理器
从用户接收关于匹配特定准则的一组数据的请求
1150
将用户数据与信用相关数据或其它数据进行匹配
1152
信用数据数据库
704
征信所
1105
1100

图 11