

On-Line Market Research: Using Technology to Improve Your Information



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The Internet's explosion creates new opportunities for on-line market research. With over 1 billion pages and over 400 million estimated worldwide on-line households, the opportunity to collect valuable marketing information through the Internet has never been greater. The Web facilitates the two major types of market research, secondary and primary research.

Secondary Market Research

Secondary market research consists of collecting and analyzing data that has previously been collected. Because the data has been previously collected, secondary market research is less expensive than primary research where you collect data yourself. Secondary research also helps you better frame any subsequent primary research. You discover what issues are hot topics for your respondent group. You may also find answers to certain questions that you can then omit in primary research, saving time and money. In some cases, you may not, however, find exactly the information you need in the form you need it.

The sheer volume of information available creates a challenge in finding it. Discovering certain information is looking for the proverbial "needle in a haystack". At other times, the massive volume of information you find presents more of a challenge in organizing it for meaningful analysis. Descriptions of general information sources, those sources useful for marketing to separately to consumers and businesses, and those for understanding your competition follow.

General Sources

A number of general sources that are useful for both consumer and business market analysis are available. These include search engines, directories, discussion groups, news sources, trade associations, and government information.

Search Engines

Search engines index Web pages for retrieval using key words and phrases. They obtain their included pages by sending out "crawlers" to examine Web pages. They form a key tool in secondary research. Each search engine only indexes a portion of what's available on the Web, so you may want to use multiple engines to get a comprehensive look.

Before using search engines, you draw up a list of phrases and keywords that you want to explore. This will add discipline to your search process as you utilize multiple search engines. Check off the words used for each engine to ensure that you use all engines similarly. Of course, when you find additional words as you progress, add them to your list and go back to the previously used engines to try them out.

Because there is so much information available on the Web, power-searching tools will speed your project. When you enter your key words, most engines will search for any of them on a page. If you enter the terms “market research”, the results will include pages with either “market” or “research” on them. Using Google, this returns 2.6 million pages. Most engines allow searches for phrases using quotes around the phrase. They will then return only pages with the words shown side-by-side. Entering the phrase “market research” enclosed with quotes reduces the pages returned to only those with the words market and research side-by-side. This reduces the number of pages returned by Google to 730,000 pages, still a lot, but about 1/4th of the previous search. If you’re only interested in market research about telecommunications, adding the word “telecommunications” to the phrase “market research” reduces the Google search results to 102,000.

The different search engines rank results differently. One ranking technique is the number of sites that link to it. Google uses this. Northern Light organizes results into sub-folders, and also includes Special Collection documents from journals and other news sources that can be purchased. Most of the search engines also accept payments from Web sites for inclusion and ranking, which influences some search results.

Leading search engines are:

www.google.com -- has the largest number of pages indexed.

www.directhit.com -- uses click-through and duration data to rank results.

www.askjeeves.com -- can phrase questions.

www.northernlight.com -- Special Collection of documents, some which must be purchased.

www.dogpile.com -- searches multiple engines, shows results by engine.

www.metacrawler.com -- searches multiple engines and shows co-mingled results.

For more information on searching and search engines, check out Search Engine Watch at www.searchengine.com. The Sales and Marketing Source (www.smsource.com/search.htm) shows a more complete list.

Because search engines direct you to pages, once at the page, you may need to perform a page search to find the specific content within the page. This is accomplished in Internet Explorer by using the Edit -> Find menu on Internet Explorer. You then type in the words you seek.

Directories

Directories are similar to search engines, but employ real people to review the sites. This filters out irrelevant sites and leads to cleaner searches. They miss a lot of sites, however, because they never are reviewed. All feature drill-down hierarchies.

Yahoo (www.yahoo.com) delivers the most inquirers to sites and receives the most Web visits. Yahoo supplements its Web site directory with Web pages searches provided by Google. Another directory is Looksmart (www.looksmart.com).

Discussion Groups

Discussion groups and message boards are groups of people discussing various topics. There's a good chance that the topic you are researching has been discussed. You can also post questions of your own to try to get an answer. Many of the search engines listed above also allow you to search the USENET compilation of these message boards. Try Deja (recently purchased by Google) at groups.google.com/googlegroups/deja_announcement.html to search these groups. Topica (www.topica.com) contains a directory of discussion lists.

News Sources

Most news organizations put all of their articles on-line in searchable archives. These articles usually provide brief summaries of what may interest you. The sources they cite often lead you to further information on the subject. One of the best news Web sites is bizjournals.bcentral.com, which is the compilation of stories produced by the 40 local business journals owned by American Cities. This includes the Denver Business Journal. In aggregate, American Cities probably has the largest number of business reporters of any organization producing relevant news articles. All content is free.

The Northern Light search engine referenced above also maintains a number of news articles and articles from journals in their Special Collection. These are available for a nominal fee. Lexis-Nexis (www.lexis-nexis.com) is a subscription service that loads and indexes articles from 22,000 sources. If you do a lot of information gathering, it might be worth a subscription. If you are affiliated (student or teacher) with a university, your school library may access them. Other subscription services include Dialog (www.dialog.com) and Dow Jones Interactive (www.djinteractive.com).

Virtually all industries, no matter how small, support a trade journal publishing articles relevant to it. Most provide searchable archives. The National Directory of Magazines tracks these trade journals at www.mediafinder.com. You view a publication list, and for a subscription fee, connect to the publications themselves. If continuous news about a specific industry interests you, some publications provide breaking news stories via e-mail. For example, I subscribe to the service from Wireless Week, a magazine covering the mobile phone industry. Each afternoon, I receive top news headlines from the publication with links to the entire story.

Trade Associations

As with trade publications, a trade association exists for almost every industry, no matter how small. They provide industry overviews and often display links to other Web sites relevant to the industry. Some supply in-depth research for free or for a nominal charge. In some cases, it may be worth joining the association to obtain access to their information. Lists of the more than 100,000 trade associations can be accessed at Association Central (www.associationcentral.com).

Government Information

Most government information will be discussed below because it applies specifically to consumer or business markets. The Statistical Abstract of the U.S.

(www.census.gov/prod/www/statistical-abstract-us.html) contains information on both consumers and businesses. It presents both government and outside information, and the sources used can lead you to more in-depth information. American Fact Finder (factfinder.census.gov) facilitates access to the Census Bureau's information, both consumer and business. Economics data provided by some agencies, such as interest rates (monitored by the Federal Reserve Board), are relevant to both consumers and businesses and can be found on the agency's Web site. If you plan on using a lot of government information, you may want to subscribe to STAT-USA (www.stat-usa.gov), which aggregates information from various governmental agencies. You can also purchase specific reports as needed.

Consumer Information

The federal government compiles plenty of information relevant to defining consumer markets. The most basic is population counts produced by the Census Bureau. Information is available by state, county, ZIP code, and census blocks. The decennial collection of information is the most extensive, but they also update the counts annually for various geographies.

The Census of Housing (www.census.gov/hhes/www/housing.html) is also conducted every 10 years. More detailed information is asked of approximately 1/6th of the total households. The American Housing Survey supplements this data every two years nationally. For example, you can find out that in 1998, 68.5% of housing units contained a working clothes dryer.

U.S. Consumer Expenditure Surveys (stats.bls.gov/csxhome.htm) shows consumer spending on various items. The BLS publishes summaries annually with a lag, the latest available data being for 1999. The data shows, for example, that households with \$70,000 or more income spent \$1,241 on telephone services in 1999. You can also track changes over time. The detailed data is available for purchase.

The Federal Reserve Board (FRB) conducts a triennial "Survey of Consumer Finances" in the U.S (www.federalreserve.gov/pubs/oss/oss2/scfindex.html). The last available survey is for 1998, with one currently in progress. They skew the sample to obtain information on wealthier households, so you can analyze plenty of data for the wealthy households sub-group. The survey collects data on a large number of financial, non-financial, and debt holdings, along with demographic information. The FRB issues summary results, and you can download the entire file for analysis. Did you know that the median net worth for families whose head possesses a college degree is \$146,400?

The Internal Revenue Service (IRS) also publishes tax return information (http://www.irs.gov/tax_stats/ind.html) that can provide insights into your target market. They give data on twelve separate adjusted gross income ranges by state and nationally, which can be downloaded. The information includes the number of returns reporting each 1040 line item and some deductions, and the amount reported. The data shows, for example, that 4,646 people in the state of Washington had over \$1 million in income. This represented 0.2% of the total returns, and those individuals reported average salaries

of \$1,734,000. You can purchase more aggregated and less complete data by 5-digit ZIP code for \$500 for the entire U.S. or \$25 for a state. Similarly, county data can also be purchased for \$50 for the U.S. or \$5 per state. The latest year available is 1999.

Retail sales provide insight into consumer spending. The Census Bureau conducts detailed retail sales surveys every five years showing merchandise line sales by type of store (<http://www.census.gov/epcd/www/97EC44.HTM>). In 1997, for instance, 8,762 computer and software stores sold \$3.7 billion of software. Available geographies include national, state, county, place, and ZIP code (purchase). For privacy concerns, they make less data available as you zoom in on specific geographies.

Surveys and polls contain additional consumer information. The Gallup Organization (www.gallup.com) issues some consumer surveys in addition to the political surveys that are often quoted. Other survey organizations include Roper Starch (www.ropers.com), Yankelovich (www.yankelovich.com), and NFO Worldgroup (www.nfow.com). The Marketing Research Association BlueBook (www.bluebook.org/scripts/bluebook/search.cfm) provides a searchable directory of market research firms.

Claritas (www.claritas.com) sells consumer data with each household classified into a segmentation scheme. The PRIZM segmentation defines every neighborhood into one of 62 distinct segments. The “Kids and Cul-de-Sacs” cluster, for instance, comprises 2.98% of U.S. households and has an average household income of \$68,900. They offer other segmentation schemes as well. Additionally, you can find 2000 Census data with Claritas enhancements for free.

USADATA (www.usadata.com), in addition to re-selling data from others, provides free demographic profiles of the top 64 U.S. markets. Data for markets can be contrasted with other markets for targeting. The data reveals, for instance, that 7% of Detroit’s population has earned a post-graduate degree.

Magazine circulation and the direct mail lists derived from them are a valuable, often overlooked, information source. While not all inclusive, you can find out how many people are interested in a subject through these sources. To sell direct mail lists, the list managers often append information from outside sources to the subscriber names that can be used to describe the market. Venture Direct (www.venturedirect.com) supplies response and compiled lists with on-line datacards. One of their compiled lists contains 10.9 million names of people interested in gardening, which can be thought of as the minimum potential market size for someone serving this market.

Business Information

The federal government provides a plethora of information about businesses. The most basic is the annual County Business Patterns (<http://www.census.gov/epcd/cbp/view/cbpview.html>). This survey provides counts of businesses in each county by Standard Industrial Classification (SIC) code (up to 1997), now moving to the North American Industry Classification System (NAICS) code (1998

and beyond), and employee size. It also supplies the number of employees and their compensation. The survey aggregates county data into state and national data as well. From 1994, the government makes the data available for purchase at the ZIP code level also. As with most data, the feds delay its release by two years, with 1999 data the latest currently available. The latest data reveals, for instance, that 14,000 establishments employing 83,000 provide marketing consulting services.

Zapdata (dbml.zapdata.com), a subsidiary of Dun and Bradstreet, and InfoUSA (www.infousa.com) also provide information about companies. You can perform searches to aggregate information by geography, employee size, and SIC. Zapdata organizes the data in tabular format for easy analysis. You can also purchase sales leads data from both sources. Superpages (www.superpages.com) and Switchboard (www.switchboard.com) derive their listings from the Yellow Pages. They provide counts and lists of businesses by choosing a Yellow Pages category and state or city.

The U.S. Industry & Trade Outlook (www.ntis.gov/product/industry-trade.htm) from the International Trade Administration (ITA) appraises the current situation and forecasts for 54 industries. Individual chapters for each industry are available in PDF format for downloading for \$10-\$25. You can also purchase the complete book or CD-ROM. It is produced annually, the latest available edition being 2000. Beginning in 2001, this is being converted to a Web-based service. The ITA expects to release the initial 2001 information in the Fall.

The Input-Output Model of the U.S. Economy developed by the Bureau of Economic Analysis (<http://www.bea.doc.gov/bea/dn2/i-o.htm>) shows purchases of different types of goods by different types of 498 purchasing industries. They produce this level of detail in five-year increments with a very substantial lag before release (the current data is for 1992). They also generate annual updates at a more summarized level, but also with a substantial lag. At a summary level, for instance, you can see that the automobile industry purchased \$2.1 billion of paint in 1997. You can forecast industry demand based on the ripple effects in the economy using the model's coefficients. If automobile purchases increase by 10%, for instance, the impact on the paint industry can be analyzed.

For targeting of specific job categories, the Bureau of Labor Statistics produces a matrix of jobs by industry (www.bls.gov/asp/oepl/nioem/empiohm.asp) and state (almis.dws.state.ut.us/occ/projhome.asp). They also project future employment. For 1998, they estimate that 49,950 people are employed as "Marketing and sales worker supervisors" in Colorado. This will grow to 66,450 by 2008. They forecast "Computer Support Specialists" will be the fastest growing job category in Colorado, increasing by 147% from 1998 to 2008.

If your industry of interest is regulated, the regulatory agency for that industry often publishes useful information. The Federal Communications Commission (FCC), for instance, issues an Annual Report on Competition in Video Markets (<http://www.fcc.gov/csb/csrtptg.html>) that provides a good overview of this industry.

As with consumers, you may want to check out publication data and direct mail lists. Great Lists (www.greatlists.com) keeps datacards on-line in a searchable database. This is another source of data on specific job titles. While not all inclusive, it can give you the minimum market size of your target job function.

Competitive Intelligence

The sites discussed above point to information that can be used for competitive analysis. The following sites allow you to collect information specific to your competitors. Obviously, go to your competitors' Web sites first. You can usually do this by just assuming their URL is www.companyname.com. You can also try AllBusiness's (www.allbusiness.com) directory of 1 million small companies or the general search engines.

Hoover's Online (www.hoovers.com) is a useful resource for company information, especially publicly traded companies. Its Capsules provide an overview of the company and links to other information. The Capsules and basic information are free, but to access more detailed data, you must become a subscriber at \$29.99 per month.

Hoover's links to the Securities and Exchange Commission's Edgar On-line database of annual and quarterly reports. All publicly traded companies must file these reports. You don't need to go through Hoover's to access them. The government maintains its own site at www.sec.gov/cgi-bin/srch-edgar, and another site accessing these reports is www.edgar-online.com. Because these reports are long, you may want to use your browser's search or find functionality to zero in on the information you're seeking.

A number of investment firms usually follow publicly traded companies. If you have an account with an investment firm, you can use their research functionality to obtain some of these reports. One site, Multex Investor (www.multexinvestor.com) tracks a list of reports available through some of these firms. You must sign-up for free to use the service or access it through Hoover's. They offer some free reports, while others require a payment. A few brokerage firms also allow you free access to their research, even without an account, or free research trials. These often provide good industry overviews as well.

Wire services post news releases issued by companies. You can search their archives and business overviews for company information. The two most popular wire services are Business Wire (www.businesswire.com) and PR Newswire (www.prnewswire.com).

For large companies, finding specific information may be elusive because of the large amount of information on their Web site. Most good Web sites include search capabilities, but sometimes they don't. If a search engine has indexed the site, you can use the search engine's site or URL search capabilities. With Google, for instance, you select the advanced search option, enter the text to search, and limit the search to a specific site.

Primary Research

Primary research involves collecting your own information. There are two facets of primary research. The first, qualitative research, includes information collection that cannot be projected to a universe. Qualitative research allows you to explore topics in a somewhat unstructured fashion and deeply probe into areas of interest. Quantitative research, the other facet, provides more hard numbers that can be projected to a universe. On-line techniques can be used for both facets, but works best for quantitative research.

Qualitative Research

The mainstay of qualitative research is the focus group. Companies held over 400,000 focus group sessions in 2000. Focus groups are discussions of 6-12 people led by a moderator. They are usually held at a specially designed facility containing a two-way mirror where sponsoring company representatives observe. Focus groups are used primarily for initial product development idea tests, concept re-designs, and other topics where you desire exploratory feedback. They enable you to use visual aids to show how the product or service will be marketed. To receive feedback from diverse sources, you normally conduct focus group studies with groups differing in composition and location.

In-person focus groups typically cost \$5,000 per session. Costs are incurred for recruiting respondents, paying participants, hiring a moderator, renting a facility, and travel. Through the use of tools like Microsoft NetMeeting and on-line chat sessions, on-line focus groups may significantly reduce these expenses by eliminating the need for facilities and travel expense. They also boast the advantage of being more convenient for participants to attend since they can participate from their office instead of coming to a facility.

The limitations of on-line focus groups offset most of these advantages. First, on-line focus groups depend on participants typing information, and many people can't type. This inhibits many senior managers. Second, the moderator can't see the body language of the participants. This feedback is often as important as what is verbalized during in-person focus groups. Third, technology limitations can upset your best-laid plans. Computers and connections have been known to fail. Corporate firewalls can prevent desired participants and observers from attending. New technologies, such as virtual private networks and video conferencing offered by companies like CU-SeeMe, promise to make on-line focus groups function better in the near future.

Another type of on-line focus group is remote observation of a normal focus group. The remote observers still send questions to the moderator to further explore questions. This type of focus group eliminates some of the travel costs of the sponsoring company. According to David Minter, noted marketing advisor and researcher, these "often don't work. And they aren't that much cheaper than live focus groups." Some companies are bringing focus group observation to the desktop, but these also are problematic because of technology limitations and corporate firewalls preventing streaming audio and video.

Quantitative Research

Quantitative research comprises data collection that is normally projectable to the entire universe. It includes two major types of studies. Survey research administers a questionnaire to a respondent sample of the overall universe. Experimental studies vary an input factor and observe how the results change. On-line techniques can assist with both types of studies.

On-line Surveys

“On-line surveys have worked out extremely well,” Minter states. On-line surveys possess a number of advantages over traditional collection methods. The first is cost. The sponsor expends most of the cost of the on-line survey in its development; the administration cost is zero. By contrast, telephone or in-person interviews require significant expenditures for the people conducting the interview and their support, such as phone lines.

A second advantage of on-line surveys is speed of obtaining results. Companies design the survey faster. Once designed, reaching the needed number of respondents by mail, telephone, or in-person takes weeks. Reaching them on-line takes only days.

“On-line surveys are a great way to reach people who are hard to find,” Minter adds. “If you need to talk to someone who is less than 10% of the population, for instance people who eat out 15 times or more per month, you break the bank trying to reach them by telephone. On the Internet, the cost of sending 30,000 e-mails vs. 10,000 e-mails is incremental, while by phone it is three times as expensive.”

Companies find it is easier to control the entire survey effort with on-line questionnaires. Readily available software helps one person design and administer the questionnaire. The typical telephone survey, on the other hand, normally needs different people at an outsourced call center to design the survey, program it, conduct the interviews, and analyze the results.

Visuals can be displayed with on-line surveys but not over the phone. Animations and video may be used on-line. As fatter transmission pipes are adopted, these possibilities will increase. To avoid firewalls that weed out streaming video, respondents may download videos to their desktop prior to taking the actual survey.

What are the limitations of on-line surveys? The most obvious is that your target market needs Internet access. If your target market is seniors over 65-years old making off-line purchases, on-line surveys will not give you a representative sample of your potential market. (Of course, if you are only selling your product over the Web, an on-line survey will represent your target market). The same limitation applies to certain occupation groups, like auto mechanics, who do not access the Internet at work. Another previously mentioned limitation about qualitative studies is the lack of typing skills by certain respondent groups. This impacts results for open-ended questions.

Properly administered, on-line versus telephone surveys generate similar results. “There’s been a big debate about representativeness of results, mostly among academicians, between the Internet and non-Internet methods,” Minter articulates. “My experience is that it’s not a problem where we’ve had side-by-side data. We fool ourselves in thinking that anything is representative. With high telephone refusal rates, other techniques are far from perfect. We aren’t comparing to something being done in a perfect way.”

Two ways of recruiting survey respondents exist: sending an e-mail to desired respondents, and using Web site pop-up screens. E-mail recruitment enables you to conduct surveys with respondents who will not necessarily visit your Web site, such as competitor customers. Employ Web site pop-up screens for studies about the effectiveness of your Web site.

To use e-mail recruitment, you obviously need a list of e-mail addresses. If you are most interested in studying your own customers, use your internal e-mail list. If you need additional e-mail addresses, Postmaster Direct (www.postmasterdirect.com) rents lists of double opt-in e-mail addresses. They maintain 30 million addresses in 3,000 topical lists. They’ll also deliver your e-mails for 10¢ - 35¢ each with a \$1,000 minimum order.

To design your survey, the WebSurveyor (www.websurveyor.com) software package easily creates Web surveys. The package includes standard questions for incorporation, and you can design your own. Respondents can branch from one question to another based on their response. WebSurveyor charges \$449 to host one survey for 3 months.

If you want to outsource recruitment and questionnaire administration, Greenfield Online (www.greenfieldonline.com) maintains panels of people who have signed-up to participate in studies. They also offer QuickTake (www.quicktake.com) for short surveys. Participant incentives, like sweepstakes drawings, boost response rates.

Experimental Studies

In addition to surveys, companies can utilize the Internet for experimental studies, the second type of quantitative research. In these studies, randomly selected respondents are directed to different Web pages, or view different content on the same page. Web site logs contain results data for analysis. For instance, when users click on a hyperlink for information about your products or services, half are directed to a page with one design, and half are directed to a page with a different design. You then analyze your Web logs to view the behavior on each page. Some researchers also suggest varying prices for different users, allowing you to estimate a demand curve.

Using Professional Research Firms

While the Internet makes massive amounts of free information available for market research, consider using a professional research firm to conduct your project. A professional firm obtains the information faster from using a more disciplined research report and piggy-backing on previous studies they’ve conducted. Additionally, they

provide an important level of analysis, combining multiple sources of information. They also provide in-depth analysis of raw data that is downloaded from government sources.

InfoTech Marketing specializes in market research. Past projects include analyses of high-income/wealthy households, wireless data services, various fast food, transportation equipment, and construction markets. We tailor each study to the specific client's needs and deliver within one-four weeks, depending on the client's depth requirements. We also provide a Web portal for marketers, The Sales & Marketing Source (www.smsource.com). Our Web site is www.infotechmarketing.net, or call us at 303-904-3045.