The Dilenschneider Group, Inc.

Special Report

The Many Facets of

Google™

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VALUABLE, INNOVATIVE
GOOGLE WEB TOOLS YOU CAN USE

Google made its name and reputation in search technology, offering Internet users simple, effective, uncluttered searches of the global web's billions of pages and content. In many respects, Google took the entire search engine space by storm, leaving competitors standing at the starting gate. As someone once remarked, "You know you've arrived when your name becomes a verb" as in, "I Googled that…"

Not content to rest on its reputation, Google continues to push the envelope, generating interest in its technology from both the general public and major corporate players. Over the last 12 months or so, Google has launched numerous web-based add-ons – including Google Finance, Google News, Gmail, Google Talk, Google Maps, Froogle, Blog Search, and Orkut. The following is a summary of current features and potential uses for Google's range of services beyond the basic search functions. All, like the basic service, are provided at no charge.

GOOGLE FINANCE

On March 21, 2006, Google, Inc. launched its new Google Finance website. The service features the latest business and enterprise headlines about corporations, covering financial decisions and major news events plus stock information with a JavaScript-based stock price chart. The latter allows users to examine current as well as past company stock data.

Google Finance, while still an early beta product, offers a broad range of information about businesses in North American. For those inclined toward investment research, Google Finance offers an easier way to search for stocks and mutual funds, along with a broad range of public and private companies. Google Finance provides company news and information in a clean, relevant, unbiased and uncluttered user interface. It also includes such useful features as Company Search, Interactive Charts, News and More News, Blogs, Company Management Team profiles, Discussion Groups, and Portfolios.

By inputting either a company name or ticker symbol, users can search, for specific stocks, mutual funds, and extensive data about both public and private companies. With the help of Interactive Charts, a user can determine what, if any, correlation there may be between breaking news stories and the direction of a company's stock on any given day. Users can also click and drag the charts to check performance during different time periods and zoom in to view more detailed information.

The News and More News feature incorporates the Google News service, which clusters news by topic and offers multiple opinions on a single subject. News stories can be reviewed by monthly data range and by importance (which is determined by algorithms). Recognizing that blogs allow users to become citizen journalists, Google Finance includes company-related postings from Google Blog Search. The Company Management Team feature helps you put a name to a face. Clicking on an executive name shows you his, or her, picture as well as links, where available, to their biography, compensation, and trading activity. The Discussion Groups feature allows users to talk amongst themselves, supported by a dedicated team of moderators working to keep conversations on track and spam-free. The Portfolios feature offers a fast, easy and powerful way to keep, create and maintain one's portfolio of stocks and mutual funds.

GOOGLE NEWS

Google News gathers stories from more than 4,500 English-language news sources worldwide, and automatically arranges them to present the most significant, timely and relevant news first. Topics are updated every 15 minutes, so you're likely to see new stories each time you check the page. Picking the item of interest, the user can go

directly to the site that published that story.

Google News is a highly unusual news service in that results are compiled solely by computer algorithms, without human intervention. As a result, news sources are selected without regard to political viewpoint or ideology, enabling the user to see how different organizations report the same story. This variety of perspectives and approach is unique among online news sites, and Google considers it essential to provide balance and help users stay informed about the issues that matter most to them.

Features included in Google News are feeds, personalized news, trace story history, country-specific searching, and source-specific searching. With Feeds you can receive updates of various sections of Google News or Google News search results by subscribing to RSS or Atom feeds in one's favorite feed reader. With personalized news, users can build and share their own version of Google News by rearranging the sections on the Google News front page, or even creating new ones. For instance, one can put headlines about a favorite technology or sports team at the top of the page. One can also get recommended headlines based on the news stories searched for and clicked on in the past. And, since Google News is part of Personalized Search, one can view and manage their history of past searches and news selections.

The trace story history function allows users to trace the history of a topic or monitor an emerging story by clicking the "sort by date" option in their search results. Sometimes, one may want a particular country's perspective on an important issue. Country-specific searching in advanced search options lets users search from different sources within a specific country. Source-specific searching is an advanced search option that lets users restrict their search to specific news sources.

GMAIL

Gmail is Google's free webmail service. It comes with built-in Google search technology and over 2,600 megabytes of storage. One can keep important messages, files and pictures forever; use searches to quickly and easily locate anything one is looking for; and make sense of it all with a new way of viewing messages as part of conversations. There are no pop-ups or untargeted banner ads in Gmail, only small text ads. Ads and related information are relevant to messages. Accordingly, instead of being obtrusive, they may even be useful. Gmail also integrates instant messaging right into the e-mail experience. It's easy, efficient and even fun to use a whole new way to think about e-mail.

Unique features characteristic of Gmail include: conversation views, labels instead of folders, auto save enhancement, keyboard shortcuts, optional dots, plus-addressing, Gmail chat, and calendar.

Perhaps Gmail's most interesting and useful innovation is its method of categorizing e-mails, which Google calls Conversation View. In contrast to other e-mail services, Gmail keeps track of individual "conversations" (an original message, along with all the replies to that message) by grouping them together. This allows users to easily view all the e-mails related to a specific message, and it keeps the inbox more organized. Gmail's algorithm for determining how conversations fit together is not perfect. Single conversations sometimes become fragmented (especially when a replier changes the e-mail's subject line) and unrelated conversations occasionally become linked together. Also, if a conversation has more than approximately 100 messages, it splits into two separate storage sections, sometimes resulting in 5 or 6 chunks making up a whole conversation.

Gmail allows users to categorize their e-mails with "labels," offering a flexible method of categorizing them. An e-mail may have any number of labels (in contrast to a system in which an e-mail may belong to only one folder). Users can

display all e-mails having a particular label and can use labels as a search criterion. Gmail also allows users to set up filters, which label incoming e-mail automatically.

Google has added an Auto Save feature to Gmail, a system for avoiding loss of data in case of a browser crash or other error. When composing an e-mail, a draft copy of the message and any attachments are saved automatically. Although messages begin to be saved once a minute, saving times vary depending on the size of the message.

Gmail allows users to navigate its interface by employing the keyboard as an accessible alternative to the mouse, which is the norm for site navigation. This feature is not enabled by default, although instructions on how to enable it are provided.

Gmail user names must be between 6 and 30 characters (inclusive) and made up of only letters, numbers, and dots. The use of dots, however, is optional because Gmail ignores dots when resolving addresses. Google states clearly "Gmail doesn't recognize dots (.) as characters within a username."

Gmail also supports "plus-addressing" of e-mails. Messages can be sent to addresses in the form: user name+extratext@gmail.com where extra text can be any string. Additionally, addressing allows users to sign up for different services with different aliases and then easily filter all e-mails from those services.

Gmail's chat feature allows one to chat with others that have a Gmail account. It interacts with the whole Jabber network, so it can be synchronized with Google Talk. However, only text-based chat can take place within Internet Browsers; voice calling is Google Talk's advantage. Because of the move away from e-mail and, therefore, the name "Gmail" Google has changed the logo for Gmail, so that it includes "+ talk." The logo also has a glossier finish com-

pared to its predecessor. The introduction of Gmail Chat allows Gmail users to easily connect to the Google Talk network on computers that do not have the Google Talk client installed, without needing third-party clients (such as Psi, Miranda IM, iChat, Adium and Gaim) or web-based applications (such as Gtalkr, now defunct or Meebo). Using the web interface, a user can have up to three chats at once. Gmail Chat also allows the user to keep an archive of chats in his or her, Gmail account - although this is disabled if either user in a conversation objects (called "off-the-record mode" by Google).

However, "off-the-record mode" does not guarantee anonymity since the other user could be using a third-party client with its own logging ability such as Gaim. The other user could also copy and paste the conversation into a text editor and save it. Gmail also recently introduced contact pictures and sound into Gmail Chat, enabling users to receive auditory notifications when receiving an instant message through Gmail Chat.

On April 13, 2006, Google rolled out yet another addition to Gmail – the Google Calendar. Highly rumored for over six months, Google fully integrated this into Gmail. Google Calendar, like all other applications, is written in Javascript and uses AJAX. It allows you to view your appointments by day, week, month, and the next 4 days (the length of this can be changed in their settings). It allows 'quick adding' of events, in which an appointment can be added by entering a natural-language phrase containing the details of the event, rather than by filling out a detailed form. In addition, Google Calendar provides an agenda tab that allows you to see all upcoming events in list form.

The settings of the Calendar are highly customizable, allowing users to change their time zone on the fly; change the day that the week starts on; create multiple calendars; and send notifications to their cell phone. The service allows users to invite other people to appointments and events, regardless of whether they have a Google Account. They can then RSVP, stating whether they

will attend and leaving a note or comment. With the organizer feature enabled, invitees can have the ability to send invitations and view the guest list. The calendar also supports importing from programs such as Microsoft Outlook and iCal.

GOOGLE TALK

Google Talk is a service offered by Google for Voice over IP (VoIP) and instant messaging. Google Talk beta was released on August 24, 2005 and consists of both a service and a client used to connect to the service. Unlike some other instant messaging services, Google Talk uses an open protocol, XMPP, for the Instant Messaging (IM) part, and it encourages the use of clients other than its own to connect to the Google Talk service.

As of the launch date, the Google Talk client was available only for Windows (2000, XP, Server 2003) Google provides users of other operating systems with instructions for various popular Jabber clients, such as Psi or Miranda IM for older versions of Microsoft Windows, iChat or Adium for Mac OS X, and Gaim or Kopete for Unix-like systems. Any program capable of using the Jabber protocol is sufficient, although the voice-over IP service only works with the Google client. Google has released the VoIP portions.

Google has announced that a major goal of the Google Talk service is interoperability and that all messages (text and voice) will be encrypted in future releases.

GOOGLE MAPS

Google Maps is a free web map server application and technology. This Map has map-based services including Google Maps, Google Ride Finder and embedded maps on third-party websites via the Google Maps API. It offers street maps, a route planner and an urban business locator for Australia, Canada, Japan, New Zealand, the United States, and most western European states, as well as satellite images for the whole world. A related product is Google Earth, a standalone Apple Mac, Windows and Linux application program that offers enhanced globe-viewing features. Unlike Google's web-based services Google Earth, is an actual software program that must be downloaded and installed by the user.

[All the images shown in Google Maps' satellite mode are at least a year old and in some places up to five years old.]

Like other Google web applications, a large amount of JavaScript was used to create Google Maps. As the user drags the map, the grid squares are downloaded from the server and displayed to the user. When a user searches for a business, the location is pin-pointed with a red pin, which is actually a transparent PNG placed over the map.

As the code for Google Maps is almost entirely JavaScript and XML, some end-users reverse-engineered the tool and produced client-side scripts and server-side hooks, which allowed a user or website to introduce expanded or customized features into the Google Maps interface.

Using the core engine and the map/satellite images hosted by Google, such tools can introduce custom location icons, location coordinates and metadata, and even custom map image sources into the Google Maps interface. Some of the more well-known of these "Google Maps Hacks" include tools that display locations of Craigslist rental properties, student apartment rentals, and local map Chicago crime data (or check Misdaadkaart.nl showing crimes of one entire country). The script-insertion tool Greasemonkey provides a large number of client-side scripts to customize Google Maps data, and the mygmaps.com website provides an interface for easily adding one's own set of locations and viewing them on Google Maps.

Combined with photo sharing websites such as Flickr, a phenomenon called "memory maps" has emerged. Using copies of the Keyhole satel-

lite photos of their home towns or other favorite places, users can take advantage of the image annotation features to provide personal histories and information regarding particular points of interest in the area.

The main Google Maps site includes a local search feature, finding businesses of a certain category in a geographic area. There are several uses of Google Maps; notably, Google Mars, Google Moon, Google Ride Finder, and Google Transit. While Google Mars and Google Moon are fun to use, Google Ride Finder, and Google Transit provide practical services.

Ride Finder, one of Google's experimental Google Maps-based tools, taps into in-car GPS units for a selection of participating taxi and limousine services. The tool displays the current location of all supported vehicles of the partici-pating services in major cities, including Chicago and San Francisco on a Google Maps street map.

In December 2005, Google also launched Google Transit. This is a beta web application (listed in Google Labs), that plans a trip using public transportation options. It is currently only avail-able for Portland, Oregon in the USA. Based on the success of Google Transit in Portland, Google will decide if a broader rollout is warranted.

While Google has heard a number of complaints about the data underlying its Google Maps tech-nology (That's not my house…That's not my car, etc.), this is due largely to a misunderstanding about the currency of the satellite data, which may be up to 4-5 years old in some areas.

FROOGLE

Froogle is Google's "best price" search engine, currently in beta mode. It is different from most other price engines in that it neither charges any fees for listings, nor accepts payment for products to show up first. Also, it makes no commission on sales. Any company can sub-mit product information (via a "data feed") and

be included in the Froogle engine. Advertising space is available for purchase to be displayed in Froogle in the form of an AdWords ad, similar to those in other parts of the Google network. This is, as elsewhere, noticeably separate from the main body of results. Searches can be sorted by relevance ("best match") or by price (either ascending or descending). You can also search for items in specific online stores (assuming, of course, they have provided Froogle a data feed). Froogle is only available for selected countries at this point.

Froogle collects product information in two ways. First, it uses product information submit-ted electronically by sellers who choose to take advantage of this free service. If your client is interested in having its product information ap-pear on Froogle, they are free to submit items Froogle. Second, as Google's spidering software crawls the Internet, Froogle automatically identi-fies webpages that offer products for sale. These are the pages Froogle searches when one enters the name of an item you want to find. Froogle's search results are automatically generated by its ranking software.

Froogle is unlike other sites because of what it does and because of what it doesn't do. Froogle does provide a lightning quick way to search the largest collection of sellers and products on the web. That means if the item you're looking to buy is online, Froogle will likely find it. Froogle also uses information from sellers about their in-store offers to help shoppers with informa-tion about products available near them. Froogle does not, however, sell products or promote partner sellers within the search results. There is no shopping cart or wallet into which you can place your credit card information, nor are there preferred sellers who always show up as the first result regardless of what search you enter.

BLOG SEARCH

On September 14 2005, Google launched Blog Search, a Google search engine technology fo-

cused on Blogs, or weblogs. Results include all Blogs, not just those published through Blogger. Blog Search's Blog index is continually updated. Blog Search will help users to explore the Blogging universe more effectively, and perhaps inspire many to join the revolution themselves. One's results include all Blogs, not just those published through Blogger; Google Blog index is continually updated, so one always get the most accurate and up-to-date results; and you can search not just for Blogs written in English, but in French, Italian, German, Spanish, Korean, Brazilian Portuguese and other languages as well.

To use Blog search users just type the word(s) they want to search for in the text box and click "Search." If one wants more control over a search, click the "Advanced Search" link to the right of the search button. There, option specified titles, authors, languages and more. Once search results are obtained, there will be an additional link that allows switching between displaying the results with either the most relevant or recent results at the top. In the Blogger version of the interface, there is an extra "use search options" link beneath the search box. This will show a few of the most common advanced options, such as a specific Blog or a date range to search within. The goal of Blog Search is to include every Blog that publishes a site feed (either RSS or Atom). It is not restricted to Blogger Blogs or Blogs from any other service.

If your Blog publishes a site feed in any format and automatically pings an updating service (such as Weblogs.com), Google should be able to find and list it. Also, Google will soon be providing a form that one can use to manually add his, or hers, Blog to Google index, in case Google hasn't picked it up automatically.

If you do not publish a site feed for a Blog, it will not be included in Blog Search. However, for a previously published site feed that was included, the old posts will remain in the index, but new one's will not be added.

Blog Search indexes Blogs by their site feeds,

which will be checked frequently for new content. This means that Blog Search results for a given Blog will update with new content much faster than standard web searches. Also, because of the structured data within site feeds, it is possible to find precise posts and date ranges with much greater accuracy.

One can use Blog Search to find either specific posts or entire Blogs. The main search results always return links to posts. However, when there are entire Blogs that seem to be a good match for a query, these will appear in a short list just above the main search results.

At the bottom of each page of search results one finds several links, offering the top 10 or 100 results as either Atom or RSS feeds. By grabbing the links from here and subscribing to them in the news aggregator of one's choice, updates are made available whenever new posts are made that match a particular query.

ORKUT

Orkut is an Internet-based social network service run by Google and named after its creator, Google employee Orkut Büyükkökten. It claims to be designed to help users meet new friends and maintain existing relationships. Similar to Friendster and MySpace, Orkut goes a step further by permitting "communities" of users. It is also invitation-only: users must be invited to join the community by someone who is already a member. Orkut makes it easy to find people who share one's hobbies and interests; look for romantic connections; or establish new business contacts. One can also create and join a wide variety of online communities to discuss current events, reconnect with old college buddies or even exchange cookie recipes.

Originally, the Orkut community was thought to be elitist, because its membership is by invitation only. However, at the end of July 2004 Orkut surpassed the 1,000,000-member mark, and at the end of September it surpassed the 2,000,000

mark. While the intended invitation method was e-mail between two acquaintances, invitations to Orkut are obtainable via the web with a bit of diligence or eBay, just like Gmail invites.

Orkut's use as a social tool is complex, because various people frequently try to add strangers to their own pool of friends to increase the number of friends next to their name in their profile. Many "add-me" communities exist, solely for this purpose. Be advised, a large number of bogus, cloned, fake, invisible and "orphaned" profiles also exist.

GOOGLE AT WORK

Google has created a host of useful web-based tools to help users take full advantage of the vast, almost incomprehensible amount of data available on the World Wide Web. The tools profiled above are just some of the web-based offerings by one dynamic and creative company. No doubt they will spawn a host of imitators and innovators who will push the envelope even further. The best way to ensure getting the most out of all Google has to offer is to sign up and start using some of these tools to improve one's knowledge, maximize one's work output, and enhance one's personal development yourself.

Google will clearly continue to dominate its marketshare and set the precedent by which other search engines will be gauged. It is crucial for businesses and individuals to utilize this portal effectively in the present to make sure they will garner success in the future and not be left behind.