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(54) **Titre : PROCEDES ET SYSTEMES POUR UNIFICATION DE DONNEES, ACCES AUX DONNEES ET ANALYSE DE DONNEES AMELIORES**  
(54) **Title: METHODS AND SYSTEMS FOR ENHANCED DATA UNIFICATION, ACCESS AND ANALYSIS**

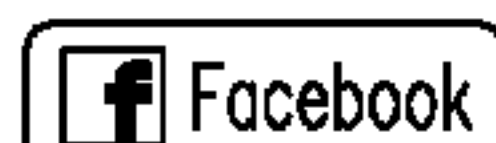
## Collective Intelligence Start to use

### Sign-In

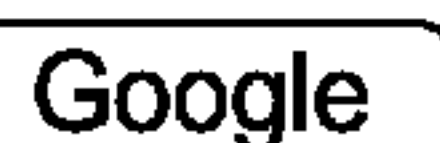
Corporate E-mail:

Password:

Or, sign-in with the one of the following services:



Facebook



Google



Twitter



Pay Pal



YAHOO!



OpenID

### Register New Account

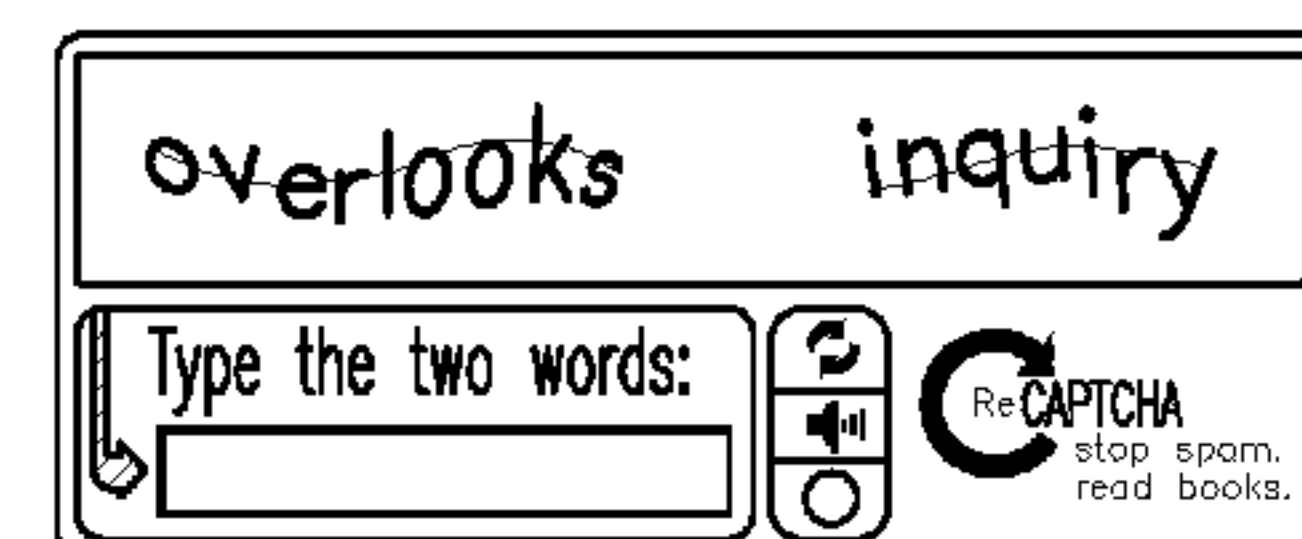
Your Corporate E-mail:

Confirm E-mail:

Password:

Confirm Password:

Presentation Code (optional):



☐ I would like periodic updates from Collective intelligence

☐ Yes, I agree to the Collective Intelligence

[Terms of Service](#)

### (57) **Abrégé/Abstract:**

A computer based system manages the collection, analysis and presentation of data. The system in one arrangement includes an online platform for collecting and unifying data across multiple channels. The platform also provides a vehicle for a plurality of users/groups to collectively analyze the data. The present system in one illustrative embodiment thus provides a data clearinghouse for gathering information from a plurality of channels, facilitating the sharing of this information, and facilitating the cooperative analysis of this information.

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(54) Title: METHODS AND SYSTEMS FOR ENHANCED DATA UNIFICATION, ACCESS AND ANALYSIS

(57) Abstract: A computer based system manages the collection, analysis and presentation of data. The system in one arrangement includes an online platform for collecting and unifying data across multiple channels. The platform also provides a vehicle for a plurality of users/groups to collectively analyze the data. The present system in one illustrative embodiment thus provides a data clearinghouse for gathering information from a plurality of channels, facilitating the sharing of this information, and facilitating the cooperative analysis of this information.

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**METHODS AND SYSTEMS FOR ENHANCED DATA UNIFICATION,  
ACCESS AND ANALYSIS**

**By:**

**Russell W. Martin, Jr.; Stephen D. Messer**

**FIELD OF THE INVENTION**

[0001] The present invention relates to computer systems and networks that permit digital communication among a large population of participants in a networked data unification system. The invention includes overlapping features and technologies found and disclosed in co-pending U.S. Patent Application Nos. 12/135,788 titled "Methods and Systems For Providing Advertisements" (the '788 application), and 12/902,019 titled "Methods and Systems for Enhanced Resource Allocation" (the '019 application), both to the applicant here and commonly assigned.

**BACKGROUND OF THE INVENTION**

[0002] Network communication systems such as the Internet offer a powerful data unification platform. Data unification and collaborative analysis of data may be facilitated by selectively configuring the platform available to users during online sessions on the worldwide web ("web"). As the number of types and sources of data has grown greatly, the complexity and difficulty in the organization and analysis of data between relevant participants on the internet has also grown.

[0003] Data is generated and collected by a plurality of segregated or "siloed" groups. Siloed groups tend to not share information or share incomplete information. Even when siloed

groups do share information, it is often not shared in an optimal or compatible format, and/or not analyzed in a collaborative manner.

[0004] In the commerce context, for example, there exists a paradigm in the marketing/advertisement industry of viewing advertisement channels as separate and distinct. As an illustration, a marketing group may segment a promotional campaign by advertisement channels, such as online advertisements, newspaper advertisements, radio advertisements, etc. A another example, a corporation may segment its departments between sales, advertising marketing, distribution, production and research. These siloed groups, if not managed correctly, result in misallocation of scarce resources (as discussed in the '019 Application), ineffective or inefficient use of data collection, and suboptimal or inefficient data analysis. Stated differently, this silo paradigm leads to “losing the forest for the trees” since groups fail to realize the efficiency and effectiveness obtained from consolidation of data and collaboration of analysis across multiple groups and channels. Prior attempts to remedy these deficiencies, before the present invention, have been unsatisfactory.

#### **OBJECTS AND SUMMARY OF THE PRESENT INVENTION**

[0005] In accordance with one embodiment of the present invention there is provided a computer based data management system, comprising: a first communication link to support transfer of analytic data into the system; a second communication link to support data transfer between the system and a first user; a third communication link to

support data transfer between the system and a second user; a processor with program-controlled operation for processing a first data set received from the first communication link and a second data set, wherein the first data set is a different format than the second data set, and wherein the processing comprises converting the first and second data sets to a unified system format. The processor is further operable to: generate a report utilizing the processed first and second data sets based on instructions received through the second communication link; modify the report based on instructions received through the third communication link; and calculate the second user's numeric indicia of topical knowledge relative to the first user, wherein the second user's numeric indicia of topical knowledge represents the second user's level of knowledge on a particular topic as compared to the first user's level of knowledge on the same topic.

**[0005a]** Illustrative embodiments of the present invention preferably include an online platform for creating a unified data model across multiple channels. An exemplary online platform allows a user to gather and analyze data from multiple channels and to view and create reports based on these analyses. These reports can be realized through collaborative analysis efforts, between multiple users and organizations. An example of data from multiple channels may be the marketing and sales data from an organization's online sector and offline sector. A web portal or similar interface is provided for collecting and consolidating this data, and providing a vehicle for a plurality of users/groups to collectively analyze the data. In a preferred

embodiment, the data collection, analysis, and/or collaboration can occur in real-time or near real-time. This web portal or online platform can be accessed through a personal computer, laptop, cell phone, tablet computer, etc.

**[0006]** One aspect of the present invention provides a network based system that supports digitally tracking of multiple promotional vehicles, including both off-line and on-line advertising in a comprehensive manner. Because the illustrative computer systems of the present invention track different types of media channels, these systems further allow for the de-segregating of marketing campaigns by media channel, and for the tracking and optimization of segments of and/or the entire marketing campaigns by implementing a protocol of common measurements across different media channels.

**[0007]** In another aspect, the present invention includes resources for consolidating a plurality of different data sets, for example data sets involving plural promotional campaigns, by creating a unified data model. This unified data model allows for users to compare and analyze data sets together and against each other, which would not otherwise be compatible or convenient for such analysis. Furthermore, the present system allows for a plurality of users or groups to share data sets, access data sets, and perform collaborative analysis of data sets. The present system in one illustrative embodiment thus provides a data clearinghouse for gathering information from a plurality of channels, facilitating the sharing of this information, and facilitating the cooperative analysis of this information.

**[0008]** The foregoing and other features of the present invention are further presented in conjunction with the following diagrams depicting specific illustrative embodiments of the present invention of which:

**BRIEF DESCRIPTION OF THE FIGURES**

[0009] Figures 1-24 are screen shots of illustrative embodiments of the present invention.

**DESCRIPTION OF THE INVENTION AND  
ILLUSTRATIVE EMBODIMENTS THEREOF**

[0010] To illustrate the present invention, the following specific embodiments are disclosed using nomenclature and terminology having well understood meaning specific to the industry specializing in online data collection/analysis platforms.

[0011] The present invention, in one arrangement, resides in a selectively programmed computer system known as the “Collective Intelligence System,” that operates on a publicly accessible network. For purposes of this disclosure, the operative computer system will be referred to as the “CIS.” A useful application of the CIS extends to the processing of marketing specific data. Specifically, the CIS includes program controlled data processing that allows users to access and interact with data from different channels, in a data format independent environment. Using software implemented tools, the system allows users to create comprehensive reports and analyze selected data sets and/or reports. In addition, users may use reports already available within CIS to analyze their data.

[0012] The terms “report” and “analysis” are used throughout the specification. The meaning of these terms in the context of the CIS system will now be described.

[0013] Reporting is the process of organizing data into informational summaries in order to monitor how different areas of a business are performing. Reporting translates raw data into information and helps users to monitor business and be alerted to when data falls outside of expected ranges. In the context of the CIS, “reports” are based on reporting and are essentially

summaries of data sets. For example, a report could be directed to the top ten products that have sold, or the daily revenue generated by a product.

**[0014]** Analyzing is the process of exploring data and information in order to extract meaningful insights, which can be used to better understand and improve business performance. “Analyses” are based on analyzing and have been designed to answer one or more business questions; for example, whether an email marketing campaign has an effect on sales. An analysis can be made up of multiple reports. Additionally, an analysis may allow users to drill down on reports; for example, going from nationwide sales to state specific sales.

**[0015]** Although portions of the foregoing sections will be discussed with respect to marketing, it is understood by those skilled in the art that the following teachings can be equally applied to other areas where specialized, but articulated data is collected and/or analyzed. For example, different “channels” that would benefit from collaborating on data include: different sections within one of an organization’s departments, different departments within an organization, different organizations, different individuals, and/or individuals and organizations/groups.

**[0016]** An organization may include a sales department and a marketing department which is divided into different groups, where such groups may have responsibilities regarding different marketing channels, such as mail, TV, and Internet (all collectively different channels). Within each of these channels, data are formatted differently and collected/stored independently. More importantly, different metrics to determine success are used in each channel. Accordingly, each group makes decisions based on siloed information, such as creating a budget for TV advertising utilizing only TV response data. Once the CIS is implemented, the TV advertising group may pull data from other sources, such as internet advertising or the sales department. The CIS can

also recommend sources of data that may add the most value to the user, group, or report objectives.

**[0017]** The CIS is selectively configured to pull data from a variety of sources, such as LinkedIn for general information about a user, group or organization, or Google Analytics for detailed data including sales information. In a preferred embodiment, data within the CIS, such as Google Analytics sales information, is updated in real-time or near real-time. In one embodiment, CIS users may selectively choose which of their data sets, or which data sets used by their reports or analyses, should be updated in real-time or near real-time.

**[0018]** Another feature optionally provided by the CIS is benchmarking. Specifically, data may be obtained from related groups and then aggregated. Users can then see how their organization relates to related organizations. For example, an online widget seller can see how their profit margins compare to similar organizations. In one embodiment, the CIS facilitates the anonymous collection of data for benchmarking. Accordingly, organizations can see how they compare to their peers, without sensitive financial (or other) information being publicly available. The data may be aggregated to provide averages, lows, highs, modes, etc.

**[0019]** The system also facilitates relationship based links to other nodes such as individuals or organizations. Although social networking sites such as LinkedIn and Facebook are well known in the art, the CIS takes into consideration data collection and analytic goals and leverages data set information to facilitate “value added” driven connections. Furthermore, unlike prior art social networking, the CIS provides a powerful platform for collaborative analysis of data. The CIS also includes a “marketplace” for the distribution of data sets outside of an organization. These features are described in further detail below.

**[0020]** Data may also leave the CIS for decision support or other purposes. In one embodiment, programmatic access to data is given via an API. For example, a customer may use a third-party to help them choose which ads to run and how much to bid for advertising inventory in real-time. That third-party may in turn be allowed to access the customer's data via CIS's API. This is important for two reasons: 1) the third-party may now have real-time access to data that was not previously available to them, because the original source of the data only provided data on a daily basis, for example, and 2) the third-party now has access to data that CIS has combined or integrated. For example, CI may have combined and made available e-mail marketing and affiliate advertising data, which previously would have required someone to integrate themselves either manually or through an automated process.

**[0021]** Data could also be exported via CSV or other standard format for a user to manipulate outside of the CIS system. Additionally, sellers of data in the CIS marketplace could optionally allow purchasers to have access to the raw data and/or data that may be used outside of the CIS system.

**[0022]** Another feature of the CIS is the generation of “Collective Intelligence IQs” for users. This “IQ” is based on the previous work the user has done, as measured by the system. In one embodiment, a first user’s IQ is represented by a single number. In another embodiment, the first user’s IQ is further dependant on the identity of a second user in viewing the first user’s IQ. For example, the first user is a widget marketing expert who has generated many highly rated widget marketing CIS reports. The first user’s IQ may appear higher to a second user who is also in the widget marketing field, than to a third user who is in the donut marketing field. The CIS can make recommendations to users/organizations based on user IQs. In the CIS, analysis of data will be facilitated through “reports.” In a preferred embodiment, one user “owns” the report

(or is primarily responsible for it), and they and others can discuss, publish or share the report.

On the report discussion page, users may comment on a certain data point, or overlay other data on top of existing data set(s). For example, overlaid data can allow a user to see merchandise return data on top of click through conversion rate data.

**[0023]** Another feature of the CIS is its developer kits. The CIS has core analysis tools, but allows users to develop additional tools for analysis, data collections, and visualization. These developers may also share or sell the tools they create with other users or organizations, in the CIS marketplace (discussed in further detail below). In addition, third parties may sell or share their data and/or services in the CIS marketplace.

**[0024]** Network-based operation is depicted via Figures 1 - 24, where navigation through an enhanced portal/interface permits controlled access and implementation of system operative features. Beginning with Figure 1, when a user lands at the CIS website, they may sign in with their existing account, or create/register a new account if they do not have one. In one embodiment, the system requires an organization email address to register. In Figures 2a-b, the system collects information about the user's organization, and optionally imports some or all of this information via LinkedIn or similar. Organization information may include organization name, parent organization, description, website, industry, type (privately or publicly held), year founded, organization size, address, and the organization's email domain names.

**[0025]** In Figures 3a-b, the system collects information about the user. Optionally, the user may import this information, as well as relationship/link information via Facebook, Twitter and Google (or similar). Information about the user includes name, title, department, biography, corporate email, secondary email, and phone number. The user may also write a message to the organization administrator during this sequence, for example, to request certain privileges or

rights to access data sets. Figure 4 shows the system requesting analytic information to import. This can be done by submitting the username and password for a web based analytics company, such as Google Analytics. If the desired analytic company is not listed, the user may manually enter the analytic company name and/or information. If the user does not have the credentials for their organization's analytic account, they may send a message to another party who would have access directly through the CIS, as shown in Figure 5.

**[0026]** In Figure 6, the CIS displays a list of people that the user may know that already use CIS, and allows the user to request connections (or request "friend" status) to these other users.

**[0027]** An illustrative embodiment of a CIS user homepage is shown in Figure 7. This page comprises a selective layout optimized for comfort of viewing and maximization of productivity. By grouping and displaying the appropriate information, as shown in Figure 7, the user is not overloaded by extraneous information but still has enough information to effectively engage in their data analysis operations. In a preferred embodiment, this homepage is customizable by the user. The top of the homepage includes a navigation bar, including links to: home, analysis, sharing, learn, develop, presentations, messages, and account. The homepage is customizable and may show a Trending Analysis for website traffic which displays relevant charts and graphs. The homepage also shows friend requests (with options to add, ignore or add to group), group activity which is a stream of information relating to updates or comments within the user's group or organization, a schedule of upcoming events, and announcements.

**[0028]** The homepage also displays news headlines, Tweets, and blog comments (collectively "feeds") in a streamlined fashion, as shown in Figure 7. Specifically, the feeds are within a single module, but are organized by tabs for each of news, Tweets, and blog comments. In Figure 8, the system sets up the user's feeds. It does this by searching for relevant feeds and

relevant posts within feeds. For example, the system defaults to searching news stories, Tweets, and comments related to the user's organization and/or name. The user may customize the feed search criteria as desired.

**[0029]** Figure 9 shows the analysis screen. In this example, the data being presented includes, for the time period of 10/1/2010 to 12/31/2010, calls per day, caller gender, call topics, net sales per day, and refunds per day. The items displayed on the analysis screen are dependent upon the data sets being used, and may be adjusted. For example, demographics other than gender (such as age) may be shown if available. In Figure 10, the user has clicked on a particular point in the calls per day graph, and enters his comments on this data point. In Figure 11, the user is presented with the option to include additional data to the chart, including point of sale (POS), refunds, unique website visitors, new website users, resolved calls, customer complaints, sales, and number of website purchases.

**[0030]** If a user wishes to share a particular report, data set, or data point, they may do so (if they have appropriate privileges) through the CIS by clicking a button and entering the name (if they are in the CIS network) or email address of the person they wish to share the information with, as shown in Figure 12. Alternatively, the site may be shared through a social networking web site. The user will be able to share the exact view they were looking at. For example, a user may be looking at the widget sales data for last month, and may have noticed a large spike. They may zoom in on this data point, mark it with a comment, such as noting that the spike occurred the day after a complimentary widget product was put on sale. The first user can send their view of the report to a second user, and that second user will see the same screen that the first user was looking at when they clicked the "share" button. The second user would not simply receive a screenshot, they would be able to zoom out or manipulate the data set(s) as desired.

Additionally, the second user accessing the site via sharing could be tracked back to the first user, and this data fed into the system analytics.

**[0031]** The discussion view allows users to comment on particular graphs, data set(s) or reports. As shown in Figures 13a-b, different users comment on the calls per day graphs. Not only are user comments listed under the chart, a marker is also placed directly on the chart to indicate which portion of the data the user is commenting about or referring to. This view additionally shows the details of the data being viewed/used, who has viewed the report, and/or who has access to the report. Also provided are relevant links and attachments, including links to related reports with an optional side-by-side comparison.

**[0032]** Figures 14 – 15 show the “add friends” feature of the CIS, including importing contacts from other networks (LinkedIn, Facebook, Twitter, Google, Yahoo, AOL, etc) to be added as friends. In Figures 16, the system displays the friend and group requests received by the user, along with the options to accept the request, ignore the request, or add it to a group. Figure 17 shows a user’s groups along with their descriptions, and provides links to the group pages. This page also provides the options to create a new group, or browse groups to join. In Figure 18, the system displays a user’s friend and group request history. In Figure 19, a user creates a group and the system asks for information about the new group, such as name, members, logo, group type, brief and full description of the group, the creator’s email address, language, and the access level (open for all to join, only those in the same organization as the creator may join, must request permission to join, or the creator may pre-approve users with specified email domains). The system can optionally determine the group’s industry by the industry of the group’s members.

**[0033]** Another embodiment of a user's home page is shown in Figures 20a-b. Again, this home page comprises a selective layout optimized for comfort of viewing and maximization of productivity. This home page contains an activity and news tab, within a single module. Each of the tabs can optionally be viewed by the user. Similarly, the home page contains tabs for reports and contacts within a single module. In the middle of the page, the user's default or primary report graphic is shown, in this case calls per day. The report may be filtered by a date range, or the advanced filters options may be selected for additional filter options. Activity for the report is shown beneath the graphic, which includes filters to see comments from all users, internal users only, partners only, or public users only. Also underneath the graphic are details of the data set(s) used in the report, subscriber information, access information, relevant attachments and links, and links to related reports. Any of the modules in the home page may be selectively removed or minimized by the user to optimize the limited viewing space for that particular user. In Figures 20a-b, the displayed report has three comments made directly on the data set, represented by points (a), (b) and (c). The user has clicked on point (b) causing the system to display the comment made with respect to that data point. The user has also hovered over Report 1 listed in the reports tab causing the system to display report information, such as the date the report was last updated. Additionally, when other users are actively viewing a report, the icon associated with that report in the report tab changes color (e.g. green) to indicate this activity.

**[0034]** Continuing on to Figures 21a-b, the user has selected the contacts tab and hovered over a contact causing the system to display contact information such as organization, position, IQ, and the option to send a private message. In Figures 22a-b, the user has clicked on the contact causing the system to display the contact's activity feed, and providing the option to chat in real-time. In Figures 23a-b, the user has selected a report from the reports tab, and the system

displays a report preview box containing the activity and comment feed for that report within the home page. Continuing with Figures 24a-b, the user clicked on the chat about this report button within the report preview box, and is selecting users to invite to chat in real-time about the selected report.

**[0035]** Specific work-flows of the CIS will be discussed below.

**[0036]** First-Time User

**[0037]** A first-time user will be asked to register with the system website. For each new user, a history is created of how they came to the system website. This tracking can be done, for example, by promotion codes or cookies, or other means known in the art. After the user enters their organization/work email address, the system will determine whether the user's email domain is in the system. If it is, the status of the organization's account will be determined (whether it is a paid or free account, or whether a trial account is available).

**[0038]** If the domain is not in the system, organization and user information will be collected, and in a preferred embodiment, this information will be imported from an external source such as LinkedIn. The system will send an email with a verification link to the registered email account.

**[0039]** After logging in, the user will be prompted to create user-level relationships through friend-requests. The system may suggest friends to be linked to based on user information and organization information. For example, the system may suggest a user to request friend status with another user who works at the same organization, or another user that shares a similar/complimentary interest or profession. The user will also have the option to search or browse users, organizations, and groups and manually select friend or relationship connections.

**[0040]** Homepage

**[0041]** A user's homepage will be displayed once the user signs in. This page may display friend requests, headlines/tweets/comments, trending analyses, and widgets. In a preferred embodiment, newsfeeds, tweets and/or RSS feeds are generated by relevancy searches based on keywords. Default keywords include the organization name associated with the user and other information that may be derived from the user's account information. The user can optionally edit or add keywords for focused homepage feeds.

**[0042]** Analysis – Manage User's Report Tabs

**[0043]** When a user joins a group the group will be added to their group report tab, or a new tab can be created for a group. Additionally, alerts can be sent when new tabs are available because of a group join. This alert can, for example, notify the user that they may freely modify one or more of the group's report.

**[0044]** When a user logs into their homepage, a list of all report tabs that are available for that user is displayed. The user may edit their report tab by changing names or descriptions of reports, creating additional reports, removing reports from the report tab, or adding reports to the tab. If the user chooses to add reports to their report tab, the system will show the user a list of reports available to them, including reports made by the user's groups. The user can also search for specific reports to include in their report tab, such as a friend's report. Once a user selects a report, the system will determine what data sets contained in the report the user has access to (based on their permissions / rights), and give the user the option to request or buy missing data sets, if appropriate. The system may update (or publish to) the user's activity board and/or notify other users who subscribe to the user's tab of the changes to a user's report tab.

**[0045]** Analysis – Manage Organization's Report Tabs

**[0046]** An organization can manage their report tabs similarly to users. An organization is given the option to remove reports from their report tab, edit reports, and create reports. Editing may include changing the report name and/or description, choosing which reports to include in the tab, and choosing user profiles or roles (such as owner or administrator) to make the tab visible for. Creating a report tab may involve entering a name and description for the tab, choosing reports to include in the tab, and choosing user profiles or roles to make the tab visible for.

**[0047]** Analysis – Report Settings

**[0048]** When a user selects “Edit” on a chart or report, that user will be presented with a number of options. For their own view, each user can add and/or remove data to the report, change the name of the report, and change the names of the data labels. Unless the user has appropriate privileges (such as account owner), this will not affect other users. The report owner can change the default names and data labels. Other users will be notified of these changes but can choose to accept them or keep their current data/settings.

**[0049]** If a report owner chooses to “Edit” or “Manage” a report, the system will provide the following options to the report owner: 1) invite other users to the report via a collaboration initiation; 2) change the internal data label name; 3) change the internal report name; 4) review requests to view the report, and allow or deny requestors access to the report. If access is granted, different levels of access may be specified, for example, by choosing which data sets the requestor may or may not view; 5) manage frequently asked questions. The system will list existing questions associated with the report. The owner may then add new questions and answers (or editable field for others to answer), edit existing questions or confirm answers to editable answer fields, or forward questions; 6) edit the curated list of data to use with the report;

7) view where the report has been used or shared. For example, the system may show (over time periods) which presentations have used the report, if and when those presentations were given, who publicly shared the report and over what channels (e.g. Twitter, Facebook, and LinkedIn). This data may be filtered, for example, by time period or channel; 8) view the history of the report usage. The system may display a list of users who have accessed the report and groups who use the report, as well as how often and when these accesses have occurred; 9) edit internal description of the report; 10) contact report builder regarding the report; 11) change report visibility. The owner can determine who will be able to see the report, for example by user role, and the system may provide a summary of changes preview showing who will be able to see the report based on the changed settings. Optionally, this feature may only affect new users so that if someone subscribes to a report they will maintain their access to it even if new visibility settings would preclude them from newly subscribing.

**[0050]**      Analysis – Discussion

**[0051]**      When viewing a report a user may select an option to view the discussion page for that report. The system will then lookup the settings for that report discussion page and determine which data the user has access to in the report. Optionally, the system shows the user which data sets are not shown because of inadequate permission and/or which data sets the user would need to purchase to access. The system then displays the report discussion page based on the appropriate settings and displays the report, report details, attachments, links to external web pages, links to associated reports and internal and external activity, as appropriate. The system will also display appropriate widgets or applications that are configured for the report and/or the discussion page.

**[0052]** Work flow with respect to each item within the activity board will be discussed briefly. When the user performs an activity on the report discussion page the system will determine whether the user who posted the activity is internal, public, outside of the system, a friend of the user, or a business. Posts that are made outside of the system (e.g., Facebook, Twitter, LinkedIn) are captured on the report discussion page and links to outside hosting sites are also provided. The user will also have the option of editing and deleting their own posts, and/or making their posts private to specific users, available for only internal users, or available to all. The user will also have options to reply, hide, like comments, private message, and chat.

**[0053]** Depending on the settings for the page, the user may have the option to comment about reports or activity diagrams, attach documents (and choose their visibility to other users), use widgets, remove associated reports from screen, show/hide associated reports, reply to or hide an activity item, filter activities (by people outside the organization, people within the organization (internal), or by internal and partners), edit activity settings including which activities to see by default, invite people to view reports or collaborate on reports, and unsubscribe from a report.

**[0054]** Analysis – Discussion Page Settings

**[0055]** When a report owner is viewing a report, they may change the report's page settings by selecting the "Edit" button. This will give the owner the option to add/remove widgets, toggle default activities shown, and edit who can see the report. If the owner is adding widgets, the system will present a list of available widgets, and if required, will prompt the owner for payment for any selected widgets. The system also gives the owner the ability to remove widgets from everyone's view or just new viewers. The owner can also select which activity is shown by default – internal, external, or both. Additionally, the owner can select who has

permission to see the report. For example, 1) only users in the organization, 2) all users in the organization plus the owner's external contacts, 3) all groups / users, or 4) users and groups who have access to another specified report. The system also provides a search tool to find users and groups to add.

**[0056]**      Analysis – Manage Reports

**[0057]**      In a preferred embodiment, a sidebar will display a list of reports that the user is currently subscribed to. The system can recommend reports based on a report or report tab currently being viewed, and/or may recommend reports based on what friends are subscribed to. These recommendations may be prioritized, for example, by which reports are used/viewed most often, which reports are owned by friends, etc. The user may also see a list of available unsubscribed reports, subscribe to reports, or unsubscribe from reports. If the user tries to subscribe to a report, the system will check whether the user has permission to access the data contained in the report, and when appropriate, give the user the option to request or buy the data if not currently viewable by the user. The user will also have the option to add the report to multiple report tabs. In one embodiment, the current report tab is the destination for newly subscribed reports.

**[0058]**      Write Message About Report

**[0059]**      Users may write messages related to reports, including writing comments, replying to comments or writing private messages. When viewing a report, the user is presented with report options, filter options and a text area to enter a message. When sending a message, the user can select a message type (private or public). If the user chooses to send a private message, they can select the desired recipient, and the system will indicate which data in the report the recipient does not already have access to. The user may then select which data in the report to give the

recipient access to (if they have appropriate permission to do so). The user then chooses which view of the report they want to send. In a preferred embodiment, the default view to send will be the view the user has of the report before selecting the messaging option. The user can write and send their message, and if the user selected to share their view, the recipient will be able to see the user's view and filter settings at the time the message was sent.

**[0060]**      Analysis – Overlay

**[0061]**      A user may view a report on their viewing device. If the user wishes to overlay data on top of the report, the user may click the overlay option which will generate a list of data that may be overlaid. This data list could include data from the report's owner or could be from another source, such as the data the user and/or their organization has access to and can be overlaid into the report. The system may also generate a list of data that may be overlaid on the report, but that must be purchased. Additionally, a user viewing the report is able to set their view of the report to be their default, over the default view set by the owner of the report. The user may share their view of report, with or without the overlay.

**[0062]**      Analysis – Send Collaboration Invitation

**[0063]**      A user with appropriate permission can share a report or request another user to collaborate on the report. After clicking the report sharing button, the user will have the option to embed the report into a website, share with a friend, share with a group, or share publicly. If the user chooses to embed the report, the system will generate the appropriate code for the website and allow the user to copy the code to their clipboard. If the user wants to share the report with a friend, the system will display a list of connections and users in the same organization (and/or outside the organization), and the user can select one or more of these users to send a collaboration invitation to. The user then selects which data in the report to share. For

each recipient, the system will indicate which data the recipient does not already have access to. In some instances there will be third party data in the report. In a preferred embodiment, the user must affirmatively select access to be given for this third party data. In one embodiment, if the data to be shared with the recipient must be purchased, the system will require payment from the recipient before allowing access the data.

**[0064]** If the user chooses to share the report with a group, the system will display the groups that the user belongs to, and give the user the ability to search across the entire system network for other groups. The user can either choose to collaborate with a group, or add a report to the group's report tab. The process flow is much like the process flow for sharing with another user. The user selects one or more groups to collaborate with and selects which data in the report to share. The system informs the user whether all users in the group already have access to the selected data, and sends the notifications. If the user wishes to add a report to a group's report tab, a group is selected, and the report tab activity flow is followed, and a report tab is created.

**[0065]** The user can also share the report publicly. The system will allow the user to specify sharing options, such as allowing comments, requiring sign-in for comments, when access to report expires, which accounts/domains to share with, whether users can interact / drill down / filter data in the report, and where the user should be taken if they click the report. The system will then publish the report or a link to the report to a website or location specified, such as Twitter, Facebook or LinkedIn.

**[0066]** Analysis – Receive Collaboration Invitation

**[0067]** A collaboration invitation will display which data sets within the report the user has access to and which they do not. A user must have access, or be given access to, at least one data set in order to receive a collaboration invitation. The invitation will also provide the terms and

conditions of the collaboration. If the user accepts the terms of collaboration, the user will be granted access to the selected data, the user will be subscribed to the report, a notification that the report has been shared (including which data was shared and which users were involved) may be sent to the user who granted access to the new user, sent to the report owner, and may be posted to the activity boards of the organizations involved.

**[0068]**      Analysis – Select Owner

**[0069]**      Report ownership may be modified. If a user without administrative privileges requests ownership of a report, the system will send an appropriate request to the current report owner. If a user has permission to assign an owner to a report, the user may click select owner and the system will display a list of people associated with the organization, indicate the current owner, and indicate which users have full access. The user with administrative privileges may then select a user to become the new report owner and the system will then give the new owner the option to request or buy data associated with the report if not viewable by them. The system can also publish a story about the identity of the new owner, and optionally send a notification to the old owner.

**[0070]**      Analysis – Unsubscribe from Report

**[0071]**      If a user unsubscribes from a report, the system will first determine whether the user is the report owner. If the user is not the report owner, the system will remove the report from the user's subscribed list of reports, and may optionally notify the report owner. If the user is the report owner, the system will remove the report from the user's subscribed list of reports, and allow the user to select a different user to be owner or make the account administrator the report owner.

**[0072]**      Friend Requests

**[0073]** A user may or may not receive friend requests that can be accompanied with a report or analysis. The request may additionally or alternatively require that the user receiving the request share certain data in order to confirm the request. For each request received, the recipient user can choose to ignore and remove from display (but store in history), show all the information on the requesting user and show the report/data/analysis that is being offered and/or the report/data that is being requested. If the friend request is accepted, the recipient user can access the data offered by the requestor. Optionally, the user can choose report permission settings for the recipient user (including the data sets to be shared). A similar work flow may be used where the recipient is a group. Optionally, the confirmation of friend requests can be posted to activity panels and/or the system can notify appropriate users.

**[0074]** Marketplace – View Listing

**[0075]** Users are able to go to an online marketplace to integrate new analyses, data and visualizations into their view. This allows users to extend the functionality of the CIS by using contributions from third parties. In a preferred embodiment, this marketplace is hosted or managed by the CIS (or other system facilitator). The marketplace displays a plurality of listings which include descriptions, prices, ratings, and links to videos, screenshots and other resources (e.g. case studies). Once a user selects a listing, the system may provide the option to try the application/data, and if selected, the demo can be installed in a read-only demo account, and a record of the user trying the demo can be sent to the developer for lead generation. The user may also view sample data, download attachments or view screen shots of the application/data, if available. If the user decides to purchase the application/data, the system will ask the user to agree to the application/data terms and conditions. If the application/data is free, it will be added to the user's account. If the application is not free, the system will determine if the user has

authorization to make the purchase, and if not, prompt the user to send a request to the administrator or payment manager to authorize payment for the application/data.

**[0076]** Developer – Manage Data

**[0077]** Users are able to manage data by adding, editing or deleting data. When a user adds new data, the user must input a name and description for the data, and choose which geographic regions the data applies to (if relevant). The system will provide the user a list of types of possible data, the organization's custom data types, and provide an option to define a new custom data type. The user then selects which type of data is being provided and how often the data is updated (real-time, daily, weekly, monthly, semi-annually, annually, once only). The system will prompt the user for how the data will be provided (e.g. uploaded or posted to web service), and will retrieve the data accordingly. If the user is part of an account that can sell data the system will ask the user whether the data is for internal use only or for sale in the marketplace. If the data is for sale, the user will input costs, define customer support, choose who can maintain the data, and select access policies. The data costs could be based on one time fees, subscription, free, limited demo version, etc. In a preferred embodiment, if the user selects marketplace availability for the data (not internal use only), a prompt will be sent to the system facilitator and/or the organization/group administrator to review the data before it is made available in the marketplace.

**[0078]** The user may edit data, and in one embodiment must describe the changes. The change may require review by the system facilitator and/or the organization/group administrator. In one arrangement, the user is not allowed to change data type or frequency.

**[0079]** If a user wishes to delete data and has appropriate permission to do so, the system determines whether the data set is used in at least one report or analysis, and if so, the system

determines whether it is used internally only. If the data is used internally only, the system notifies the users of the reports and analyses that the data is used in. The user wishing to delete the data is able to select alternate data to suggest to report builders and report owners, and then choose when the data will be taken offline. When the data is taken offline, the data will be removed from the data lists of the user, organization, and all reports and analyses that use that data. If the data is not only used internally, the system may determine whether users paid for the data.

**[0080]** In a preferred embodiment, if a user paid for the data, the data may not be deleted by another user. The system notifies users of other organizations that are using the data, and the work flow follows similarly to internal use only data deletion and the data will be removed from the marketplace.

**[0081]** Developer – Manage Report

**[0082]** The system will show a list of reports that the user maintains. The user can choose to create a new report, delete a report, or create a sandbox version of the report which is seen only by users who have permission to see a development version of the report. If the user chooses to edit a report, the system determines if a sandbox version exists, and if so, loads the settings of the sandbox version. Otherwise, the settings of the live version of the report are loaded. Once the user has finished with their edits, they can choose to “push” the changes or work on the changes later. If the user chooses to push the changes and the report is not in the marketplace, the user may describe the changes and push the sandbox version of the report to be the live report. If the report is in the marketplace, changes to the report may require review by the system facilitator or an administrator. The create new report and delete report workflow are similar to those described above. When the user tries to delete a report, the system will determine if there are

subscribers to the report, and if so, notify the user that there are other users who subscribe to the report, allow the user to select alternate reports to suggest to the subscribers and write a message to the subscribers. The user must then choose when the report will be taken offline, and the system will send a notification that the report will be removed. At the designated time, the report will be removed from the list of reports the user manages, from the list of the organization's reports, and from all subscribers' report lists. If the report is available in the marketplace it will be removed from there as well. As mentioned above, in one embodiment, the report will not be removed from users who have paid for it.

**[0083]** In one arrangement, when the user chooses to create a new report, they must enter a name and description, select a report owner from the list of users in the organization or allow an agency to manage the report, and choose which geographic region the report is applicable for. The system shows the user all the data sets that are available to the user's organization. The user selects/adds the data they want, and may select data sets that are recommended for overlaying. The user may also select a visualization to show the selected data, if a visualization is available. The user then modifies the settings and report parameters, and may preview the report (using sample data if necessary). If the user has an account that permits them to sell reports, the system will query whether the report should be placed for sale in the marketplace, and if so, cost and payment parameters (one-time fee, subscription fee, free, shareware, etc). The user must also define the level of customer support to be provided and choose users that can maintain the report. The user may also want to allow access to the report while it is in development, for feedback and testing, or may want to allow stakeholders access.

**[0084]** For ease of exposition, not every step or element of the present invention is described herein as part of software or computer system, but those skilled in the art will recognize that each

step or element may have a corresponding computer system or software component. Such computer system and/or software components are therefore enabled by describing their corresponding steps or elements (that is, their functionality), and are within the scope of the present invention. In addition, various elements of the present invention may be stored in a non-transitory storage medium, and selectively executed by a processor. The transfer of data, analyses, and/or reports may be performed by both users and systems.

**[0085]** While the invention has been particularly shown and described with reference to a preferred embodiment, it will be understood by those skilled in the art that various changes in form and detail may be made therein without departing from the spirit and scope of the invention.

The embodiments of the present invention for which an exclusive property or privilege is claimed are defined as follows:

1. A computer based data management system, comprising:
  - a first communication link to support transfer of analytic data into said system;
  - a second communication link to support data transfer between said system and a first user;
  - a third communication link to support data transfer between said system and a second user;
  - a processor with program-controlled operation for processing a first data set received from said first communication link and a second data set, wherein said first data set is a different format than said second data set, and wherein said processing comprises converting said first and second data sets to a unified system format;
  - said processor further operable to:
    - generate a report utilizing said processed first and second data sets based on instructions received through said second communication link;
    - modify said report based on instructions received through said third communication link; and
    - calculate said second user's numeric indicia of topical knowledge relative to said first user, wherein said second user's numeric indicia of topical knowledge represents said second user's level of knowledge on a particular topic as compared to said first user's level of knowledge on the same topic.

2. The computer based data management system of claim 1, wherein said processor is further operable to generate an analysis based on said report.
3. The computer based data management system of claim 1 or 2, wherein a third user having access to said report is able to comment on said report.
4. The computer based data management system of claim 3, wherein said comment is associated with one or more data points, and said association is represented visually.
5. The computer based data management system of any one of claims 1 to 4, wherein said processor is further configured to record the access history of the report.
6. The computer based data management system of claim 5, wherein the access history includes user name, data being viewed, and duration of access.
7. The computer based data management system of claim 3, said processor further configured to display the data viewed by said third user when commenting on said report, in response to a fourth user selecting said third user's comment.
8. The computer based data management system of claim 1, wherein said numeric indicia of topical knowledge calculation is based on said first user's profile and said second user's profile.

9. The computer based data management system of any one of claims 1 to 8, wherein said first data set provided through said first communication link is updated in real-time or near real-time.
10. The computer based data management system of claim 9, wherein said report is updated in real-time or near real-time.
11. The computer based data management system of any one of claims 1 to 10, wherein said data used in said report is processed with a tool, said tool relating to one of: analysis, data collection, and visualization.
12. The computer based data management system of claim 11, wherein said tool is developed by a third party using a development kit.
13. The computer based data management system of claim 11, wherein said tool is available for purchase in an online marketplace.
14. The computer based data management system of any one of claims 1 to 13, wherein said report is available for purchase in an online marketplace.

Collective Intelligence  
Start to use

Sign-In

Corporate E-mail:

Password:

Sign-In

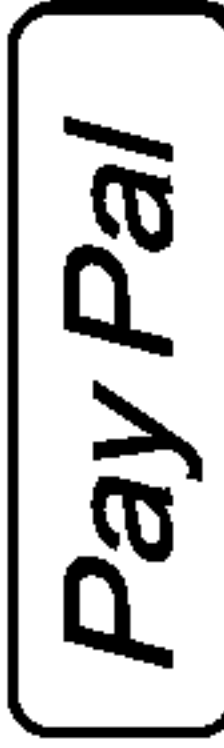
Or, sign-in with the one of the following services:

 Facebook

 *Twitter*

 YAHOO!

 Google

 *PayPal*



Register New Account

Your Corporate E-mail:

Confirm E-mail:

Password:

Confirm Password:

Presentation Code (optional):

overlooks inquiry

Type the two words:

 ReCAPTCHA  
stop spam.  
read books.

☐ I would like periodic updates from Collective intelligence

☐ Yes, I agree to the Collective Intelligence

[Terms of Service](#)

Register

FIG.1

**FIG. 2a**

**FIG. 2b**

edit

Collective Intelligence

Home

Analysis

Sharing

Learn

Develop

Presentations

Messages

Account

Welcome, Toby.

Last logged in: Never

US English

Trending Analysis: Macroeconomic Data

1

Friend Requests

Find your friends and colleagues so you can

Add Friends

Group Activity

Q

Josh L. replied to Jennifer R.'s comment

New Accounts. 1 hour ago

Comment

"lorem ipsum dolor sit amet, con

incididunt ut labore et dolore ma

Close

Connect Your Account

Connect your Collective Intelligence accounts to other networks to get started more quickly. Connecting will help you leverage the strength of your network and share your knowledge with others. Plus, we can import information into this form to help you get started.

Linked Connected as: [toby.flenderson@gmail.com](mailto:toby.flenderson@gmail.com)

[Disconnect LinkedIn Account](#)

Connect Facebook

Connect Twitter

Connect Google

Tell Us About Yourself

Fields marked with \* are required.

Profile Picture:

Try and import from connected accounts.

[Change photos](#)

First Name: \*

Toby

Last Name: \*

Flenderson

Title: \*

International Marketing Coordinator

Add keyword

et Marketing

7 hours ago

elit, sed do eiusmod tempor incididunt ut  
eniam, quis nostrud exercitation ullamco

3 days ago

elit, sed do eiusmod tempor incididunt ut  
eniam, quis nostrud exercitation ullamco

edit settings

FIG.3a

**FIG. 3b**

Collect Account Info for Company

Collective Intelligence

Home

Analysis

Sharing

Learn

Develop

Presentations

Messages

Account

Welcome, Toby.

Last logged in: Never

US English

Trending Analysis: Macroeconomic Data

1

Friend Requests

Find your friends and colleagues so you can level up

Add Friends

Group Activity

Josh L. replied to Jennifer R.'s comment

New Accounts. 1 hour ago

Comment

Like

Hide

Edit

Delete

"lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat."

Yusef M. added data, Point of Sales for Flagship Stores. 3 hours ago

Comment

Like

Hide

Jim H. annotated the report, Creative Effectiveness. 3 hours ago

Comment

Like

Hide

"lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat."

See more activity

Congratulations! Your account is verified and you are ready to get started! Let's populate some of your data into Collective Intelligence.

Accounts for Go-Go Bicycles

Web Analytics

Search Advertising

Display Advertising

E-mail Marketing

Select your web analytics provider:

Analytics Company 1

Analytics Company 2

Analytics Company 3

Analytics Company 4

Other

Username

Password

Ask someone else to submit credentials

Link Account

Clicking verifies the credentials. Informs user if there is a problem.

☐ Skip all steps, do not show again

Next >

Add keyword

Marketing, 7 hours ago

elit, sed do eiusmod tempor incididunt ut enim, quis nostrud exercitation ullamco

Add keyword

elit, sed do eiusmod tempor incididunt ut enim, quis nostrud exercitation ullamco

3 days ago

Schedule of Events

Company

Industry

+

Event

Kevin M. is speaking at Long Tail Webinar

Present Q4 Cross-Media Campaign for New Accounts

Date

12/14/2010

01/15/2010

Owner

Kevin M.

Meredith P.

Announcements

edit settings

Active & Upcoming Campaigns

| Campaign                         | Media Channel  | Start Date | Owner       |
|----------------------------------|----------------|------------|-------------|
| Rewards for Repeat Purchases     | Online Display | 06/04/2010 | Meredith P. |
| Northeast Pilot for New Accounts | Radio          | 12/01/2010 | Pam B.      |
| Northeast Pilot for New Accounts | Television     | 12/01/2010 | Andy B.     |

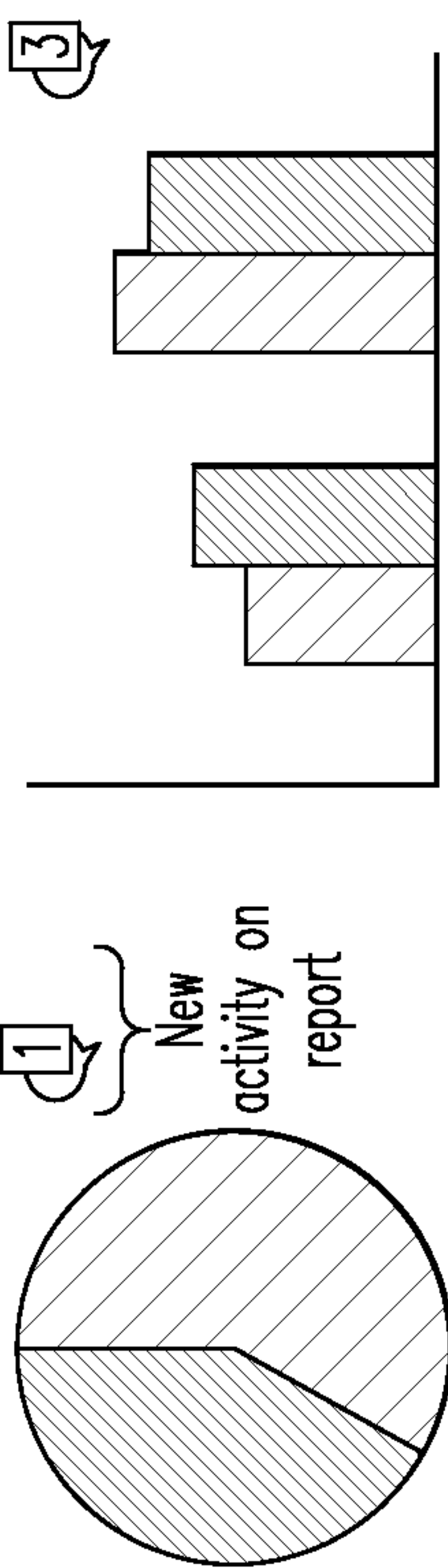
FIG. 4

[illegible]

[illegible]

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                   |                                                                                   |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |
| <u>Home</u>                                                                         | Analysis                                                                            | Sharing                                                                             | Learn                                                                               | Develop                                                                             | Presentations                                                                       | Messages                                                                          | Account                                                                           |

Headlines / Tweets / Comments on Blogs / edit settings



## edit settings

- |                                                                                       |                                      |                                   |
|---------------------------------------------------------------------------------------|--------------------------------------|-----------------------------------|
|  | Toby Flenderson from AA Advertising  | <u>accept ignore add to group</u> |
|  | Janet Levenson from On Target Data   | <u>accept ignore add to group</u> |
|  | Creed Bratton from American Autogiro | <u>accept ignore add to group</u> |

## edit settings

- Josh L. replied to Jennifer R.'s comment on the presentation, Q4 Cross-Media Campaign for New Accounts. 1 hour ago

Comment

Like

Hide

Edit

Delete

Yusef M. added data, Point of Sales for Flagship Stores. 3 hours ago

Comment

Like

Hide

Jim H. annotated the report, Creative Effectiveness. 3 hours ago

Comment

Like

Hide



Jim Halpert, SVP Consumer Marketing

Paper Plus

View Profile

Send Message

673

A reputation score or points

ore activity

## edit settings

| Industry | Company | Event                                            | Media Channel                                                                         | Start Date                                                                                     | Owner                                                                                                  |
|----------|---------|--------------------------------------------------|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
|          |         | <u>Add event</u>                                 |                                                                                       |                                                                                                |                                                                                                        |
|          |         | <u>Rewards for Repeat Purchases</u>              |  | 06/04/2010                                                                                     |  <u>Meredith P.</u> |
|          |         | <u>Northeast Pilot for New Accounts</u>          |  | 12/01/2010                                                                                     |  <u>Pam B.</u>      |
|          |         | <u>Northeast Pilot for New Accounts</u>          |  | 12/01/2010                                                                                     |  <u>Andy B.</u>     |
|          |         | Kevin M. is speaking at <u>Long Tail Webinar</u> |    |                                                                                                |  <u>Kevin M.</u>    |
|          |         |                                                  |                                                                                       | <div>Add to My Calendar</div> <div>Send E-mail Reminder</div> <div>Share</div> <div>Hide</div> |                                                                                                        |
|          |         | <u>Announcements</u>                             |                                                                                       |                                                                                                | <u>edit settings</u>                                                                                   |

# FIG. 7



edit

Collective Intelligence

Home

Analysis

Sharing

Learn

Develop

Presentations

Messages

Account

Welcome, **Toby.**

Last logged In: 11/06/2010, 10:15pm EST

US English

From: 10/01/2010 to 12/31/2010

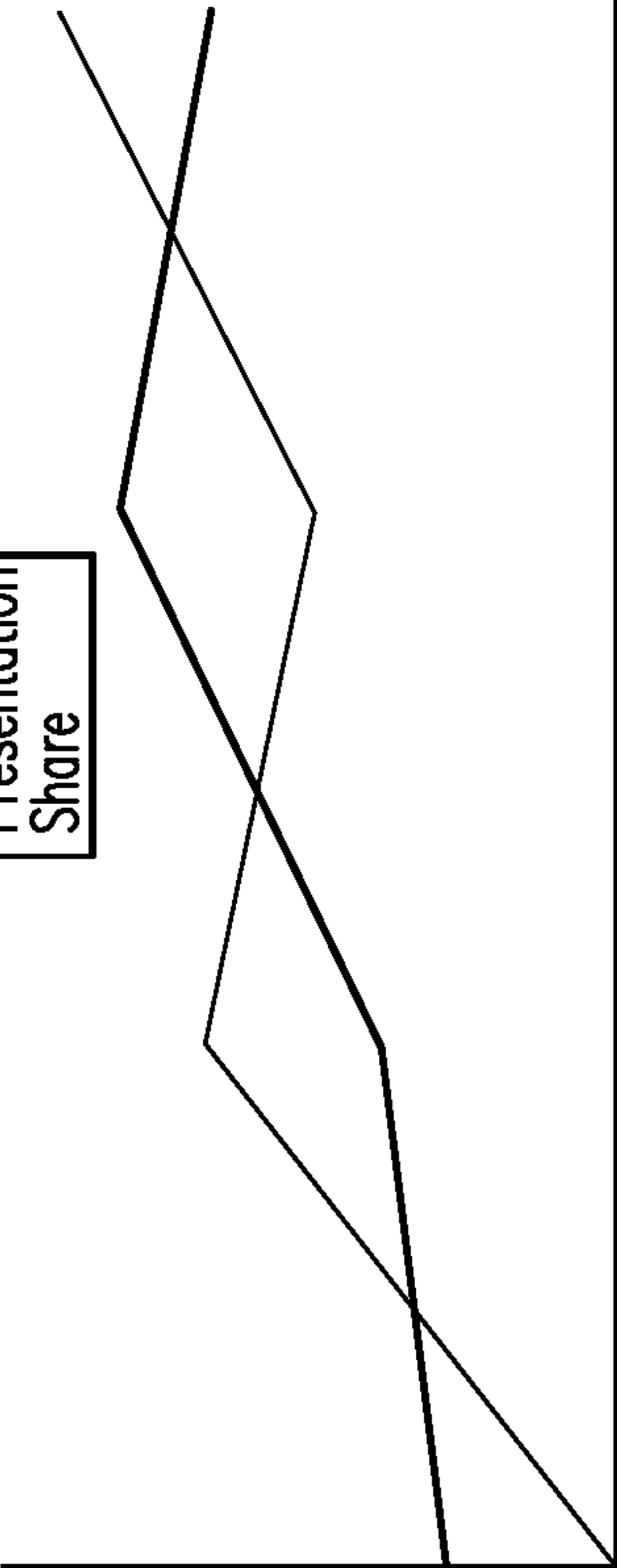
☐ All dates

**Calls Per Day**

Last updated: 7 minutes ago  
[Overlay](#) | [Annotate](#) | [Like](#)

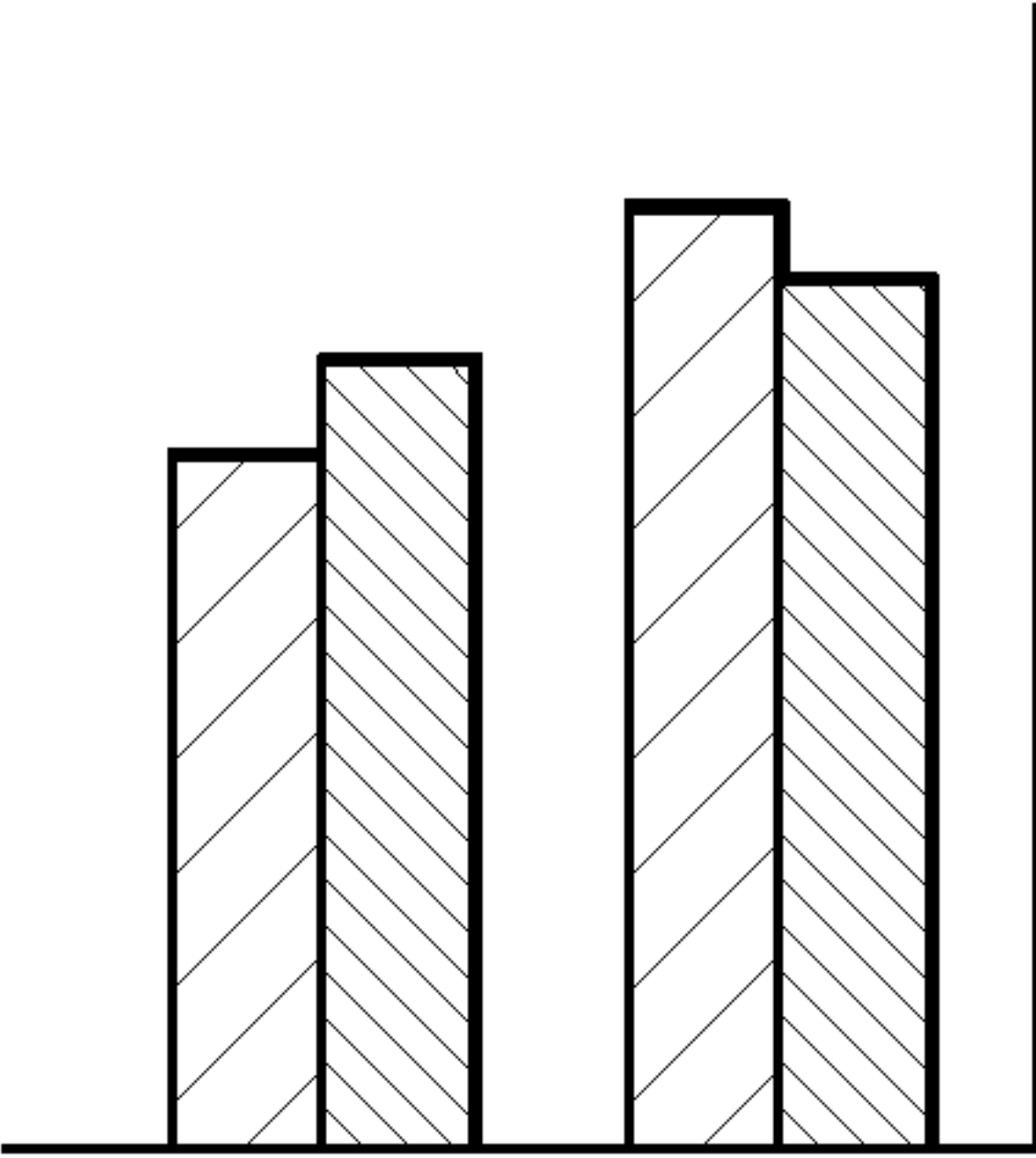
3

Discuss  
Presentation  
Share



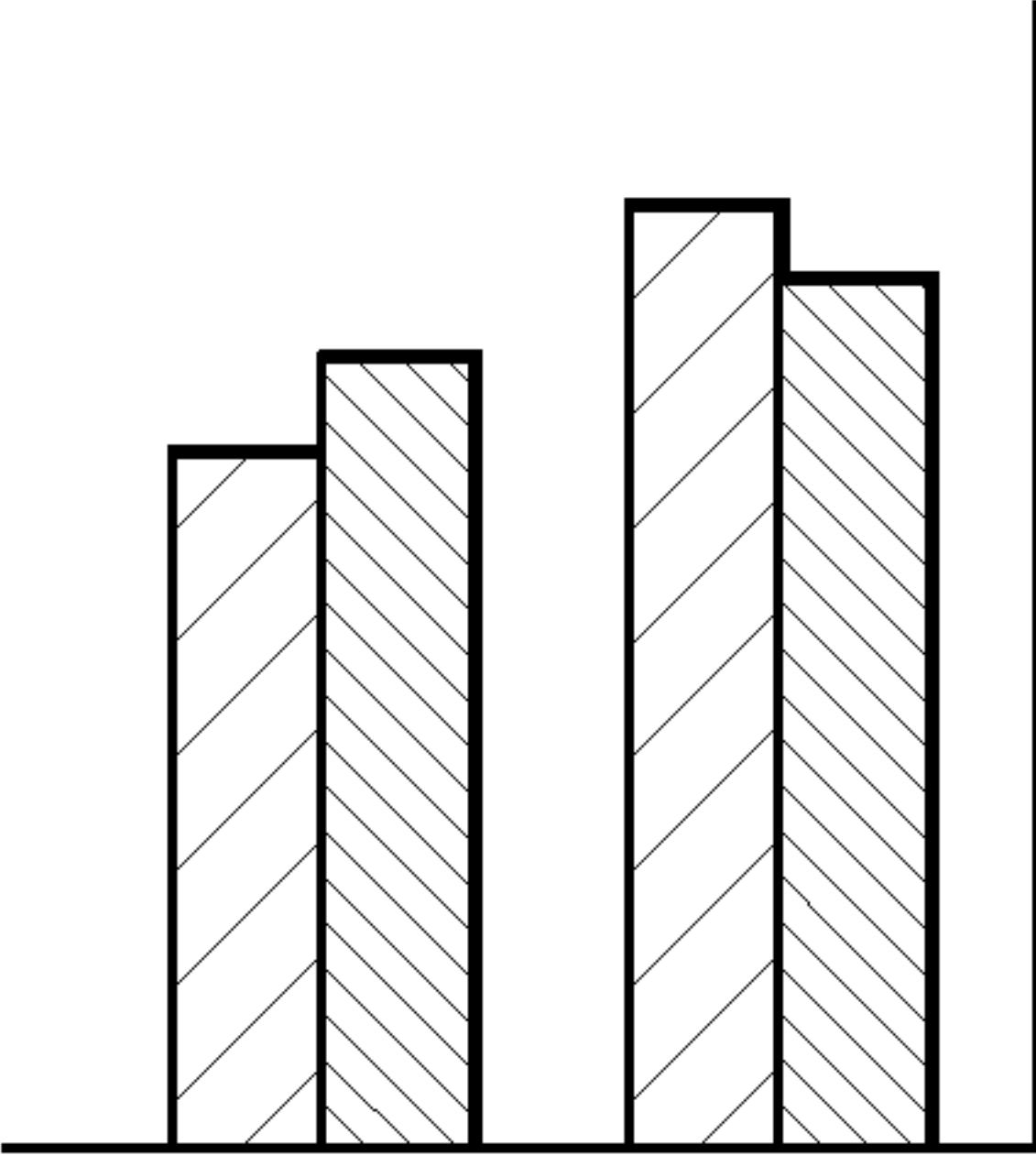
**Call Topic**

Last updated: 7 minutes ago  
[Edit](#) | [Annotate](#) | [Like](#)



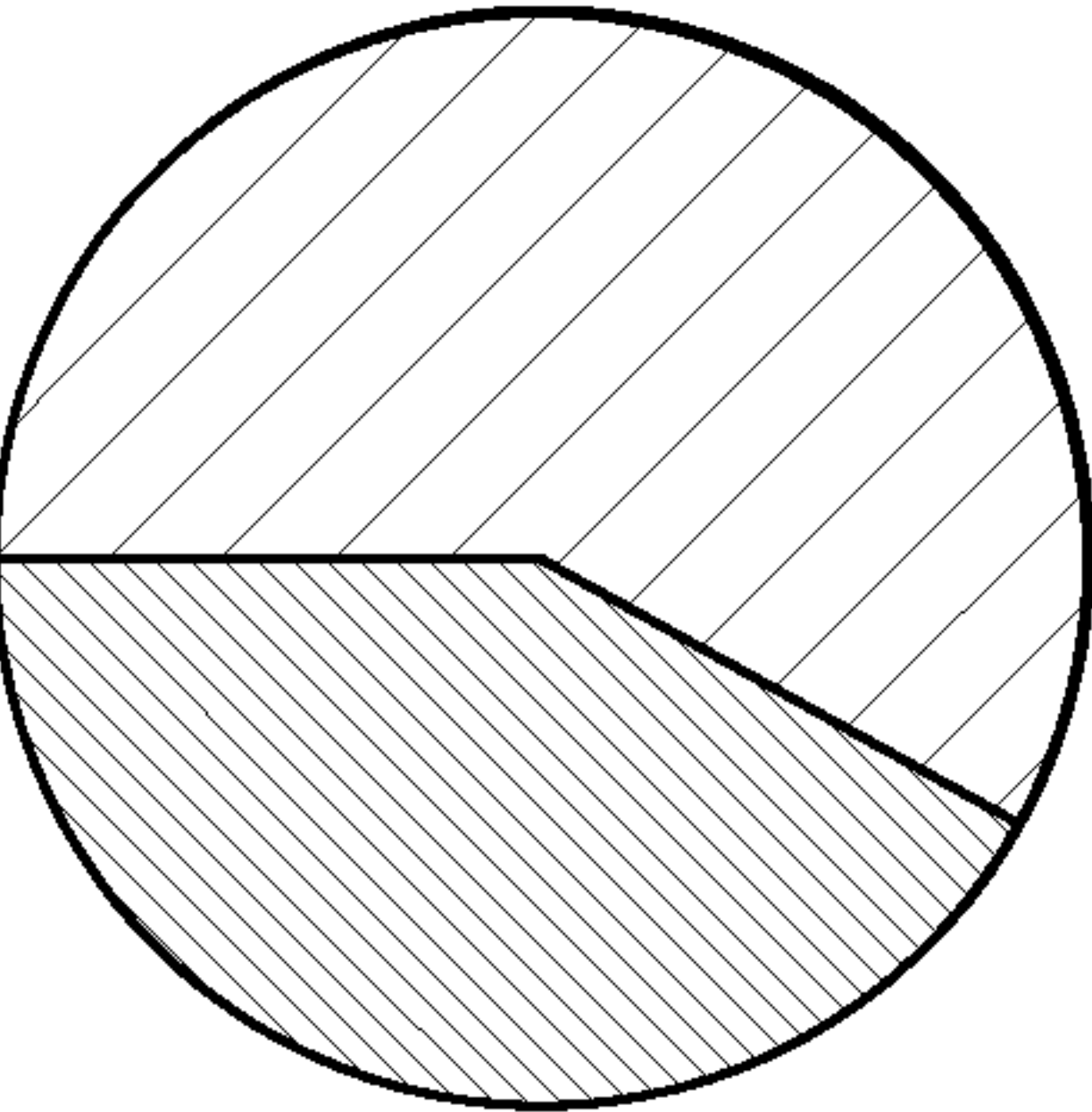
**Net Sales/Day**

Last updated: 7 minutes ago  
[Edit](#) | [Annotate](#) | [Like](#)



**Caller Gender**

Last updated: 7 minutes ago  
[Edit](#) | [Annotate](#) | [Like](#)



**Refunds/Day**

Last updated: 7 minutes ago  
[Edit](#) | [Annotate](#) | [Like](#)

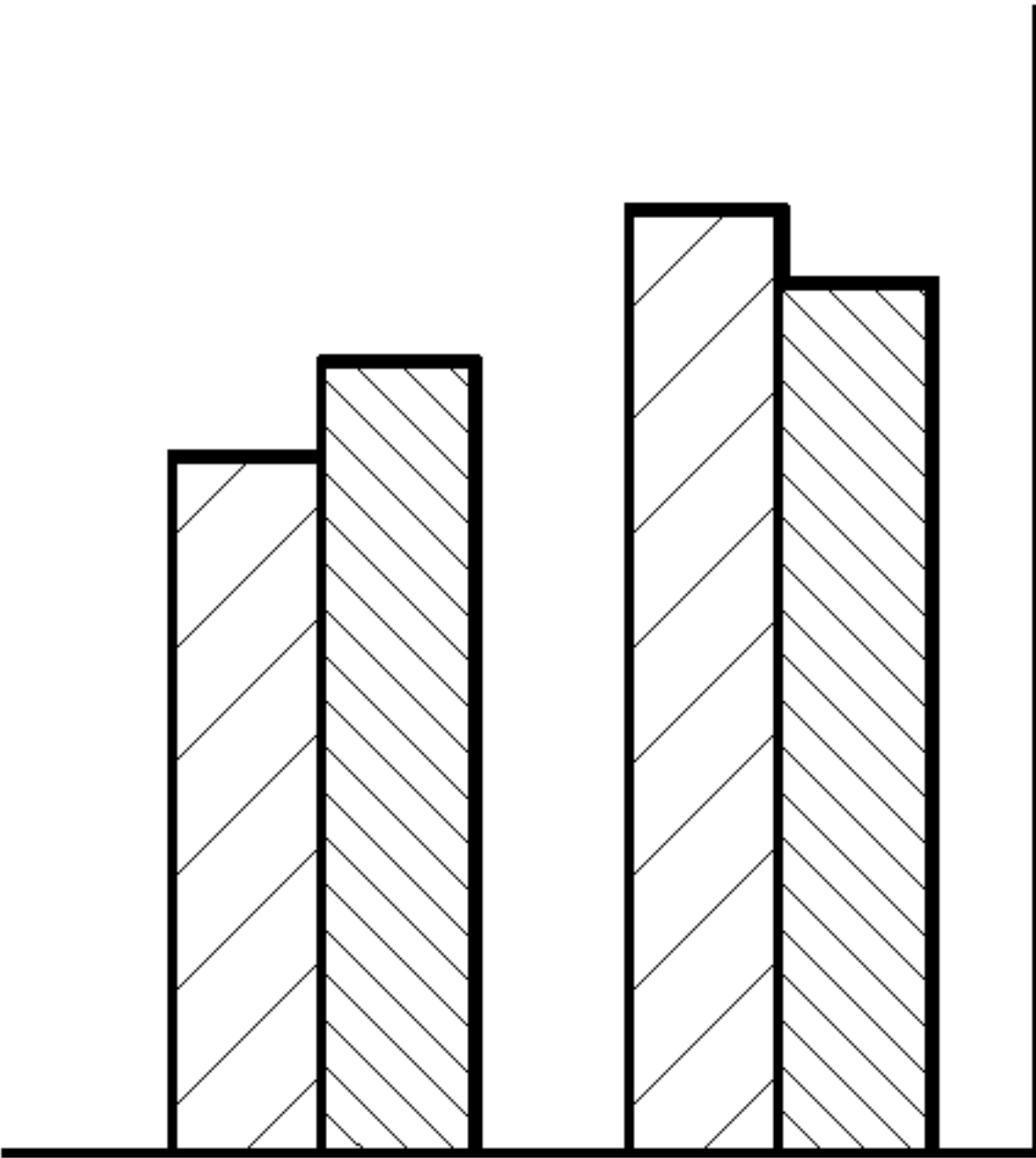


FIG.9

Welcome, Toby.

Last logged In: 11/06/2010, 10:15pm EST

US English

Home

Analysis

Sharing

Learn

Develop

Presentations

Messages

Account

From: 10/01/2010 to 12/31/2010

All dates

Calls Per Day

Last updated: 7 minutes ago

Discuss Edit Presentation Annotate Share

Enter your comment:

lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut

record Submit

If recorded annotation, we can still transcribe annotation and provide text and audio.

Caller Gender

Call Topic

Net Sales/Day

Refunds/Day

**FIG. 10**

edit

Collective Intelligence

Welcome, **Toby.**

Last logged in: 11/06/2010, 10:15pm EST

US English

Home

Analysis

Sharing

Presentations

Messages

Account

From: 10/01/2010 to 12/31/2010

☐ All dates

Calls Per Day

Last updated: 7 minutes ago

|              |
|--------------|
| Discuss      |
| Edit         |
| Presentation |

Select the data to add to this chart:

☐ POS

☐ Refunds

☐ Unique website visitors

☐ New website users

☐ Resolved calls

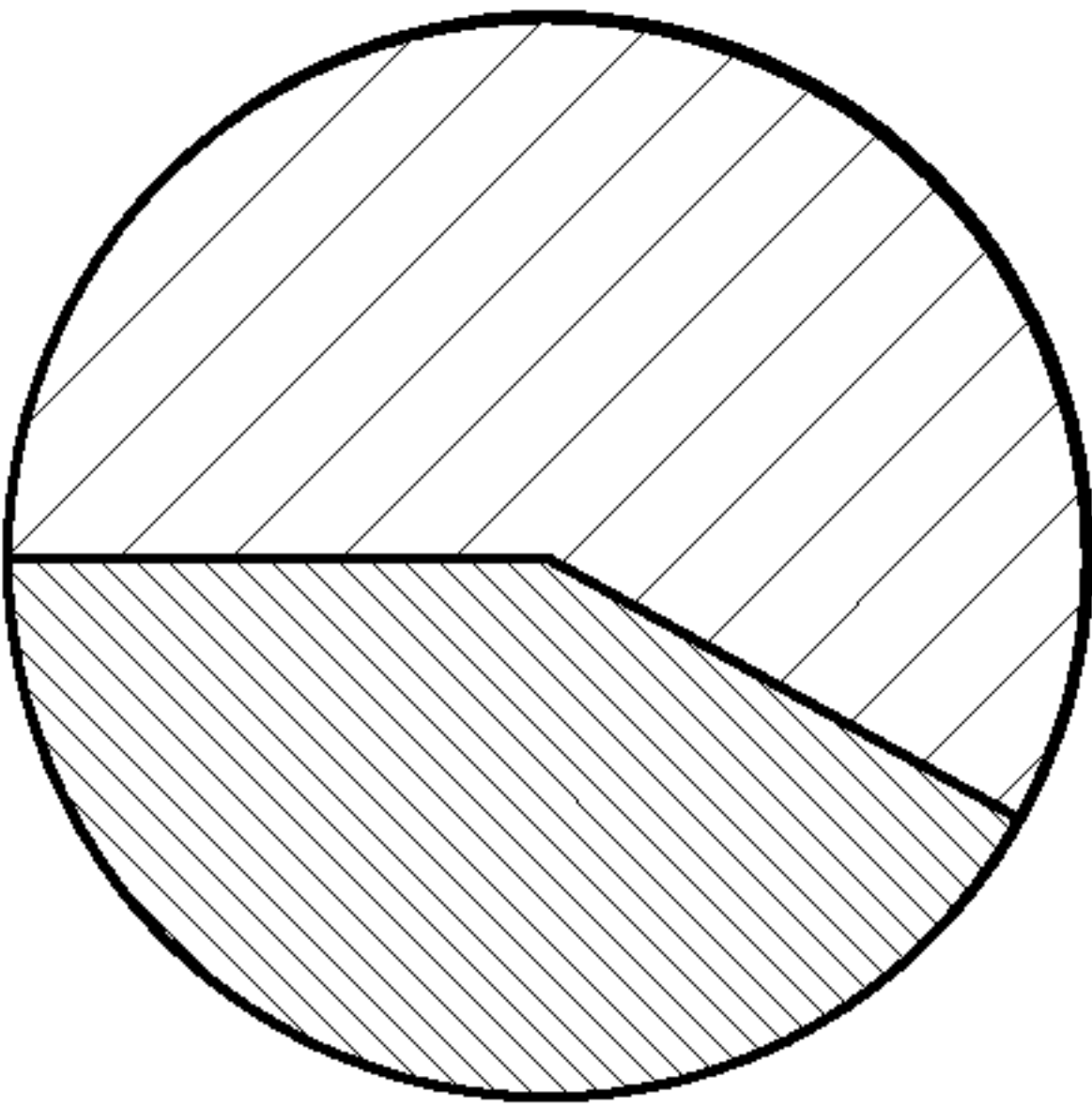
☐ Customer complaints

☐ Sales

☐ # of website purchases

more

Caller Gender



Time ->

Call Topic

Net Sales/Day

Refunds/Day

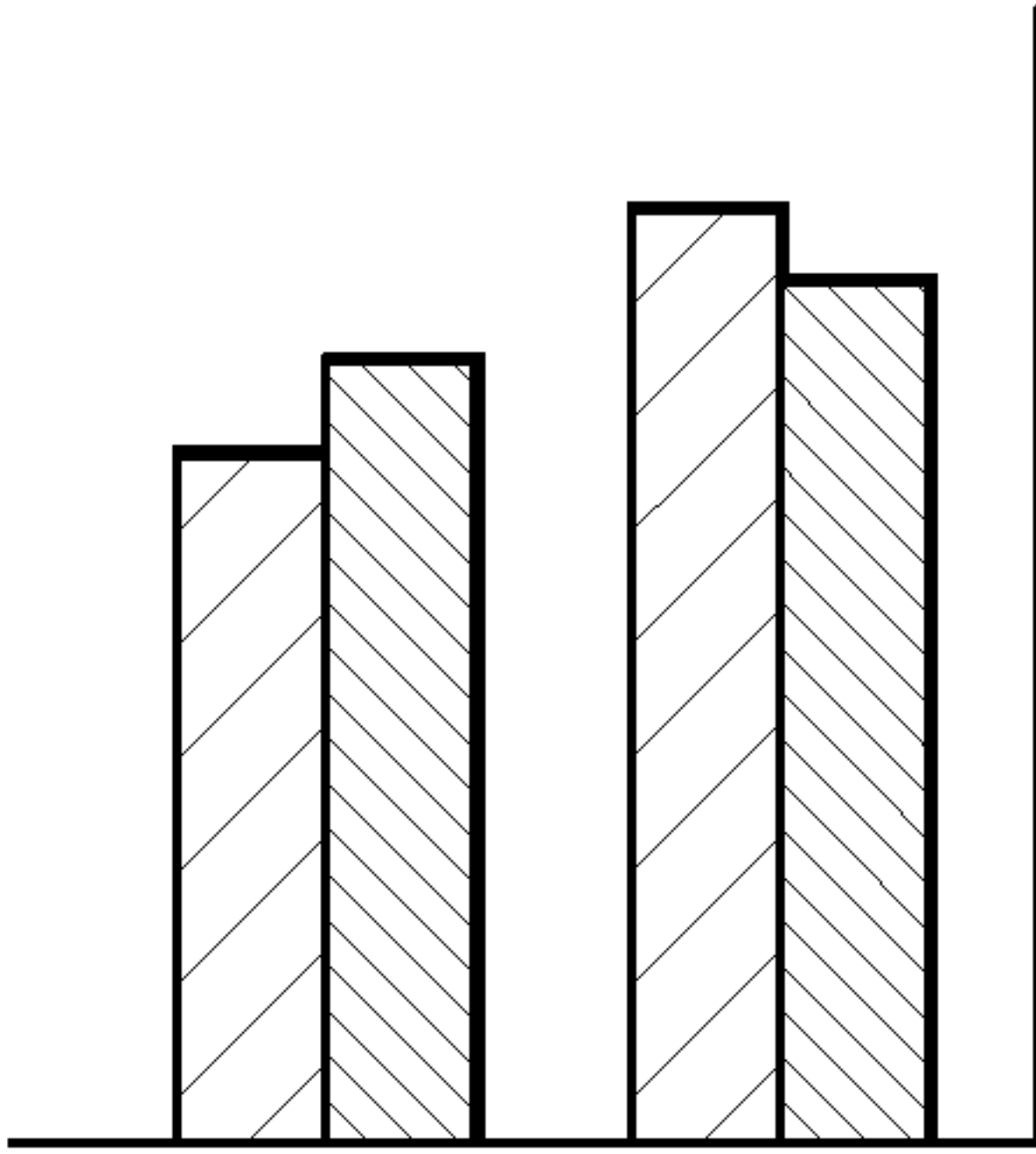
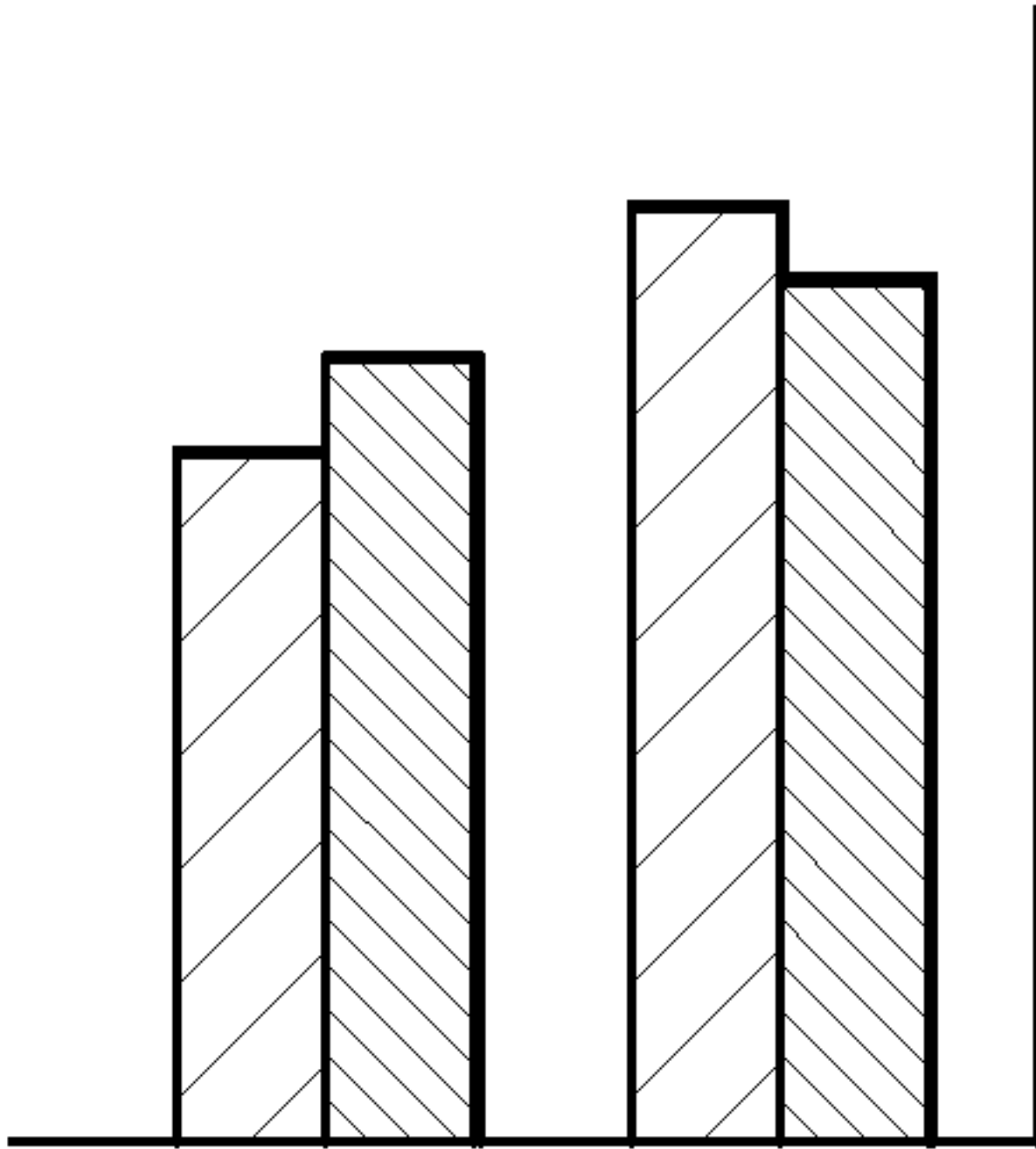
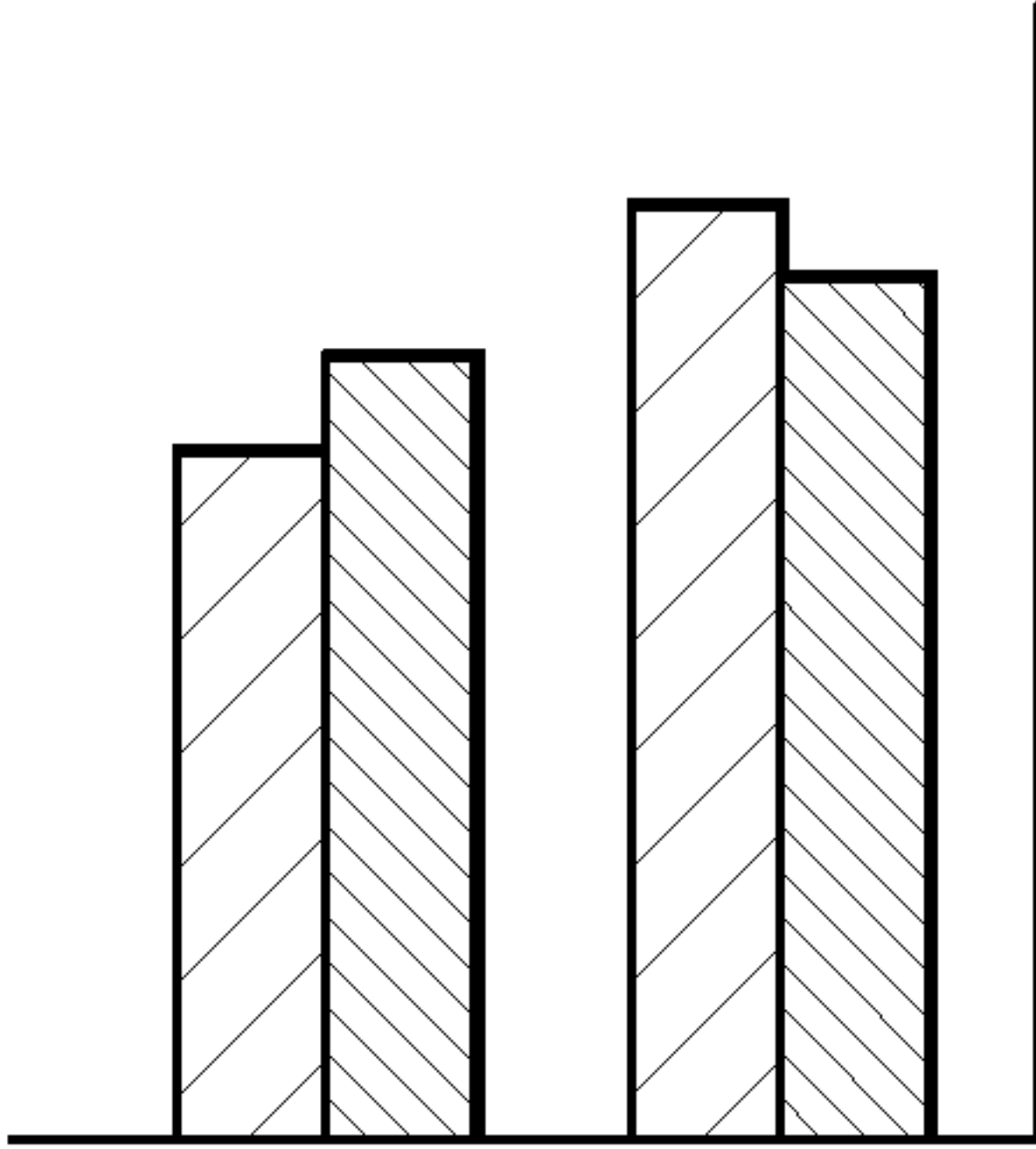


FIG.11

edit

Collective Intelligence

HomeAnalysisSharingLearnDevelopPresentationsMessagesAccount

Welcome, Toby.

Last logged in: 11/06/2010, 10:15pm EST

US English

From: 10/01/2010 to 12/31/2010

☐ All dates

Calls Per Day

Last updated: 7 minutes ago

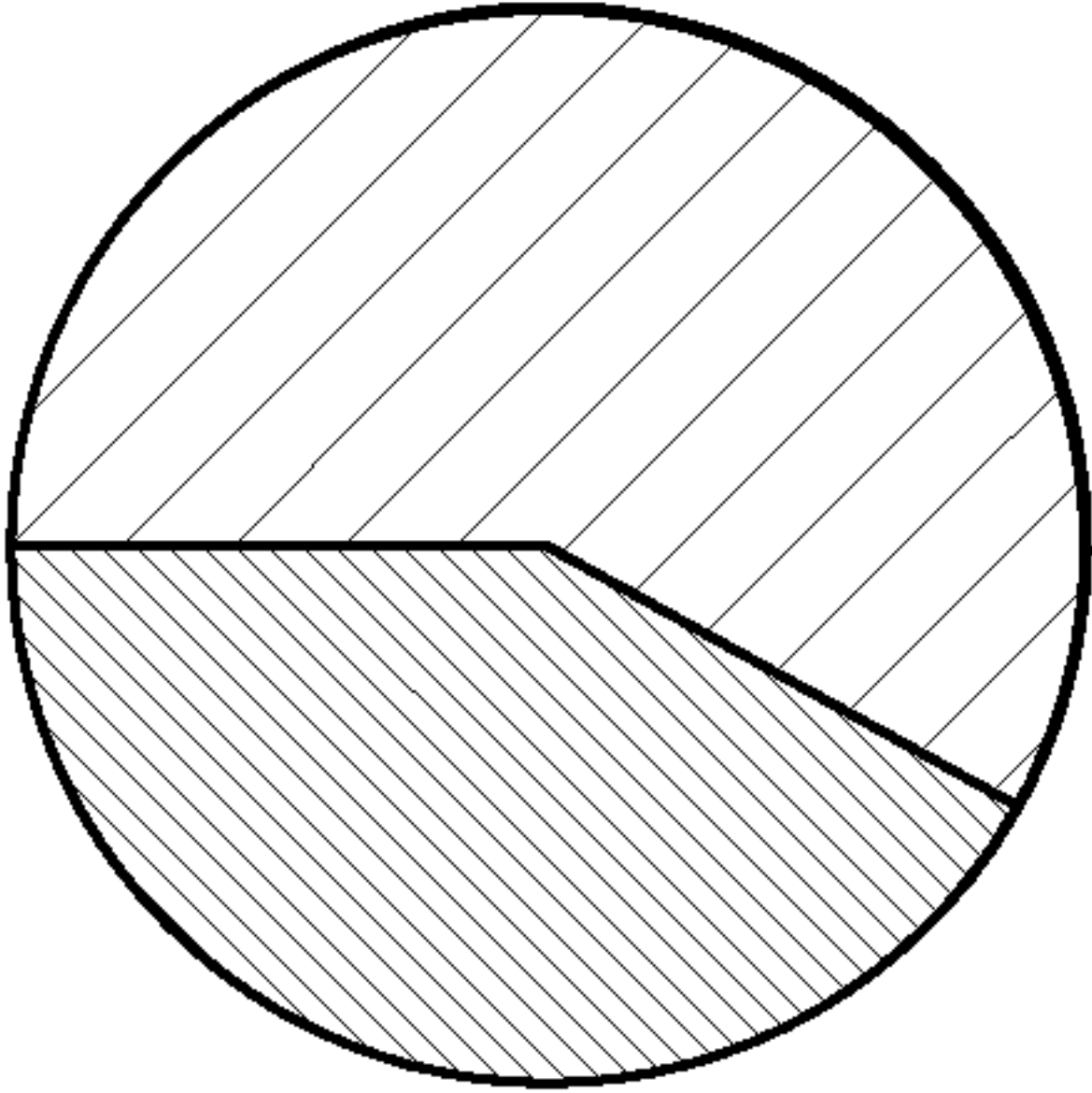


- Discuss
- Edit
- Presentation
- Annotate
- Share

Friends Group Partner Publish

Only use share options that are congruent with access options of report. For example, don't allow people to tweet this report if Access is set to 'Company Only.'

Caller Gender



Time ->

Call Topic

Net Sales/Day

Refunds/Day

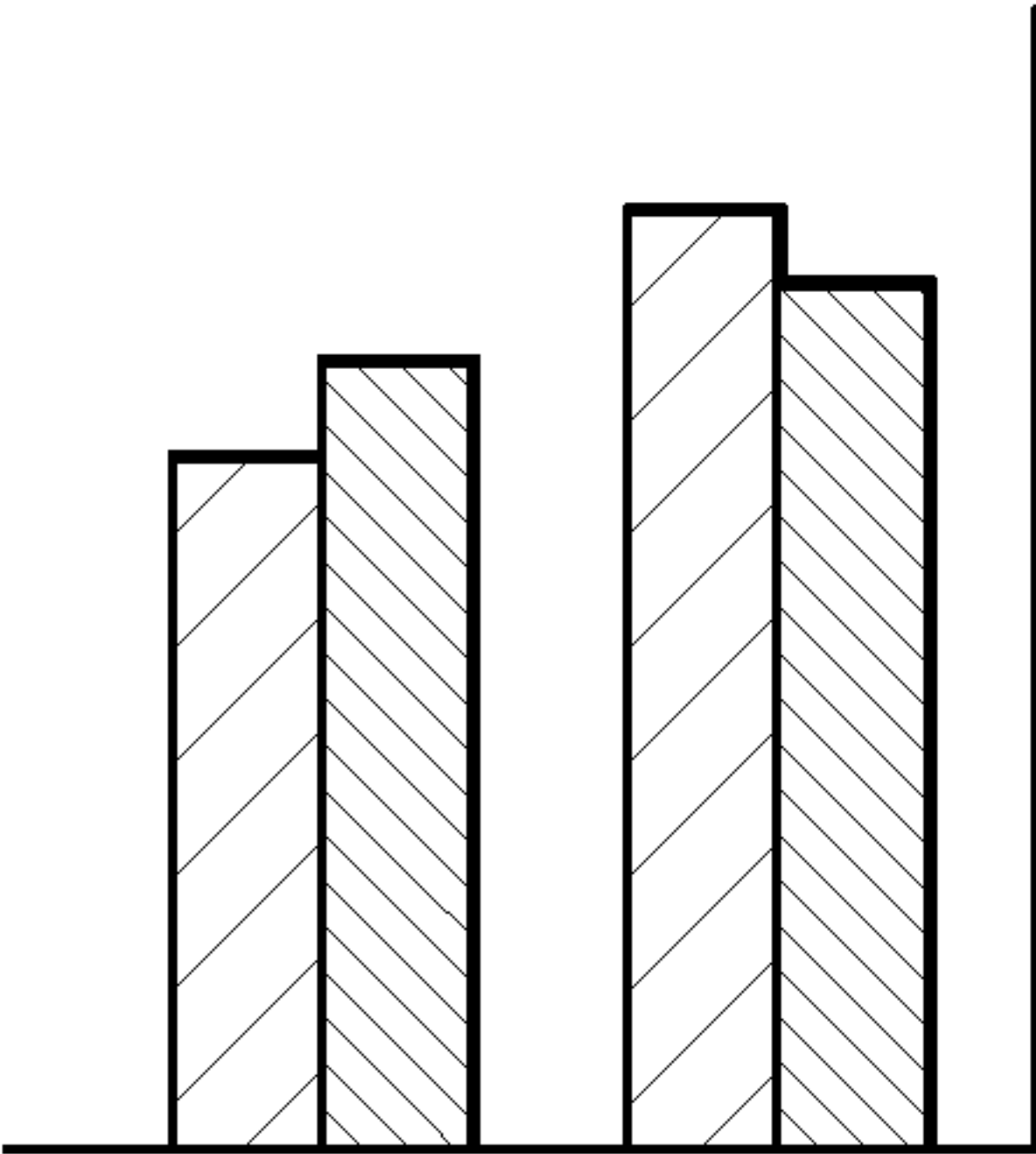
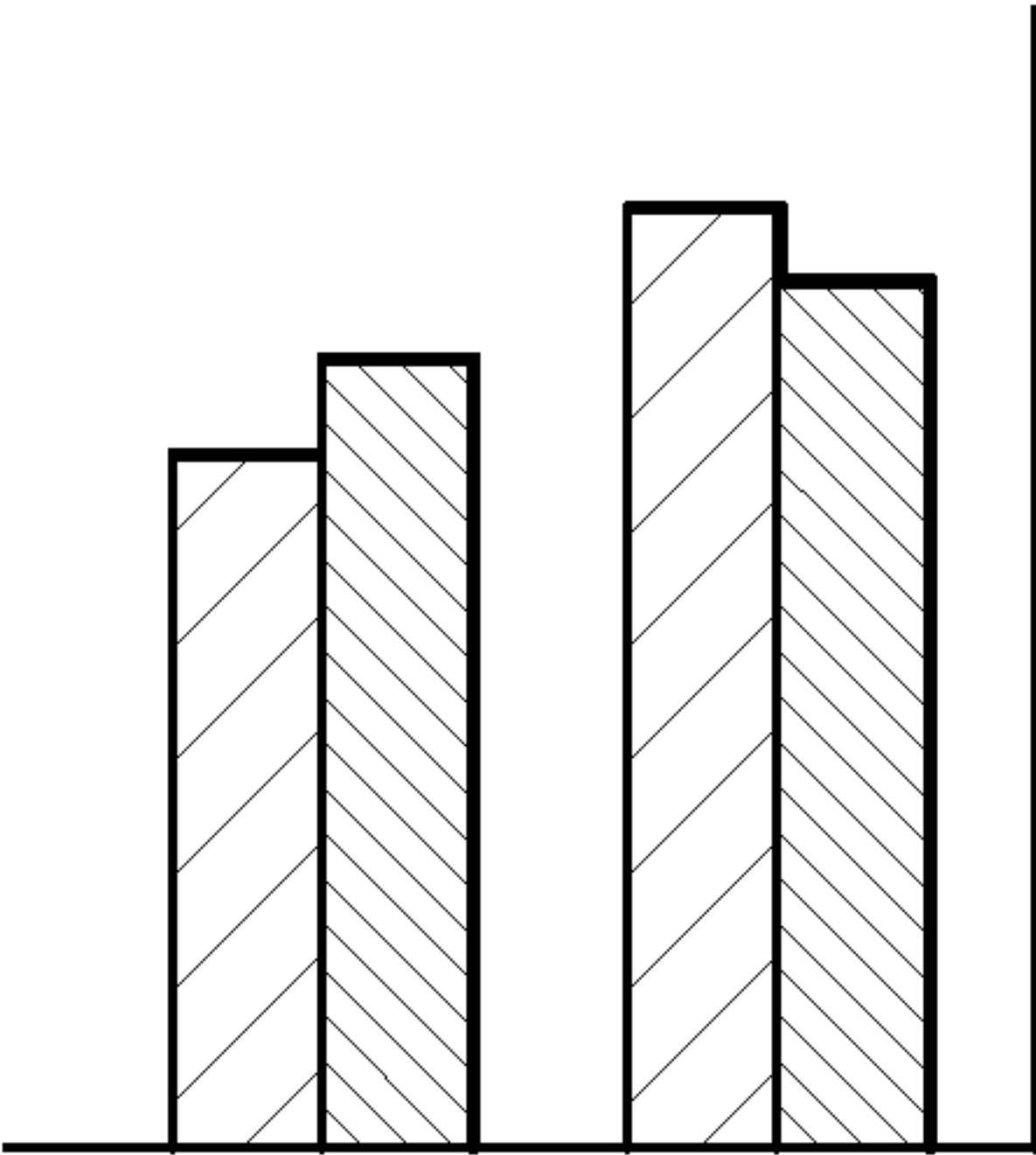
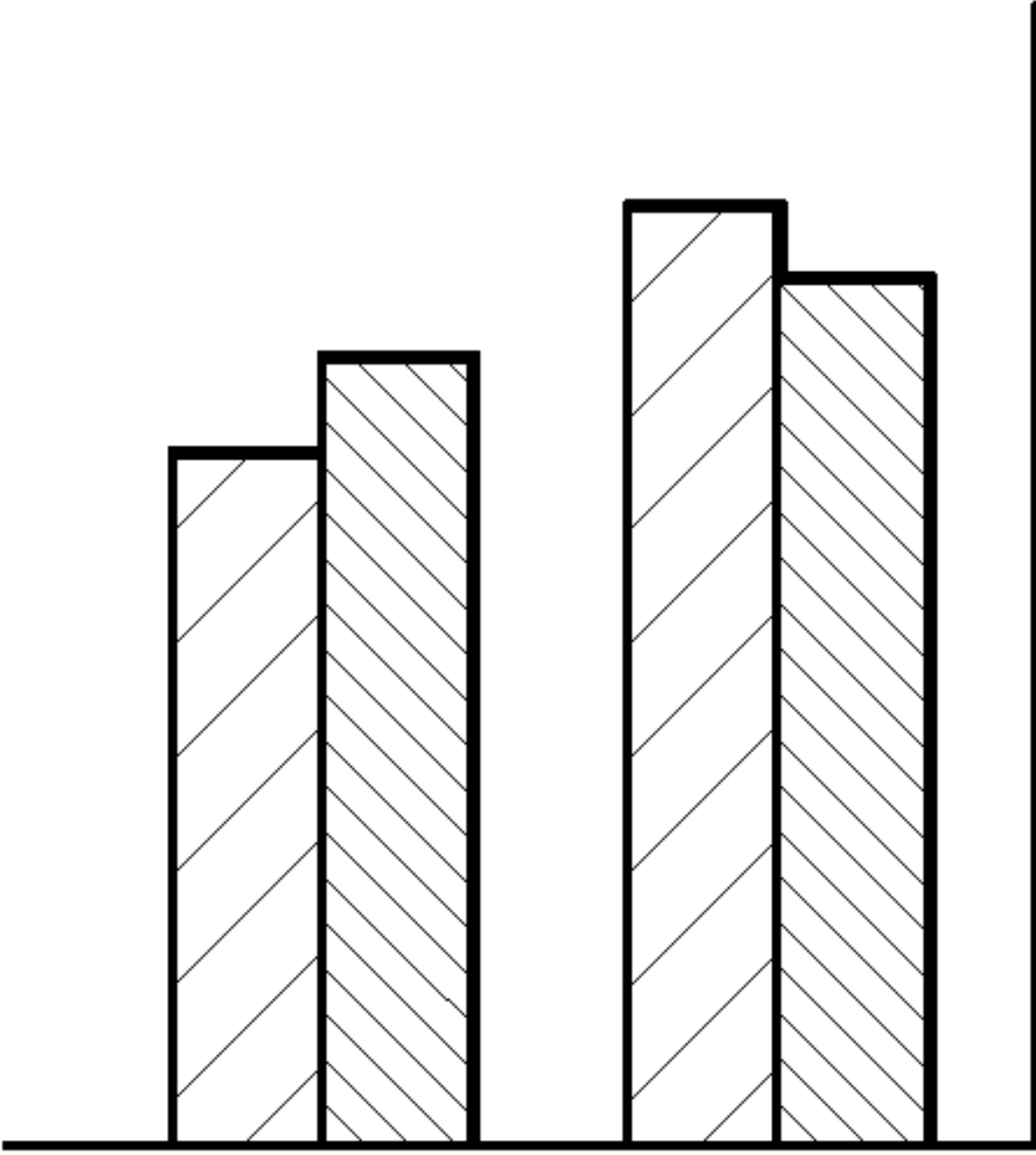


FIG.12

Welcome, Toby.  
Last logged in: 11/06/2010, 10:15pm EST

edit

Home

Analysis

Sharing

Develop

Learn

Presentations

Messages

Account

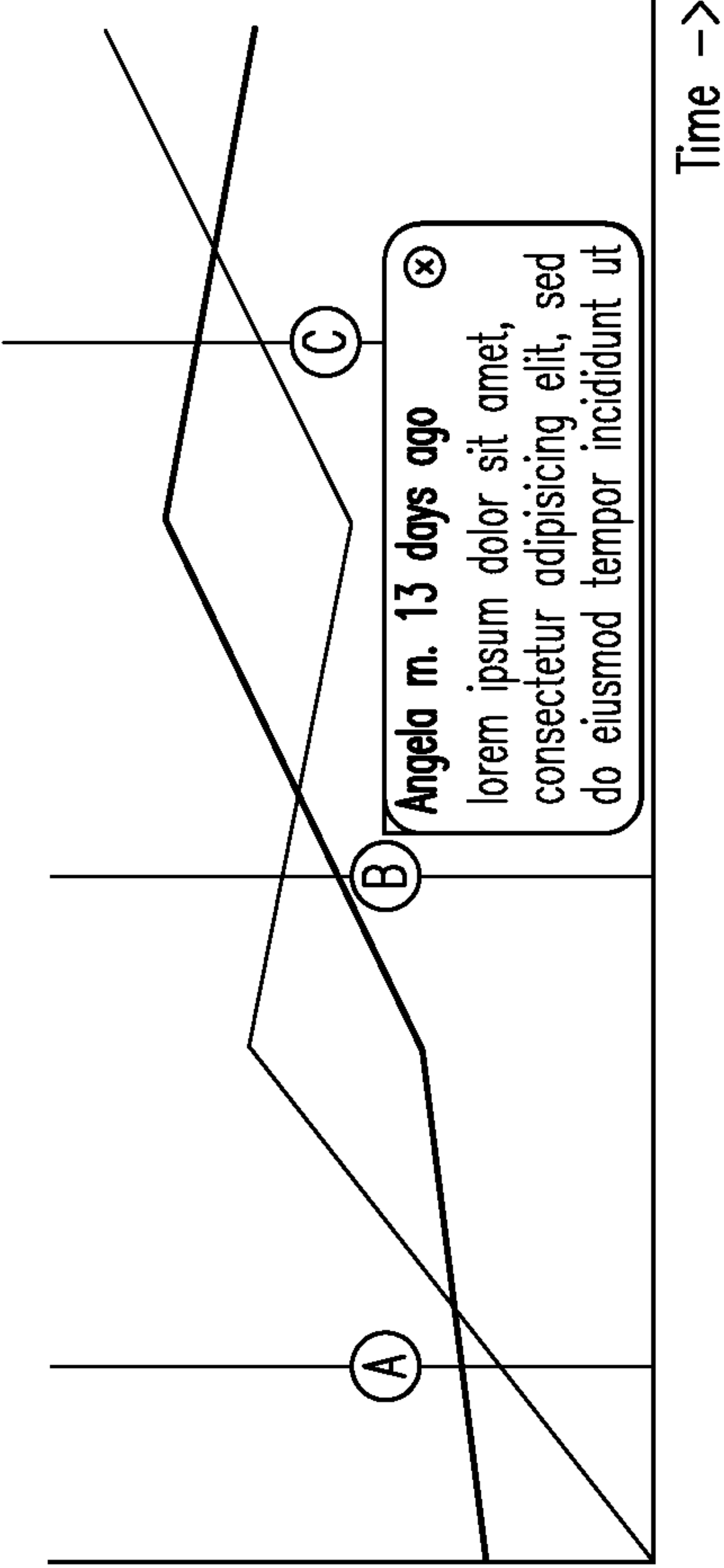
Discussion: Calls Per Day

From: 10/01/2010 to 12/31/2010

☐ All dates

Calls Per Day

Last updated: 7 minutes ago



Share: Comment Link Attachment

Activity

Creed B. 15 hours ago  
lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut

FIG.13a

Details

Name: Calls Per Day

Data: Blue Diamond Call Center Data  
Blue Diamond Net Sales

Viewers:

Access: Company Only

Attachments & Links

3 Key Integrations for Interactive Marketing Success  
 Turning Call Centers into Revenue Streams

Related Reports

Click a report for by side-by-side comparison:

Calls by Time of Day  
 Product Shipments by Day  
 Call Types

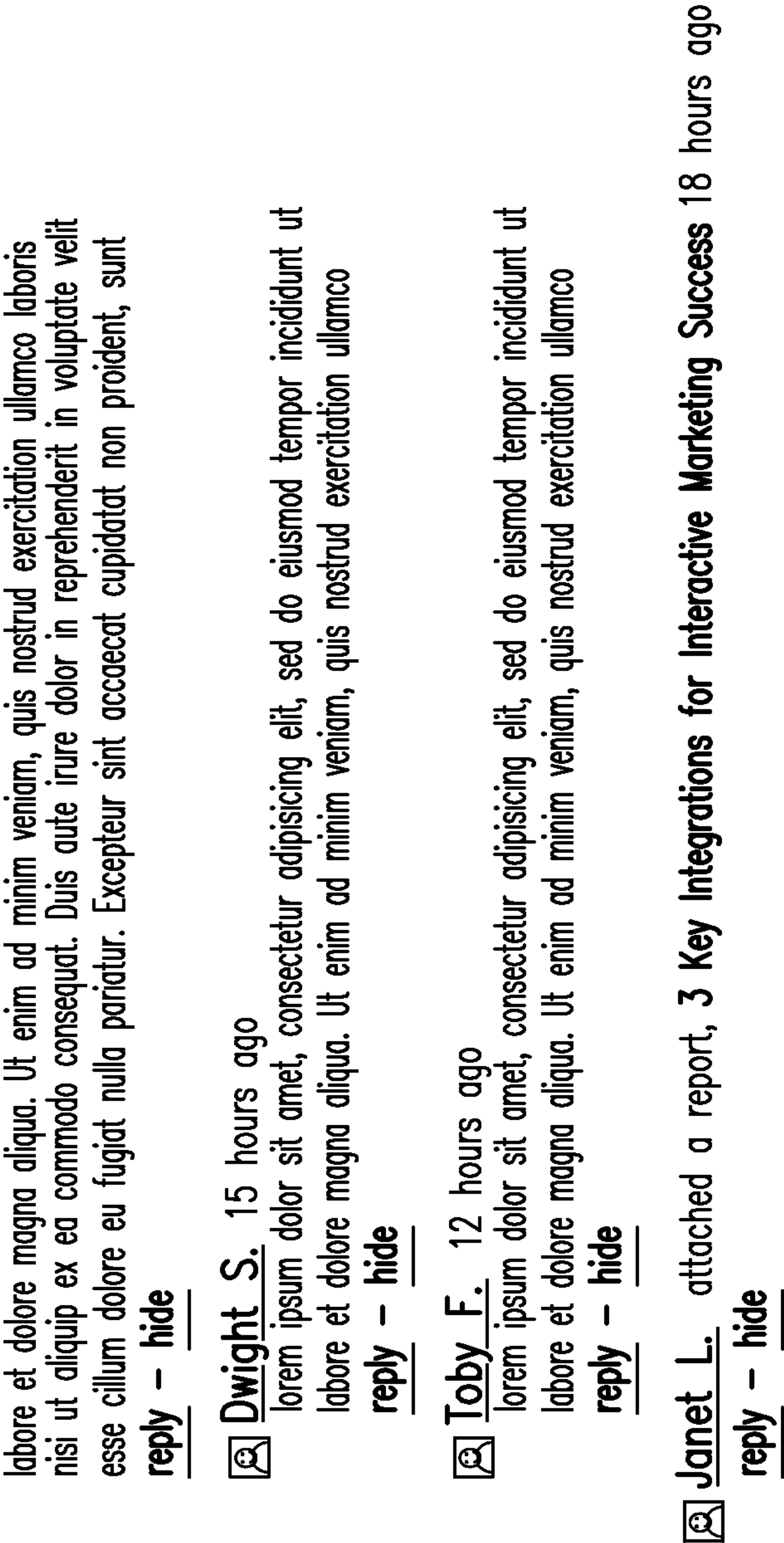


FIG. 13b

edit

Collective Intelligence

Welcome, Toby.

Last logged in: 11/06/2010, 10:15pm EST

US English

Home

Analysis

Sharing

Learn

Develop

Presentations

Messages

Account

Add Friends

Friend/Group Requests

Groups

History

Search existing Collective Intelligence members:

Start typing a friend's name

By linking your other accounts to your Collective Intelligence account, we'll help you connect and collaborate with the people you already know.

Linked

Connected as [tflenderson@gogobicycles.com](#)

Find Contacts

Facebook

Email:

Password:

Link

Twitter

Username:

Password:

Link

Google

Email:

Password:

Link

YAHOO!

Email:

Password:

Link

AOL

Email:

Password:

Link

Invite by E-mail

Enter in e-mail addresses

Personal Message (optional):

Invite

FIG.14

## Collective Intelligence

Welcome, Toby.

Last logged in: 11/06/2010, 10:15pm EST

 US English ▼

|                                                                                   |                                                                                   |                                                                                   |                                                                                   |         |               |          |         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------|---------------|----------|---------|
|  |  | <u>Sharing</u>                                                                    | Learn                                                                             | Develop | Presentations | Messages | Account |
| edit                                                                              |  |  |  |         |               |          |         |

Add Friends Friend/Group Requests Groups History

Search existing Collective Intelligence members:

Start typing a friend's name 

By linking your other accounts to your Collective Intelligence account, we'll help you connect and collaborate with the people you already know.

Linked  Connected as tflenderson@gogobicycles.com Find Contacts

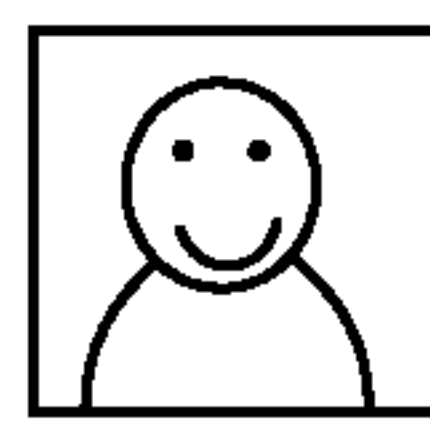
LinkedIn Contacts



Angela Martin  
Director, Quantitative Analysis  
Delaney Bank

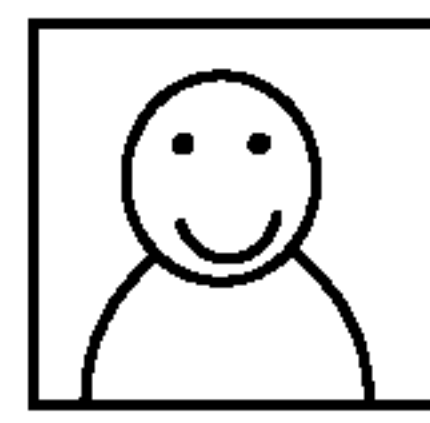
Search for me 

Connect



Darryl Philbin  
SVP, Brand Management  
American Autogiro

Connect



Rick Gervais  
Chief Marketing Officer  
International Packaged Goods, Inc.

Invite

 Facebook Email:  Password:  Link

 Twitter Username:  Password:  Link

 Google Email:  Password:  Link

 YAHOO! Email:  Password:  Link

 AOL Email:  Password:  Link

Invite by E-mail

Enter in e-mail addresses

Personal Message (optional):

Invite

FIG. 15

Add Friends

Friend/Group Requests

Groups

History

Kevin Malone

Director, Quantitative Analysis

Delaney Bank

Accept

Ignore

Add to group

Janet Levenson

SVP, Consumer Marketing

American Autogiro

Accept

Ignore

Add to group

Creed Bratton

Director, Customer Experience

Go-Go Bicycles

Accept

Ignore

Add to group

Group Photo

Q4 Campaign Measurement Working Group

Owner – Kevin Malone, Director, Quantitative Analysis at Delaney Bank | 11 members

lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

Accept

Ignore

**FIG. 16**

edit

Collective Intelligence

Welcome, Toby.

Last logged in: 11/06/2010, 10:15pm EST

US English

Home

Analysis

Sharing

Develop

Learn

Presentations

Messages

Account

Add Friends

Friend/Group Requests

Groups

History

My Groups

Group Photo

Measuring Virality

Owner – Dwight Schrute, Director of Social Media at Blue Diamond | 4 members

lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

Featured Groups

Group Photo

Cross-Media Best Practices

Owner – Jonas Fischer, Director of Marketing at Cross Commerce Media | 973 members

lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

Group Photo

Privacy Professionals

Owner – Angela Martin Privacy Fellow at Consumer Marketing Association | 287 members

lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

Search Groups

Enter keywords

Filter by industry

Filter by region

Filter by language

Search

Browse All Groups

Create New Group

Could skip these here and add them to search results page

FIG.17

edit

Collective Intelligence

Welcome, Toby.

Last logged in: 11/06/2010, 10:15pm EST

US English

Home

Analysis

Sharing

Learn

Develop

Presentations

Messages

Account

Add Friends

Friend/Group Requests

Groups

History

November 4, 2010

Group Photo

Kevin Malone

 invited 

Toby Flenderson

 to group 

Q4 Campaign Measurement Working Group

Angela Martin

 confirmed your friend request.

Creed Bratton

 requested to be your friend. You ignored. 

Accept?

November 2, 2010

Group Photo

Rick Gervais

 from 

International Packaged Goods

 joined your account. He was invited by 

Michael Scott

.

FIG.18

Welcome, Toby.  
Last logged in: 11/06/2010, 10:15pm EST

## Collective Intelligence

 US English ▼





Sharing

Learn

Develop

Presentations

Messages

Account

Add Friends

Friend/Group Requests

Groups

History

### Create New Group

[Back to Groups](#)

Name: \*

Members:

Might not need to define industry of group. We can deduce from the industry of the members

Logo:

Group Type: \*

Summary: \*

Enter a brief description about your group and its purpose. Your summary about this group will appear in the Groups Directory.

200 characters left.

Description: \*

Your full description of this group will appear on your group pages.

200 characters left.

My Email: \*

Access:

☐ Open Access  
☐ Same Company Only  
☒ Request to Join

Pre-approve members from the following email domains:

Enter domains separated by a space, comma, or new line.

Language:

▼

☐ Check to confirm you have read and accept the [Terms of Service](#).

FIG. 19



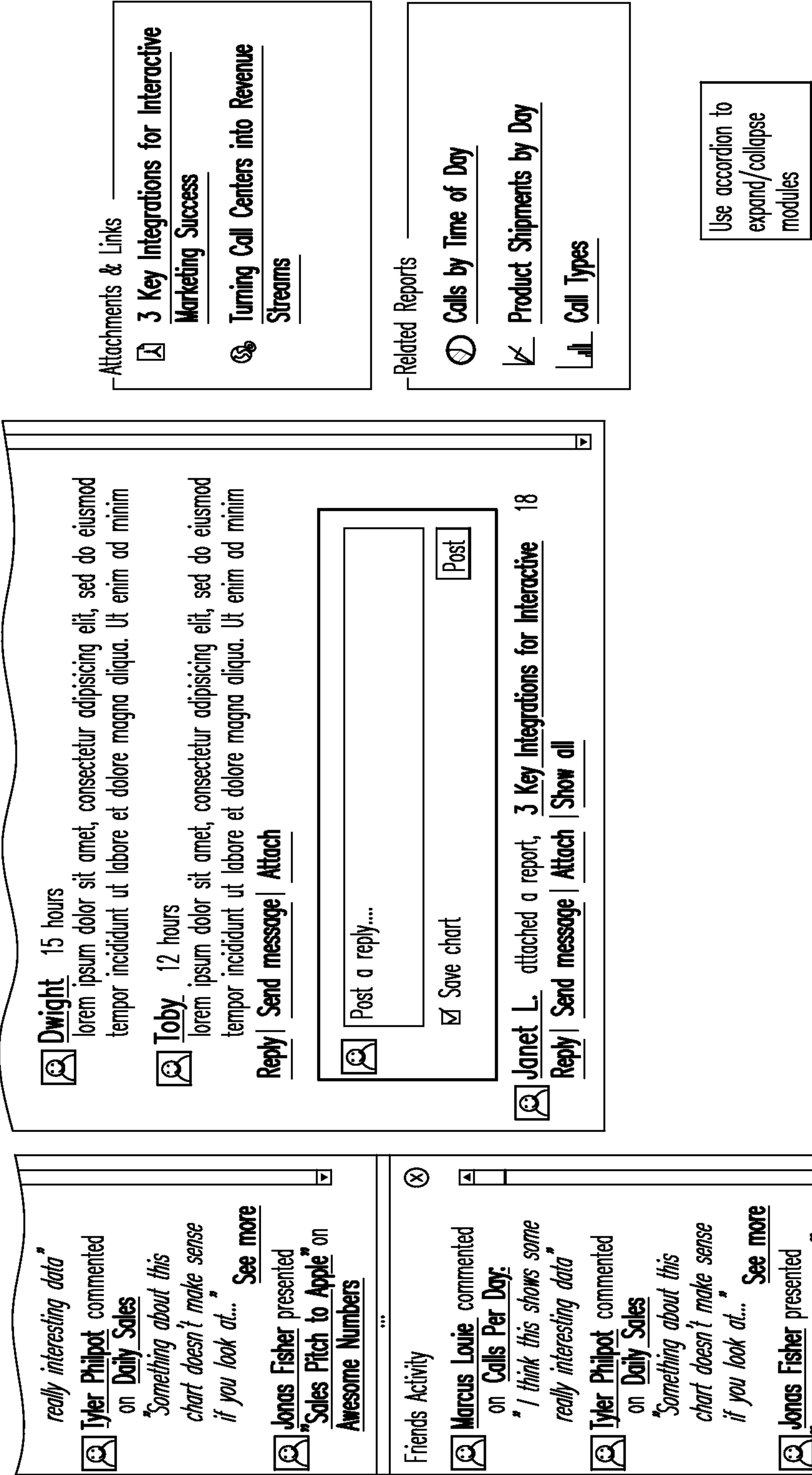


FIG. 20b

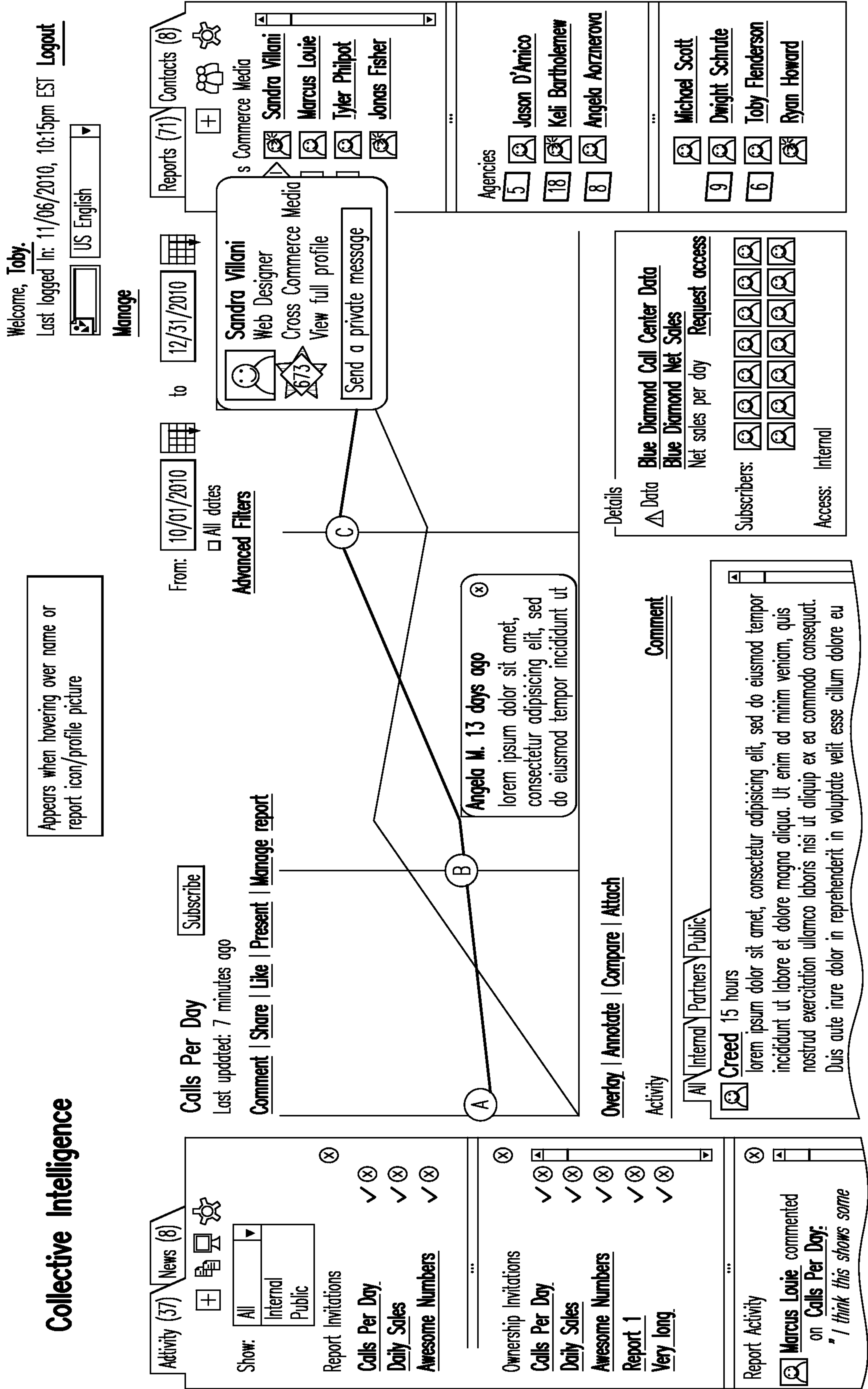


FIG.21a

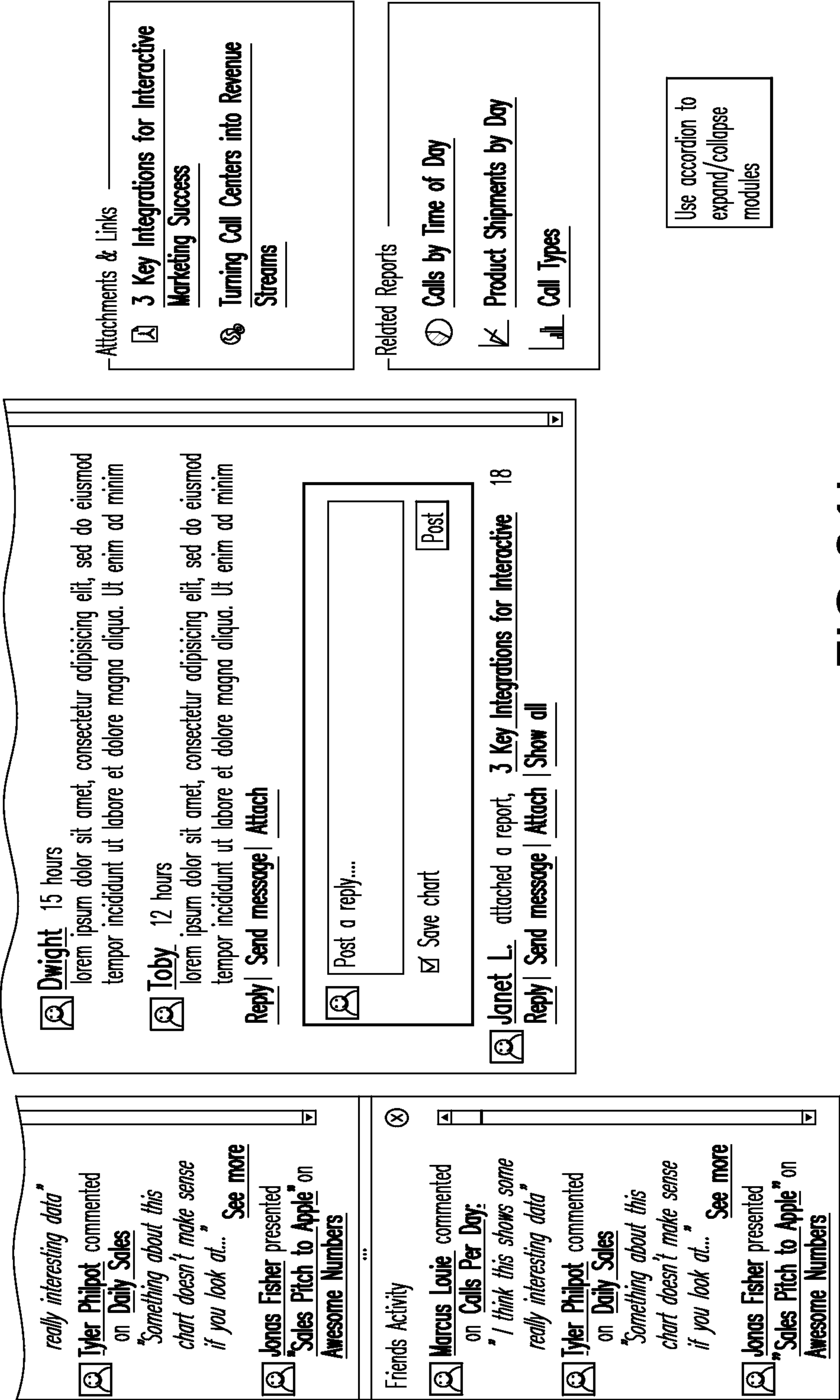
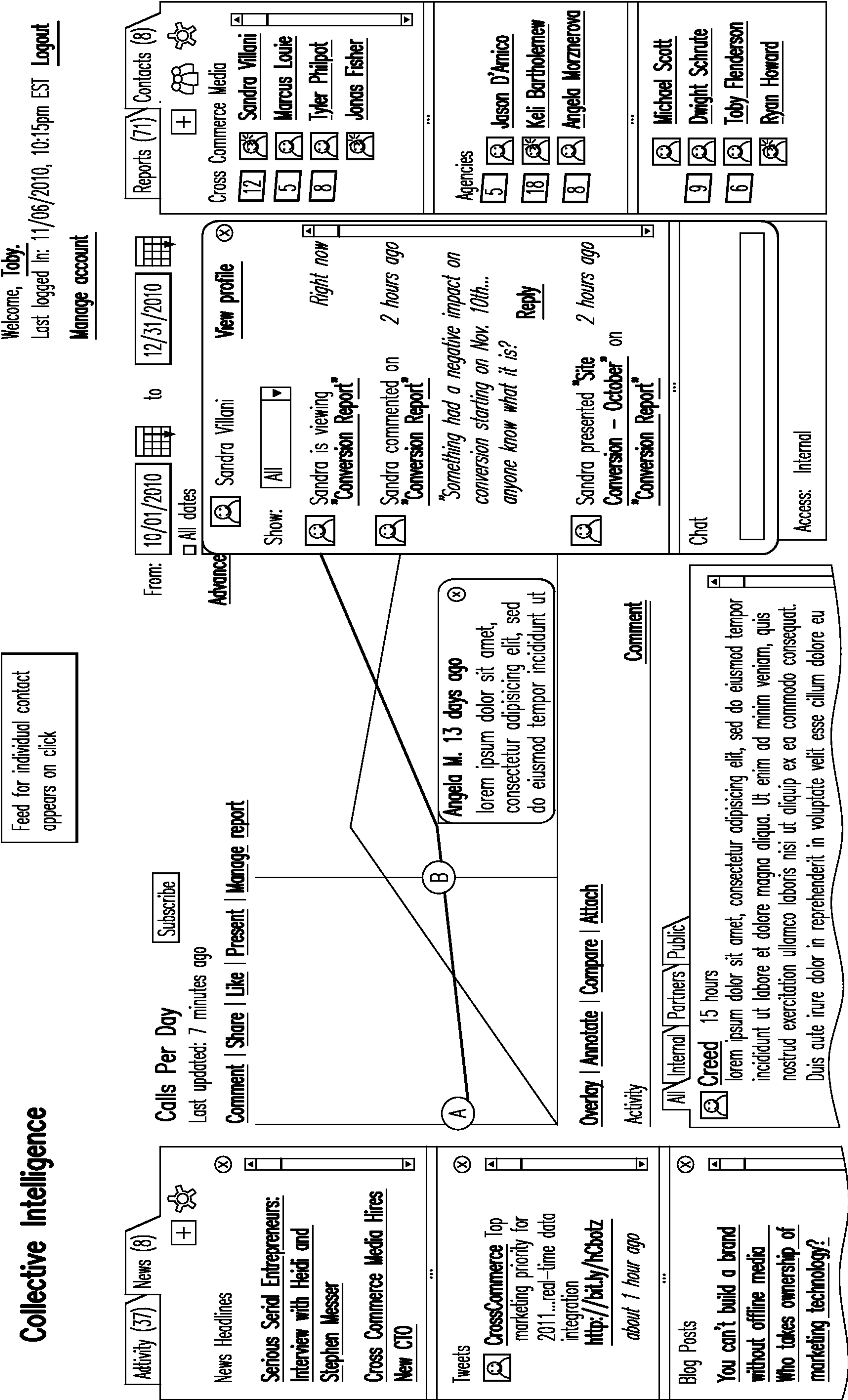


FIG.21b



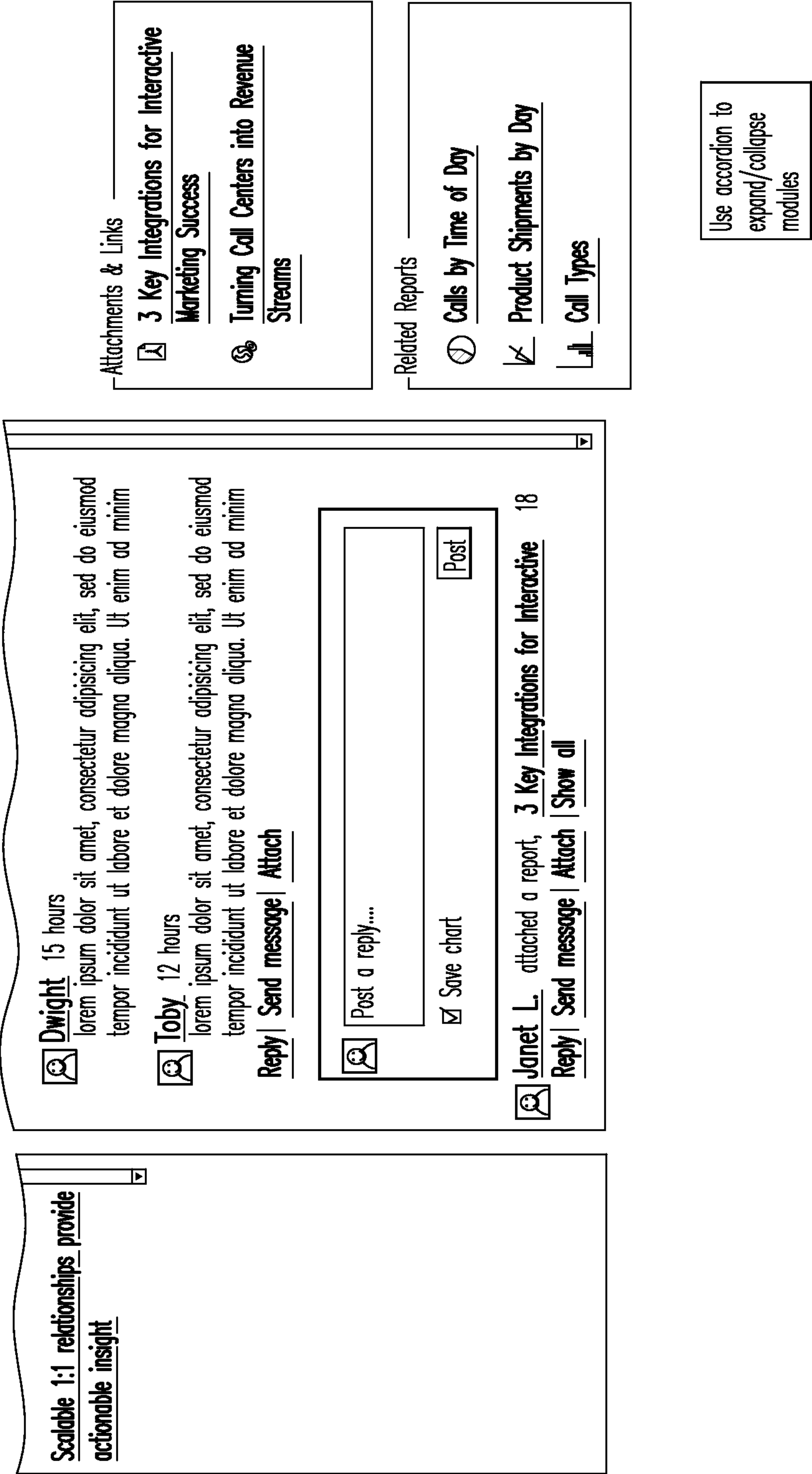
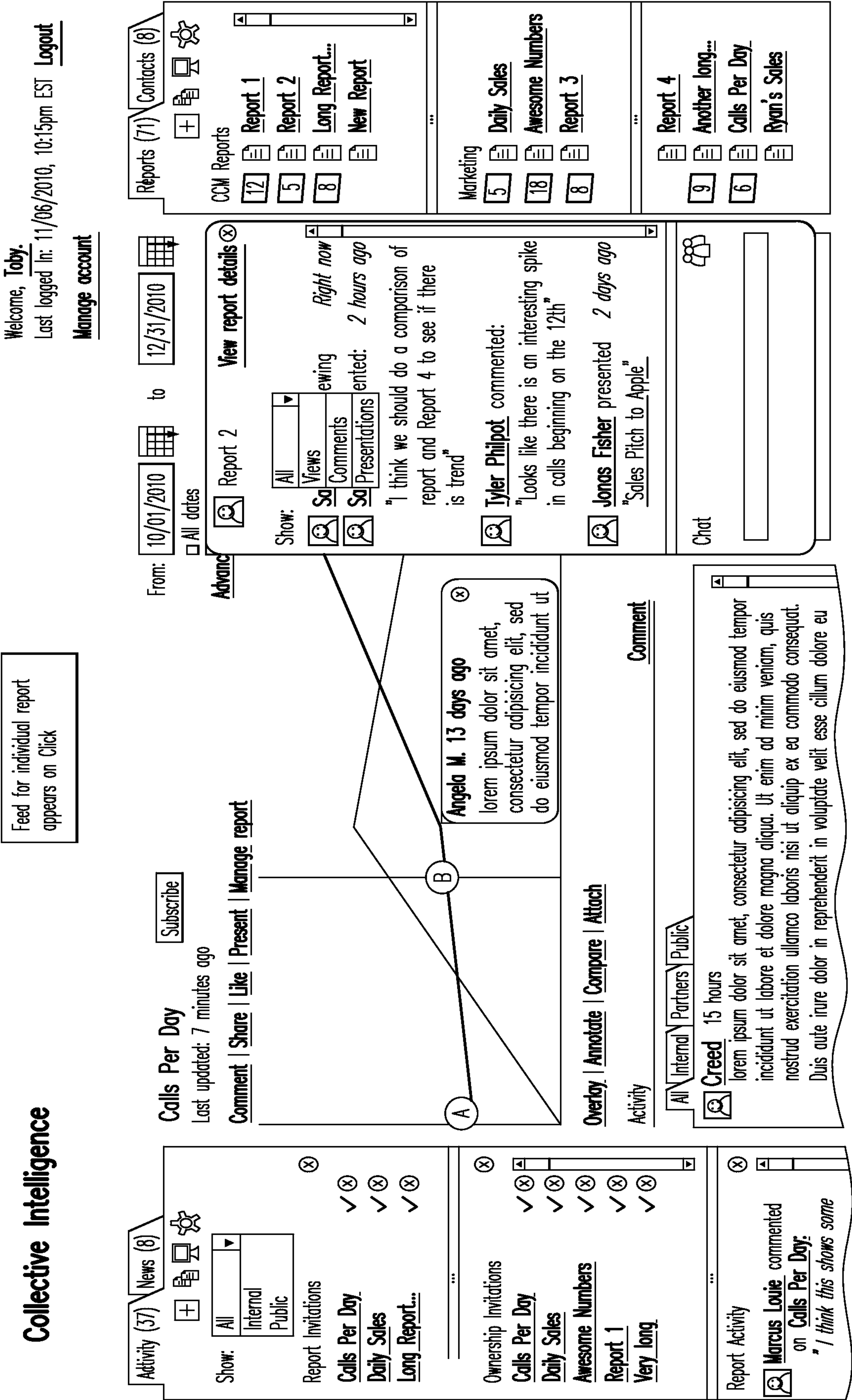


FIG. 22b



**FIG. 23b**

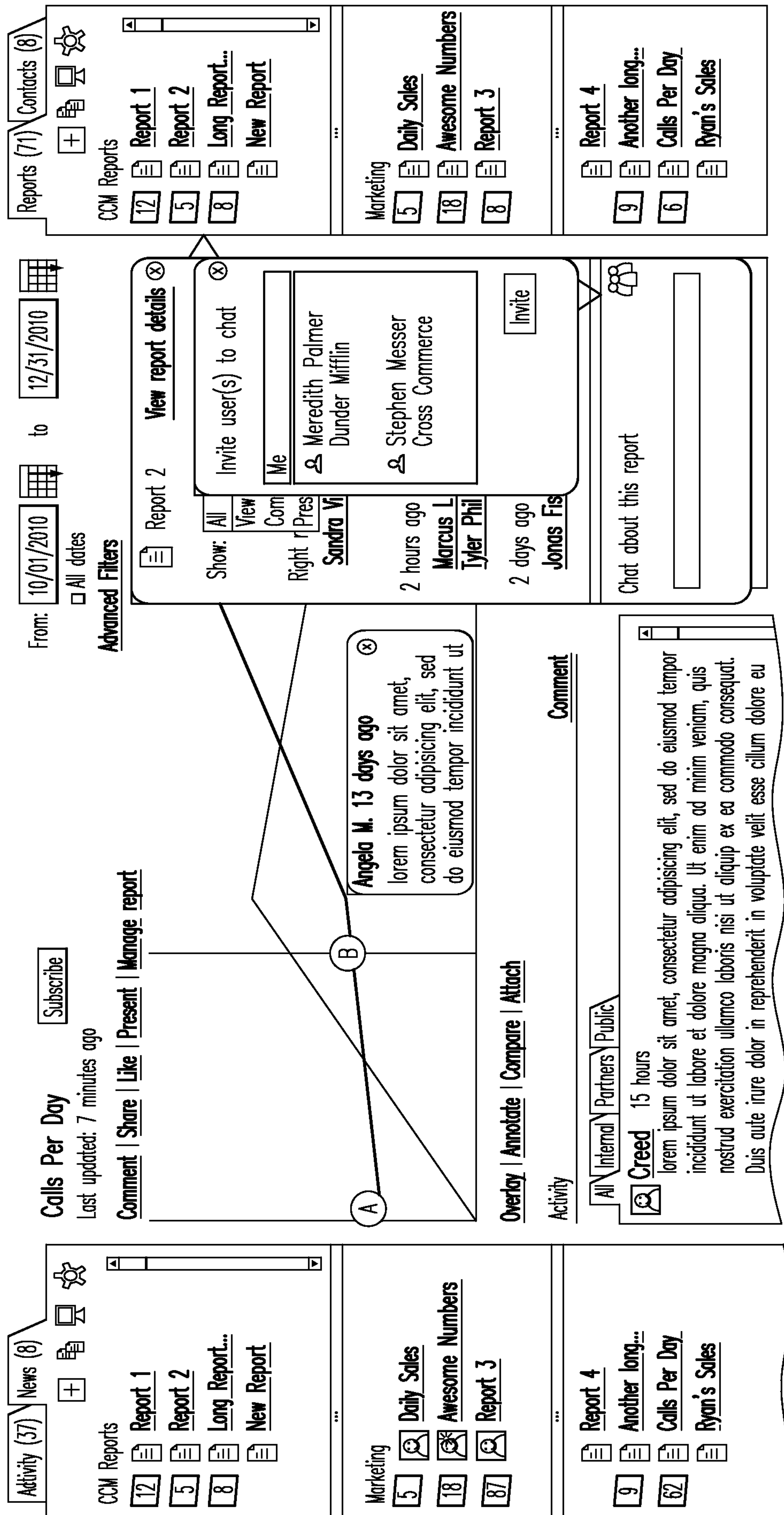
# Collective Intelligence

Feed for individual report  
appears on click

**Welcome, Toby.**

Last logged in: 11/06/2010, 10:15pm EST Logout

## Manage account



**FIG. 24a**

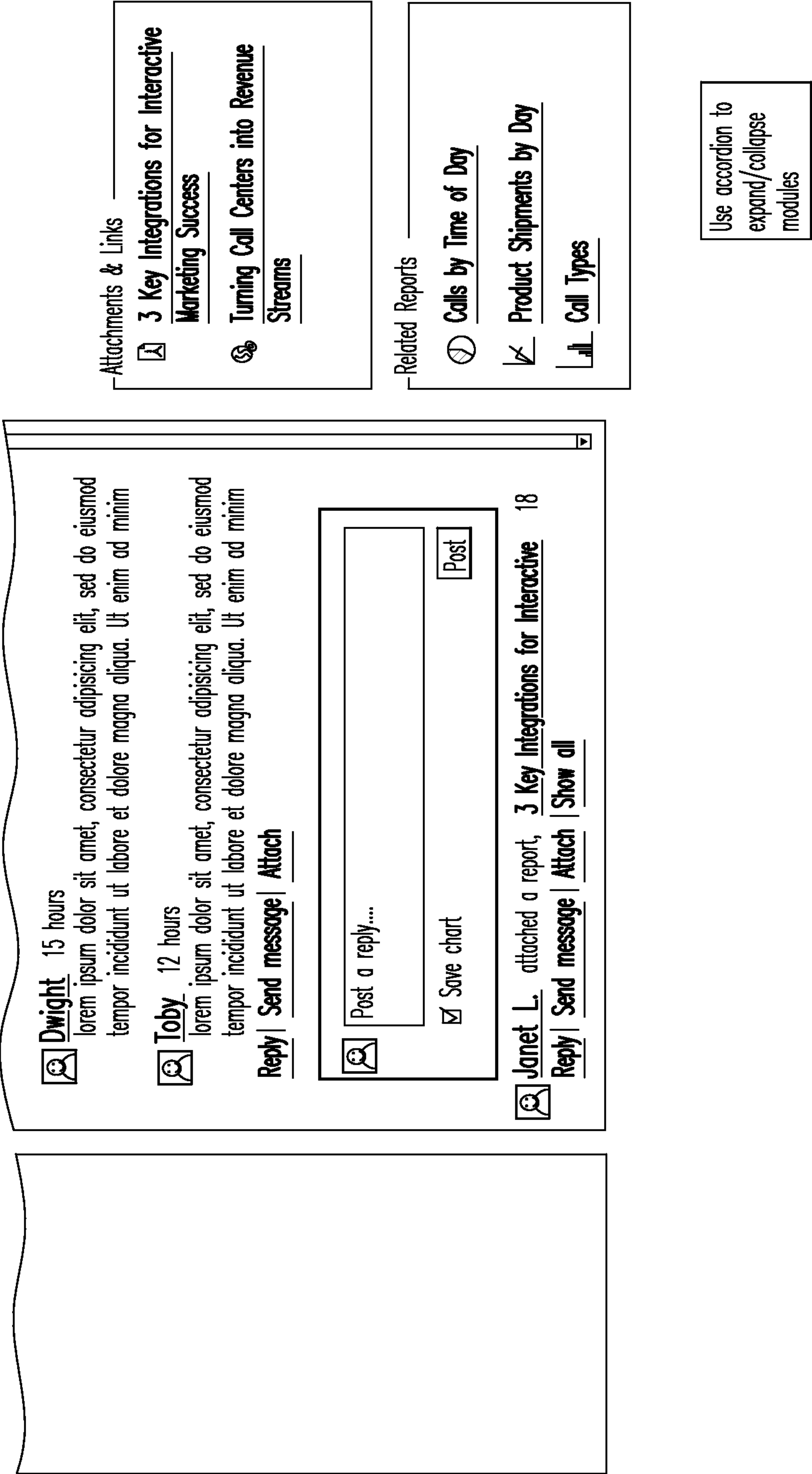


FIG.24b

# Collective Intelligence

Start to use

## Sign-In

Corporate E-mail:

Password:

Or, sign-in with the one of the following services:

 Facebook

 twitter

 YAHOO!

 OpenID

## Register New Account

Your Corporate E-mail:

Confirm E-mail:

Password:

Confirm Password:

Presentation Code (optional):

overlooks

inquiry

Type the two words:


  
stop spam.  
read books.

☐ I would like periodic updates from Collective intelligence

☐ Yes, I agree to the Collective Intelligence Terms of Service