



---

## Internet Search & Strategies For Sustainable Profits

[Christin Anderson](#) - [Joe Lazarus](#) - [Ben Loftsgaarden](#) - [Ben Weiss](#)

[Economics of Competitive Strategy](#)

Wednesday, April 30, 2003

[Summary](#)[Industry](#)[Strategy](#)[Competition](#)[Recommendations](#)

## Executive Summary

This paper describes the tactics Google has employed to attain a dominant position within the Internet search industry and offers strategic recommendations that should be implemented to sustain profitability. From a five forces perspective, the search industry is structurally unattractive. Yet, Google has managed to capture significant value through a strategy of product focus, innovative technology, differentiation, organizational design, and inventive pricing. Google competes against other search engines, portal companies, and forms of Internet advertising. Recently, two of their main competitors Overture and Yahoo have sought major acquisitions to merge search and portal functionality with which to compete with Google. Despite the competitive landscape, Google has achieved dramatic growth and become the market share leader. (See Exhibit A) The success was initially facilitated through developing technological superiority in its search offering, but now sustained growth has come from an uncompromising commitment to the end-user experience. At this point, there are two primary courses the company could follow: 1) to expand its business beyond Search or 2) to focus exclusively on search. Based on Google's competencies and likely competitor responses, it is recommended that the company maintain their focus solely on search. In doing so, Google should pursue an IPO to attract sufficient capital that would be funneled into maintaining technical superiority, bolstering brand loyalty, and pursuing partnership agreements.

[Summary](#)[Industry](#)[Strategy](#)[Competition](#)[Recommendations](#)

## Industry Analysis

### Product and Complements

Google earns revenue from two distinct business units. First, their proprietary search technology is licensed to web portals and other Internet websites. This search technology simplifies locating information on the web or within pages of a particular site and is featured on the Google.com site as well as on affiliate sites such as AOL, Yahoo, CNN.com, and Amazon.com. Google's second business unit is a highly targeted keyword advertising business. This division generates over 70% of the company's revenues and is considered one of the more effective forms of online advertising. Google's advertising programs enable advertisers to closely match text-based ads with users' search queries. The result is a targeted service that consistently produces click-through rates four to five times higher than the industry average for traditional Internet



banner advertising. Compliments include ISPs, Internet portals, PC's, websites, digital cameras and any other content that is published on the web. As individuals and companies post more information online, the value of tools which help consumers sort through that vast store of information increases.

### 5/6 Forces

A classic Porter analysis demonstrates that this industry is generally unattractive. With "Buyer Power" and "Threat of New Entrants" at a high level for both Internet search and advertising businesses, the industry in which Google is operating is highly rivalrous. (See Exhibit B)

Summary

Industry

**Strategy**

Competition

Recommendations

---

## Google's Strategy

While Internet search is fundamentally an unattractive industry, Google has managed to capture significant value through a strategy of product focus, innovative technology, differentiation, organizational design, and inventive pricing. Each element of their strategy is explained in some detail below.

### Focus

Since its founding in 1998, Google has remained solely focused on search and providing customers with tools to sort through the vast amounts of information on the web. While Yahoo and other companies initially focused on search expanded into new product categories and pursued a portal strategy, Google was unwavering. In fact, Yahoo, MSN, and AOL's lack of focus is what provided for later entry by Google, Overture, and others. Google's dedication to providing users with the preeminent search product facilitated initial and a maintained focus on search has enabled continued growth.

### Technology

Consumers generally evaluate search technology on three basic criteria:

- *Relevance*: how accurately the search results match with what the user is looking for
- *Breadth*: how many internet pages are included in the search engine database
- *Freshness*: how frequently the search engine database is updated in order to capture breaking news and other timely content

Google quickly grew to dominance in all three of these categories, but their initial advantage is slowly diminishing as competitors learn to replicate that technology.

Google's major technological innovation was what is known as the PageRank™ system. PageRank assumes that when one page links to another page, it is effectively casting a vote for the other page. The more votes that are cast for a page, the more important the page must be. Also, the importance of the page that is casting the vote determines how important the vote itself is. Google calculates a page's importance from



the votes cast for it. Other techniques include analysis of font size, location of the search words on the page, and how close the words are to each other. Prior to Google's introduction of this system, search engines generally ranked a page's importance based on information from the page itself rather than pages that link to it. Google's link referral system offered far more relevant search results than what competing search engines provided in the late 1990's and helped to develop a loyal following of users.

Google's early growth was due also to a unique approach to computer hardware. Most search engines in the mid-1990 were supported by a few extremely expensive, high performance servers that churned through vast databases to provide users with search results. These systems were costly and not particularly scalable. Google's engineers created a system whereby thousands of low cost PC's are networked together to create a relatively low cost, highly scalable engine. This innovation helped to establish Google as a leader in search breadth and freshness while keeping costs relatively low.

The PageRank system and hardware innovations facilitated Google's initial growth and established Google as a dominant search engine technology. Their technology provides for low marginal costs, which could be used to dissuade competitors should Google decide to instigate a price war. Google currently indexes more web pages than any other site with 3.1 billion pages in its database.<sup>1</sup> AllTheWeb, a relatively new entrant, ranks second in breadth with 2.1 billion web pages.<sup>2</sup> Certain sections of the Google site, including the News category, are updated as frequently as every 15 minutes, thus establishing Google as the clear leader in terms of database index freshness.<sup>3</sup> Relevance is more difficult to objectively measure, but several studies have ranked Google as top in this class as well.

Google has a technological edge over its competitors, but technology seems fairly easy to imitate in the search industry. New entrants such as Teoma and AllTheWeb have successfully copied several Google innovations. Breadth and freshness are largely a function of computer processing power and disk storage space, both of which are readily available and dropping in price. Relevance requires more proficiency, but several search engines have realized the value of the PageRank system and incorporated similar technology into their own ranking systems. In fact, a recent report from VeriTest suggests that improvements based on a system similar to PageRank boosted Inktomi's relevance score slightly above that of Google.<sup>4</sup> So, while technology played a crucial role in Google's rise to prominence, competitors can easily copy that technology and sustainable profits will likely need to be based on more than just technology alone.

### Differentiation / Positioning

Google positions itself as a service that provides users with impartial answers that are delivered quickly and guaranteed to be relevant and clear. The Google website is void of flashy animations, pop-up ads, and annoying banner ads. Instead, the site is designed around simplicity, speed, and function. Google does serve text advertisements, but they are clearly distinguished from standard search results and the ads are highly targeted to the user's search query so that they provide value to the end user. Sergey Brin, one of Google's founders, summarizes the company's positioning

---

<sup>1</sup> As reported on Google's homepage and supported by secondary research

<sup>2</sup> As reported on AllTheWeb's homepage and supported by secondary research

<sup>3</sup> "Freshness Showdown", SearchEngineShowdown.com, October 2002.

<sup>4</sup> "Web Search Relevance Test", VeriTest.com, March 2003.



strategy with one simple rule: “don’t be evil.”<sup>5</sup> Misleading users with subtle advertisements, slowing download times with large graphic files, and filtering controversial political sites would all be considered evil by Brin and his colleagues. Strict avoidance of all that is evil helped to establish Google as a fair, efficient, and uncluttered site.

### Organizational Design

Google’s organizational design, their emphasis on innovation, and their creative work environment allow the company to attract and retain highly productive employees. Google has a rather unique approach to the strategic planning process and creation of new products. Their News service, for example, was conceived not by a team of corporate strategists, but by a creative engineer who conceived an early version of the product, which is currently in beta, in his spare time. As Google’s CEO Eric Schmidt says, “virtually all of the strategic initiatives and product initiatives are either driven by the two founders or by very small innovative technical teams. We don’t have a traditional strategy process, planning process like you’d find in traditional technical companies.”<sup>6</sup> This novel strategy process and the willingness to continually experiment with new ideas permit Google to innovate quickly and efficiently. Google’s work environment attracts some of the most talented people in the industry. Over 60 of Google’s 800 employees have a doctorate<sup>7</sup>. Perks, such as free gourmet meals and office masseuses that were dismissed as dotcom excesses, seem to work in Google’s favor. The company reportedly receives over 1,000 resumes per day and employee turnover is close to zero percent.<sup>8</sup>

### Pricing Strategy

Google’s pricing strategy for its targeted advertising product is another important part of the company’s strategy and fits well with the Google brand. Pay-per-click (PPC) advertising represents an estimated two thirds of Google’s revenue. The PPC pricing model, pioneered by Google’s competitor Overture, is an auction-based form of price discrimination that attempts to charge customers according to their willingness to pay. Advertisers bid for ad placement along side search results. The more an advertiser pays, the higher they will rank on the search results page. Advertisers bid for keywords on a per click basis and bidding is open on a 24-7 basis.

Google takes this basic bid for placement model introduced by Overture and adds an inventive twist. With Google, placement depends not just on the amount the buyer bids, but also on the listing’s popularity with searchers. The more clicks an ad receives, the higher the listing will climb and the lower the cost per click. This approach lowers short-term revenue, but is Google’s way of policing against advertising for irrelevant terms. Google is willing to forgo some revenue to improve the overall user experience. Furthermore, Google uses a Vickery auction whereby the winning bidder pays only the second highest bid amount. This encourages bidders to bid their willingness to pay and reduces the “winner’s curse.” Google’s auction format ensures that buyers feel confident that they received a fair price for their listing. Finally,

---

<sup>5</sup> “Google vs. Evil”, Wired Magazine, January 2003

<sup>6</sup> “About Google’s Eric Schmidt”, AlwaysOn, April 2003.

<sup>7</sup> As reported by Google’s corporate information site.

<sup>8</sup> “What’s So Special About Google?”, CareerMosaic.com Case Study.



rewarding advertisers for popular listings ensures that end users are shown only the most relevant ads. This provides a coherent strategy for the firm.

[Summary](#)[Industry](#)[Strategy](#)[Competition](#)[Recommendations](#)

## Competitive Landscape

Although Google has grown to become an industry leader, their strategy can only be understood within the context of the overall search industry – an industry with a complex structure of competing companies. As just one example illustrates, Yahoo is an investor, a partner, and a vigorous competitor of Google<sup>9</sup>. This section of the paper examines the many levels on which Google competes, illustrates the converging strategy of two of their competitors, and finally proposes methods by which Google can effectively cooperate within the industry.

Google and its competitors provide a range of search industry products (See Exhibit C and D). Most directly, Google competes against other established search providers such as Overture, Inktomi, and startups such as Teoma and AllTheWeb. At the same time, Google has increasingly competed as a destination site with such firms as Yahoo, MSN, and AOL. Because the company generates revenue from advertising, the company must also be viewed as competing with online advertising companies such as Doubleclick. Recently, significant acquisitions have reshaped the industry structure. Yahoo acquired Inktomi and Overture acquired both the search engine and portal Altavista and AllTheWeb's parent company, FAST. These acquisitions are interesting in that they both demonstrate portal and search companies developing a complete product portfolio to compete with Google.

Yahoo's strategy demonstrates an information portal entering the search market. On the heels of recent integration with Inktomi, Yahoo has launched a major challenge to Google's dominance by introducing Yahoo! Search, which intends to produce "easier ways for users to find what they are searching for on the Internet"<sup>10</sup>. Google threatens Yahoo on two levels by capturing search revenue from Yahoo users and by providing a compelling destination site, thereby undermining Yahoo's core value. Consequently, Yahoo is essentially imitating most of Google's technology. The strength of Yahoo's approach lies in their ability to leverage their existing base of users into a proprietary technology. Yahoo shares search revenue with Google through their partnership. Yet, when users use Yahoo! Search, Yahoo captures a greater share of revenue. The risk inherent in this strategy is that users may value Google's search more than the integrated Yahoo bundle of services. The question that the Yahoo strategy raises is whether a portal can leverage their user base into a search technology. Specifically, it may be difficult for a portal company, with its vast business lines to devote enough resources to develop a search engine that would match Google's capabilities.

Alternatively, Overture, a search provider, has now apparently entered the portal sector. Overture has historically followed a similar strategy to Google's by focusing on advertiser-supported search results, but to gain greater leverage they are now entering the portal market. Overture derives revenue from pay per click advertising. The company has major partnerships with both Yahoo! and MSN<sup>11</sup>. The company has seen

<sup>9</sup> <http://searchenginewatch.com/reports/index.php>

<sup>10</sup> [http://biz.yahoo.com/bw/030407/75947\\_1.html](http://biz.yahoo.com/bw/030407/75947_1.html)

<sup>11</sup> <http://www.overture.com/d/USm/about/company/vision.jhtml>



significant deterioration in their market capitalization because of their vulnerability to their distribution partners and increased competition from Google<sup>12</sup>. To gain greater leverage, Overture may be pursuing a bundle strategy. Their recent acquisition of Altavista suggests that they may try to bundle their search capabilities with additional content provided by AltaVista. The merger was ostensibly consummated to “enable (Overture) to offer enhanced web search solutions”<sup>13</sup>. This seems difficult to take at face value because of Altavista’s diminished reputation. Rather Overture has likely launched a content component that could drive traffic to its search technology and give the company greater leverage with existing distribution partners. It seems that by entering the portal market, Overture may be alienating its current portal customers. This could be costly given that the bulk of ad revenue in search comes from portal partnerships.

In such a complex industry structure where customers are also competitors, Google has many points of interaction requiring a significant degree of cooperation. A successful cooperation strategy must include a basis for cooperation, punishment for harmful behavior and mechanisms for recovery. The basis for cooperation is clear: the more traffic that distribution partners drive through Google, the more shared revenue they can both benefit from. The punishment for failure to cooperate is extremely onerous for Google. They can try to share less revenue with the distribution partner. Such an action could have a negative feedback causing the site to promote Google less, thus driving down throughput. To recover, Google must take actions to accommodate partners by signaling their intention not to challenge them in other areas such as content creation and portal services.

Summary

Industry

Strategy

Competition

Recommendations

## Alternatives & Recommendations

Amid the intense competition and poor attractiveness of the Internet search industry, Google has achieved dramatic growth and has become the market share leader. This was initially facilitated through developing technological superiority in its search offering. Google’s product offered the fastest searches and the largest database of web pages indexed. However, its sustained growth has come not only from its technical superiority, but also through an uncompromising commitment to the end-user experience. From this dedication to its end-user, Google has built impressive brand equity earning 2002’s brand of the year by Brand Week. With this remarkable performance as a backdrop, there are two general strategic courses that Google could employ in the near future.

### Option 1: Expand Beyond Search

Under this option, Google would attempt to parlay its current search success into becoming a full-fledged Internet portal site. This would put Google into direct competition with large portal players such as MSN, AOL, and Yahoo.

#### *Advantages:*

- The portal market is much larger and would offer more opportunity for Google to grow.

<sup>12</sup> <http://www.internetnews.com/IAR/article.php/2196481>

<sup>13</sup> [http://writenews.com/2003/022103\\_overture\\_altavista.htm](http://writenews.com/2003/022103_overture_altavista.htm)



- The brand equity Google has built could be leveraged to stake a claim to the much larger portal market.
- Google's formula for success in search, including hiring top talent and their focus on the end-user experience could be translated successfully to the portal market providing Google a competitive advantage over the established players.
- Google's popularity in search could be used to drive traffic to the portal site.

*Disadvantages:*

- Resources may be stretched too thin. Becoming a destination site requires a broad base of capabilities (i.e. content, online purchasing, chat/email, etc.). In developing these capabilities, there is a strong possibility that focus would shift away the core search business. Google could both lose its search superiority and find itself in a fierce battle for a small share of the portal market. This situation seems highly likely, as it has already occurred in the past. Google itself was able to enter and become dominant in the search because Yahoo, in trying to build its portal presence, let its focus on search lapse. This allowed Google a window of opportunity to seize a major share of the search market.
- The possibility of brand dilution. Currently, the Google name is synonymous with search, and perhaps more importantly search is synonymous with Google. If Google becomes a portal, the name no longer retains its power in search. Additionally, the brand equity that Google has built would suffer because in the portal market the Google name would directly compete with very strong brands such as AOL, MSN, and Yahoo.

*Competitors' Response:*

- Google's entry into the portal market would be met by strong competitive response from some of the largest companies in the technology world.
- Current portal companies would invest in improving their own search capabilities (either by in-house development or acquisition) in order to sap the only core technological advantage that Google has. In addition, these companies would view Google as a threat to their core business and discontinue using Google's search and revoke partnership agreements.
- Search-only competitors (i.e. Overture, Teoma, etc.) that Google now competes head-to-head with would view Google's expansion into portals as an opportunity to seize search market share.

[Option 2: Focus Exclusively On Search](#)

This option would allow Google to continue to focus on its core search business with the goal of becoming the unmatched market share leader in search. This path would require that Google maintain technological superiority and use its brand power to build end-user loyalty and build barriers to imitation.

*Advantages:*

- Google has the best technology and a clear brand equity edge in a market that could tip towards a one dominant firm market.
- As the leader in search, Google is able to attract and hire the best employees. These employees keep Google on the technological frontier.

***Disadvantages:***

- Google is not diversified and could be severely debilitated should the search market become even less attractive. In essence, Google is putting all of its eggs in one basket. If large partners / competitors, such as MSN, focus on improving their own search offerings, or if search-only competitors catch up to Google, the market could become commoditized.

***Competitors' Response:***

- As Google focuses on growing its share of the search market, it could face increased competition from search-only competitors that are being squeezed out of their only line of business.
- Google may also face backlash from partners / competitors such as MSN, AOL, and Yahoo. These companies may feel that is not in their best interests to allow Google to attain monopoly power in search.

**Recommendations**

Despite the diversification risk, Google should pursue Option 2 and continue to focus exclusively on search. If Google could establish itself as the unmatched leader in search, both in technical supremacy and in brand recognition, there would be no impetus for end-consumers to use anything but Google for searches. This trend points to the potential of this market to tip, with one firm securing a dominant market share position. However, in order to become the dominant leader, Google must ensure success in three areas.

1. Technical superiority
2. Brand recognition and loyalty
3. Corporate partnerships & competitive vigilance

The following recommendations should be followed to achieve these objectives:

**Technical Superiority**

Google is the current technical leader in search, but there is mounting threat as competition catches up. Two small competitors, Teoma and AllTheWeb, have reportedly successfully copied most of Google's technology. However, search technology is not static. There is a continuous race to become the leader in search in terms of breadth (number of pages indexed), relevancy (search result appropriateness), and freshness (speed to index new pages). Additionally, there is a constant motivation to undermine search technology. It is in the best interests of web page developers to try to game the search system so that their web page is a top search result even though it may lack relevance.

In order to maintain search relevance, Google should establish "skunk works" teams that have the sole purpose of trying to compromise the current search technology. Through this, Google could find and fix flaws in the technology before the market does. Google should not only rely on in-house innovation, but also look to acquire small start-ups that have developed potential technological breakthroughs. In order to finance these acquisitions, it is recommended that Google go public. An IPO would afford Google the funds and equity to acquire search companies; however, in essence Google would just be purchasing the breakthrough technology.



### Brand Recognition and Loyalty

Many critics argue that there is no brand loyalty on the web. However, Google has proved this assertion to be untrue. Google has become one of the most recognized Internet brand names; more impressive is that this brand equity has come simply through word of mouth advertising. Increased marketing efforts would further strengthen brand equity, increase entry barriers, and push the market to compete on more than just technology alone. Technology is relatively easy for competition to match; strong brand equity is much more difficult. Google should begin to use mass advertising in national media channels. The goal would be make the Google brand synonymous with search, much like Intel for microprocessors, and Microsoft for operating systems. Not only would this improve Google's brand recognition, it would also raise the bar and make it more costly for the smaller, search-only firms to compete.

These marketing efforts would be lost, though, if Google does not also aim to build loyalty or attempt to lock customers in. Loyalty could be fostered by Google's continued commitment to the end-user experience. The website should continue to remain uncluttered and the ranking system to display only relevant ads should be maintained. Although it may be tough to justify when Google is public, the company policy of committing no "evil" should stand as a tool to engender end-user loyalty. To generate customer lock-in, the company should also focus on stimulating downloads of its personalized toolbar. Once they have downloaded the Google toolbar to their personal web browser, users are much less likely to switch to a new search product. This download has been available, but Google has not emphasized it. By making the download difficult to locate on the site, they have targeted only savvy Google users to download the toolbar. These users are likely already loyal to Google. It is the casual user that Google should target and attempt to lock-in with the toolbar and similar products.

### Corporate Partnerships / Competitive Vigilance

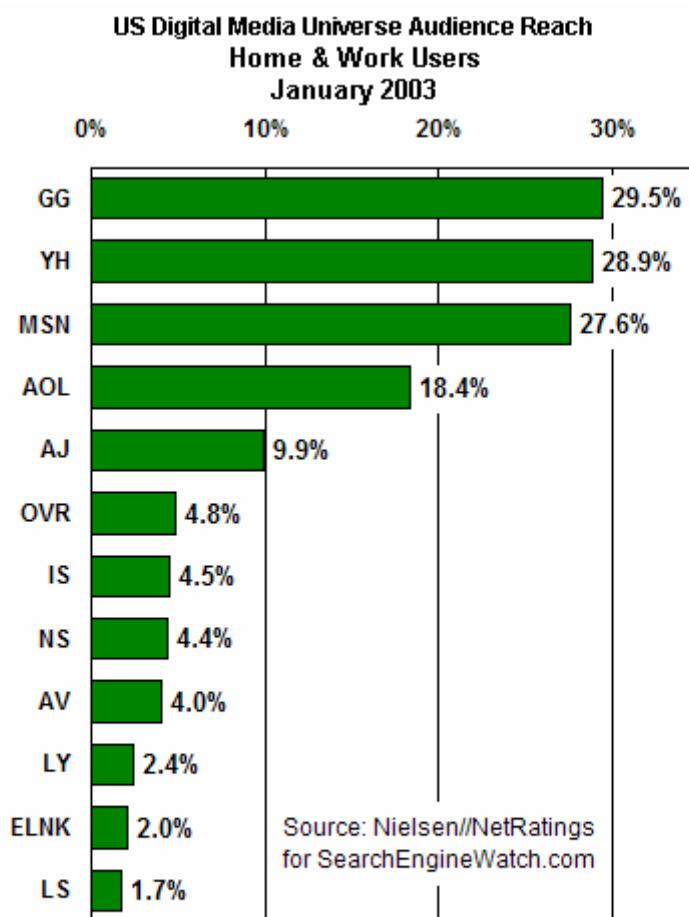
Google should enter into partnership agreements not simply with content websites, but with firms that it currently competes with. These firms include Microsoft, Yahoo, AOL, and others. For these firms, search is not their primary focus. Google, with a competitive advantage in search, should attempt to become these companies search engine provider. To make the partnership attractive, Google should structure a revenue sharing agreement in which both companies split the revenue for each user search. For this partnership to work, these companies must receive more from agreeing to split revenue on Google searches than they would have received from keeping 100% of the search revenue generated from in-house search capability. As Google becomes the dominant leader in search, and consumer demand increases, these companies may be receptive to an opportunity to use Google search to drive traffic through their sites. However, in order for this cooperative arrangement to succeed, Google must take actions to accommodate partners by signaling an intention not to challenge them in other areas such as content creation. Google would make a tacit agreement that in exchange for these portal sites allowing Google to be their search capability, Google would not forward integrate into the portal market.

Google should also focus on competing more intensely with its direct, search-only competitors. Currently Google provides some of its search technology to some of these direct competitors. For example, Google provides list results to Ask Jeeves, HotBot, and Teoma. These companies are direct competitors that provide search services for end users and content websites. Even though Google does receive revenue



for providing these services, this strategy is detrimental because it dilutes the superiority of Google's offering. End consumers that use Ask Jeeves may think that is as effective as Google, but this may only be due to the fact that Google is providing Ask Jeeves with the search results. In order for Google to gain a true market perception of brand superiority, it must discontinue providing its direct competition with its technology.

### Exhibit A: Nielsen NetRatings Audience Reach



KEY: GG=Google, YH=Yahoo, MSN=MSN, AOL=AOL, AJ=Ask Jeeves,  
OVR=Overture (GoTo), IS=InfoSpace, NS=Netscape, AV=AltaVista,  
LY=Lycos, ELNK=EarthLink.com, LS=LookSmart,

## Exhibit B: Industry Analysis

### Rivalry (High)

Rivalry is high in Internet search. Competition comes from direct competitors such as leading search pioneers Overture, Inktomi and Lycos as well as indirect competitors including online content providers Yahoo, MSN, and AOL. There are also other, more distant competitors such as Doubleclick, an online advertising network, that pose additional threats directly to potential advertising revenue. With competing business models being pursued both by large corporations, such as Microsoft, as well as scrappy technology start-ups, rivalry exists on all fronts.

### Threat of New Entrants (High)

Few barriers exist for new companies trying to enter this market. Entrants essentially need only invest in the creation of search algorithms and computer storage. AllTheWeb, for example, grew to be the second largest search engine database in just a few years with a small team of engineers. Additionally, the widespread knowledge of Google's burgeoning financial success will likely encourage competitors to enter the fray. The creation of new technologies may possibly give advantage to new, aspiring entrants. However, while barriers to entry are low, the barriers to success are extremely high. Billions of page views are required to support fixed costs of a sales force, overhead, technical staff, and building brand awareness. Obtaining that scale could prove difficult for new entrants. The threat of new entrants, nevertheless, is high.

### Supplier Power (Low)

With Internet content and bandwidth readily available, supplier power is extremely weak. Additionally, there is currently an abundance of skilled labor available should the right competitor choose to challenge the incumbents' current success.

### Buyer Power (High)

Internet users, advertisers and licensees are all buyers of online search products. Google is currently dependant on portals for revenue. Yet, portals increasingly view Google as a competitor as Google.com steals more and more of the traditional search business. End customers prefer using Google.com, but competitive advantage is somewhat limited and buyer power remains high as there are many available, if less attractive, options for Internet searching. Switching costs are low. Recall the Internet search engine darlings of past - Alta-Vista, Hot-Bot, Infoseek, even Yahoo. They all had their day. Google managed to pilfer many of these sites customers with limited advertising, relying almost entirely on word of mouth. However, search is moving further down the technology adoption curve and buyers are less likely to switch primary search providers today than when Google emerged years ago.

### Substitutes (Moderate)

There are few suitable substitutes for Internet search capabilities. Traditional search options such as libraries, encyclopedias, and yellow pages are extremely weak compared to on-line search. Substitutes for Google's online advertising business, on the other hand, appear to be abundant as advertisers could potentially abandon Internet advertising in favor of traditional advertising methods such as telemarketing, print, billboard, direct mail and even email methods.

## Exhibit C: Search Providers Chart

Provider/ Engine	<a href="#">Google</a>	<a href="#">Overture</a>	<a href="#">Open Directory</a>	<a href="#">Inktomi</a>	<a href="#">LookSmart</a>	<a href="#">Teoma</a>	<a href="#">AllTheWeb</a>	<a href="#">Lycos</a>	Notes
<a href="#">Google</a>	Main & Paid		Option						Yahoo is an investor
<a href="#">AOL</a>	Main & Paid (May 04+)		Option						Owes Open Directory
<a href="#">Yahoo</a>	Main (10/04+)	Paid (April 05)							Purchasing Inktomi by 3/03
<a href="#">MSN</a>		Paid (Dec. 04)		Backup (Dec. 05)	Main (12/3/03)				Also uses own editors
<a href="#">Ask Jeeves</a>	Paid (Sept 05)		Option			Main			Owes Teoma
<a href="#">AltaVista</a>		Paid	Option		Option (8/31/03)				Main from <a href="#">own crawler</a> ; being bought by Overture
<a href="#">Overture</a>		Paid		Backup					Purchasing AltaVista & AllTheWeb by 3/04
<a href="#">Netscape</a>	Main & Paid (May 04+)		Option						Owned by AOL
<a href="#">Look Smart</a>				Backup	Main & Paid				
<a href="#">Lycos</a>		Paid	Option				Main	Paid	
<a href="#">HotBot</a>	Main	Paid		Main		Main	Main	Paid	Offers choice of 4 crawlers
<a href="#">AllThe Web</a>		Paid	Option				Main		Lycos is investor; being bought by Overture
<a href="#">Teoma</a>	Paid (Sept 05)					Main			Owned by Ask Jeeves

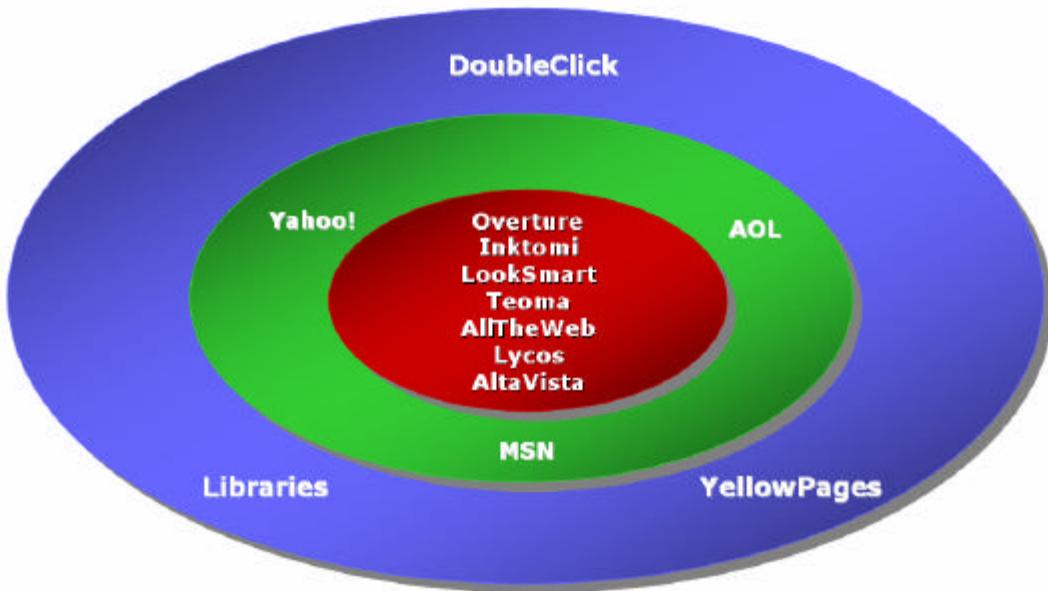
**Main:** Indicates that a search provider provides the "main" editorial results to a particular search engine, the most dominant listings that will be seen.

**Paid:** Indicates that a search provider provides paid listings to a particular search engine.

**Backup:** Indicates that a search provider provides the "backup" results that appear in cases where a search engine's main results fail to find good matches.

**Option:** Indicates that information from this source is made available either on results pages or in other ways, though the prominence of the information may not be high.

\* Source: [SearchEngineWatch.com](#)

**Exhibit D: Competitive Landscape**

\* Partial list of competitors and substitutes