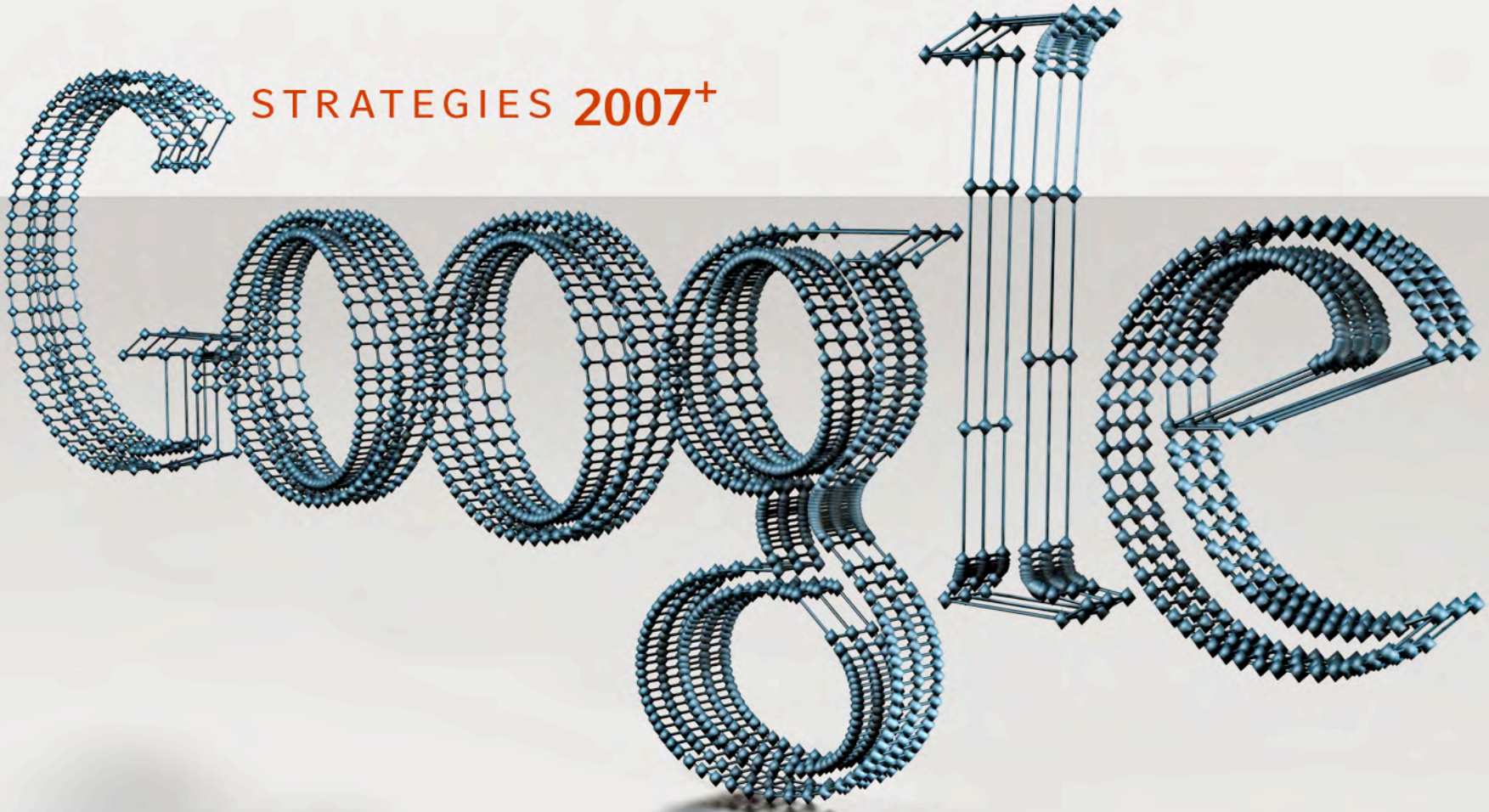
STRATEGIES 2007+



aBOYNTON: T2b

Google’s Mission and Strategic Intent

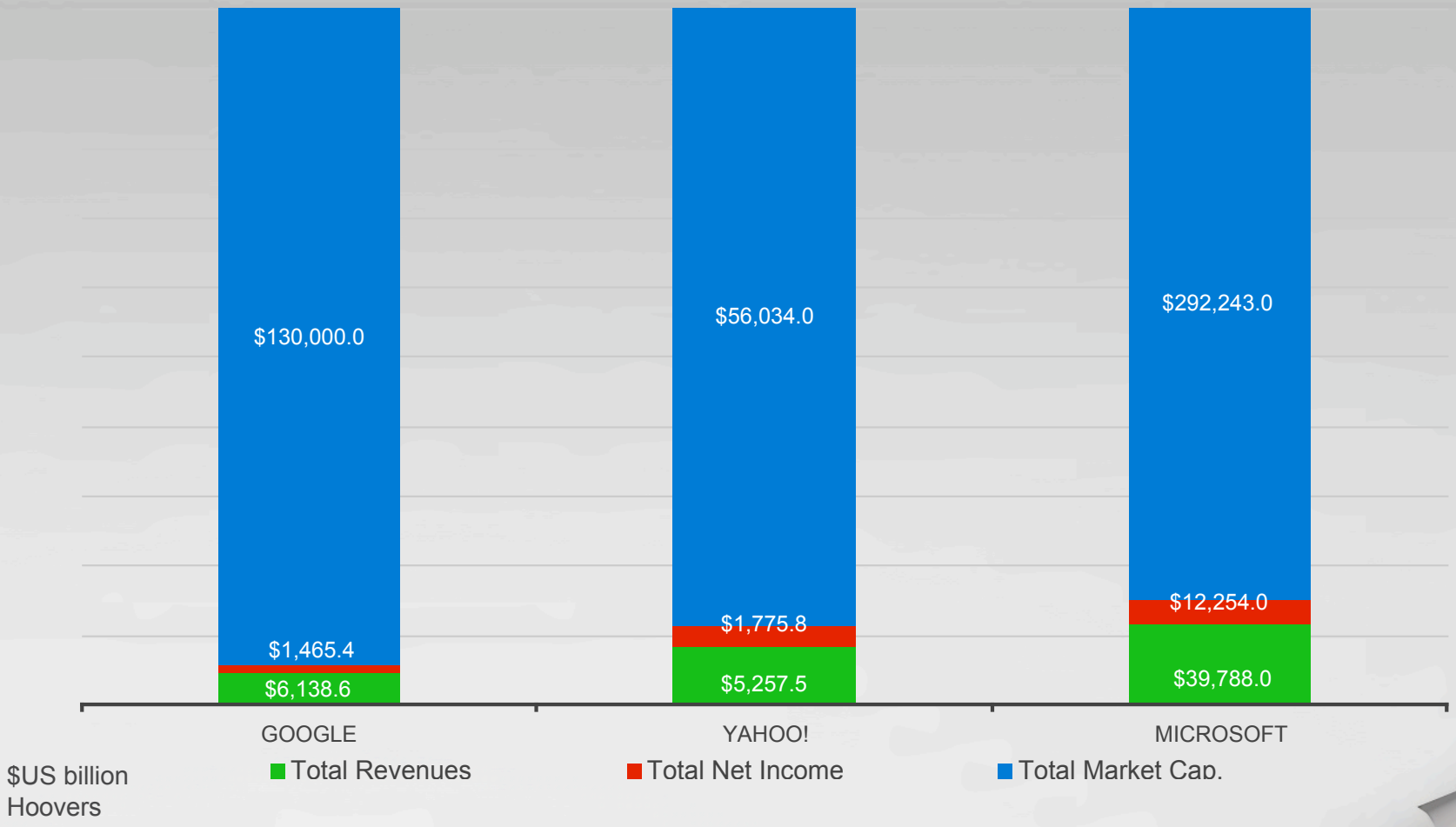
Mission: To organize the world's information, making it universally accessible and useful.

Intent: Having the strongest advertising network, and all the world’s information.

General Problem Statement

How to maximize the potential to the user offered by Google's current position as a leading conduit for connecting the user with relevant content and relevant advertisers; in tandem with cultivating the unique culture which lies at the heart of Google's success. Google's love of creating, and their concern for the user underlies their innovative advantage, and has propelled their sweeping market ascent.

Search Market Leaders

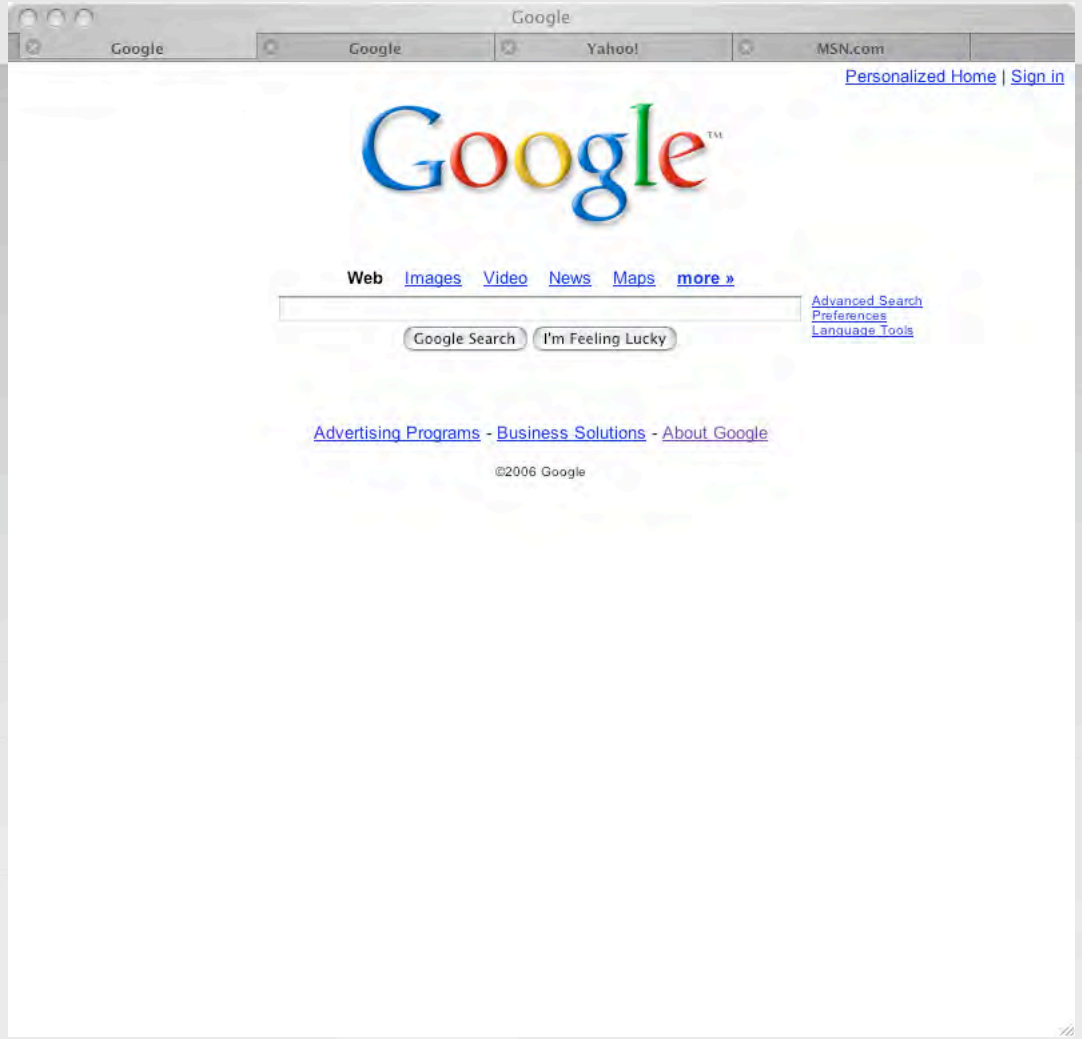


All search is not created equal

	STRATEGIES	OBJECTIVES
GOOGLE	User-centric	Respect and empower users
YAHOO!	Social-networked, ad–centric	Connect users for ad revenues
MSN	Brand–name intimidation	Control and lock-in users

"What users really wanted was, …Speed … ."

Marissa Mayer, VP, Search Products & User Experience, Web 2.0 Summit "What Google secretly discovered along the way." NOV 9, 2006.



"What Google managed to do is remember that the reason we search is to find things, potentially things that aren't in an antiseptic portal like Yahoo or Excite or Lycos, and Google …. It turns out Google had the right approach. And we can see the results today."

JOHN BATTELLE, Newshour with Jim Lehrer, "The Power of Google", NOV 30, 2005

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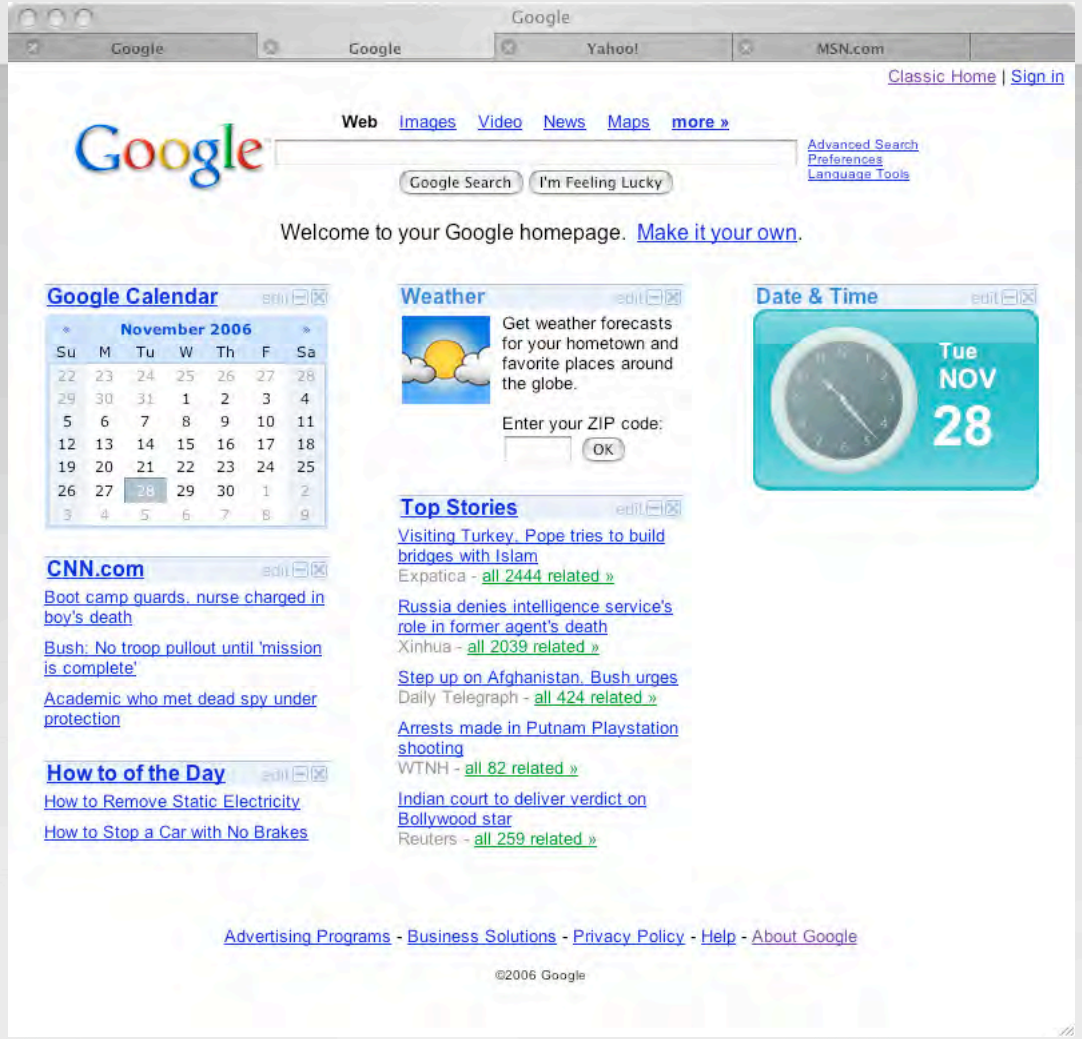

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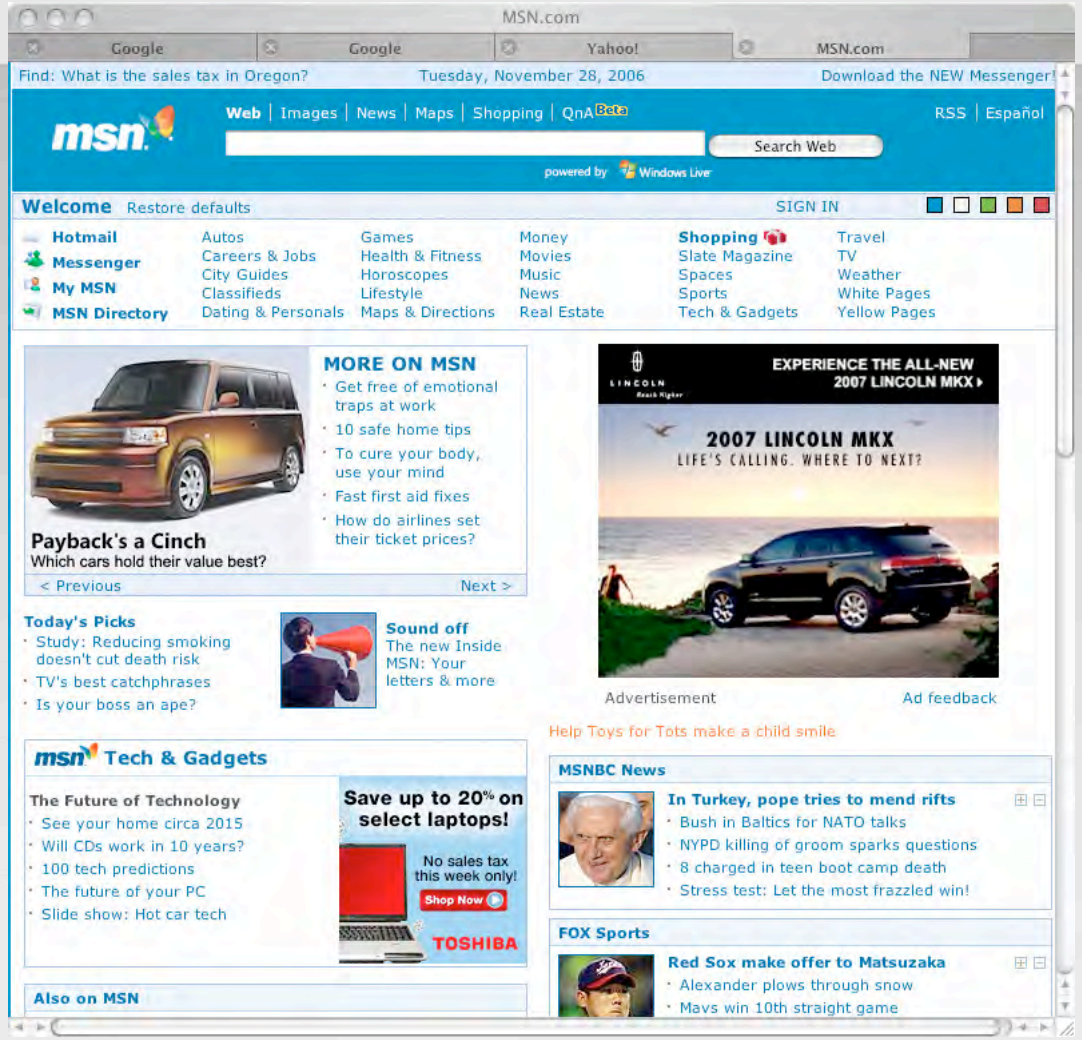

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Sustainable Competitive Advantage

GOOGLE CORE COMPETENCIES = SCA	RARE	VALUABLE	COSTLY TO IMITATE	NON-SUBSTITUTABLE
Constant Innovation of search algorithms	✓	✓	✓	✓
Impartial algorithms used to rank data weight	✓	✓	✓	✓
Open transparent organizational culture	✓	✓	✓	✓
Policies: Implement, then monetize; People > Profit	✓	✓	✓	✓
Corporate Reputation ⇔ Brand Trust	✓	✓	✓	✓
Back net-neutrality interoperability + open source	✓	✓	✓	✓

SWOT internal factors

FACTORS	STRENGTHS	WEAKNESSES
MANAGEMENT	Leadership vision: user-centric, back net neutrality & interoperability; Implement before Monetize	Backlash from Industry alliances; Rival leaders spread fear & uncertainty
PRODUCTS	Superior search; relevant & objective algorithms; user-centric service; AdWords & AdSense	Competitor strategic actions; unexpected rival breakthroughs; social networks
EMPLOYEES	Key talent / human capital; highly motivated, ownership mindset, culture values relationships	Rivals appropriating key talent; high costs of highly skilled capital; recruitment
FINANCE	Financial stability, no debt, large cash reserves; Exponential growth in revenues & net income	Face possible slowing of high revenue growth; market reaction to unexpected gains
TECHNOLOGY	Transformational systems for data processing; Superior advertising algorithms & methodologies	Intense global competition; broadband & ISP opposition to net neutrality

SWOT external factors

FACTORS	OPPORTUNITIES	THREATS
SUPPLIERS	Forward and/or backward vertical integration; Strategic alliances & joint ventures	Broadband, ISP, and competitor alliances; Global market dynamics
COMPETITORS	Increasing M & A; alliances with competitors to expand advertising growth	Increasing global competition; rival alliances to limit Google's reach & market power
TECHNOLOGY	Invest in R&D innovation; Service + interface for wireless; revolutionary systems of data processing	Internet security: Environmental crises; service interruptions; power grid failures
ECONOMIC	Market power in value chain; media & advertising powers in turmoil; structural business shifts	Global economic slowdown; trade barriers, currency fluctuations; government regulation
CULTURAL	User demand for convergence & convenience; User demands for interoperability; consumer trust	Fickle public opinion; uneducated populace as per technology; security risk-aversion

Current Strategies

"Ultimately, our goal at Google is to have the strongest advertising network… and all the world's information. That's part of our mission."

Eric Schmidt; CEO Google; NYT:11/12/06

- Differentiation » Deliver the most relevant, objective data in the shortest time
- Focus on user experience and anticipate user needs
- Develop personalized user products and services
- Innovate advertising solutions for business sector
- Protect key talent by investing in culture
- Explore & develop internet video / wireless frontiers
- Innovate services / interfaces for wireless sector

Key Strategic Issues

Dr. Walter Gibbs: "User requests are what computers are for!"

Ed Dillinger: "Doing our business is what computers are for."

Tron (Walt Disney science fiction film -1982)

» Always serve and respect the User

- Brand equity management » Verify and expedite long-term value
- Technological innovation » Advanced search algorithms
- Grasp changing dynamics » Convergence of communications
- Risks to net neutrality » Competitors » Industry » Regulatory
- First to innovate » Fastest to adapt » last to monetize
- Prioritize core competencies » Speed, access, relevancy

Strategic Alternatives

- Protect net neutrality and increase interoperability
- Diversification » vertical and/or horizontal integration
- Give users unlimited remote access to search capabilities
- Manage the Google brand » always respect the user
- Foster the Google culture
- Expand advertising platform » access environments via wireless search
- Invest in R&D » user-centric tools and search algorithms
- Prepare to deploy rapid response » rival's actions / regulatory threats
- Acquisitions & Strategic Alliances » increase global reach and scope
- Sponsor academic information exchange

Strategic Recommendations

"It takes more than capital to swing business. You've got to have the A.I.D. degree to get by – Advertising, Initiative, and Dynamics."

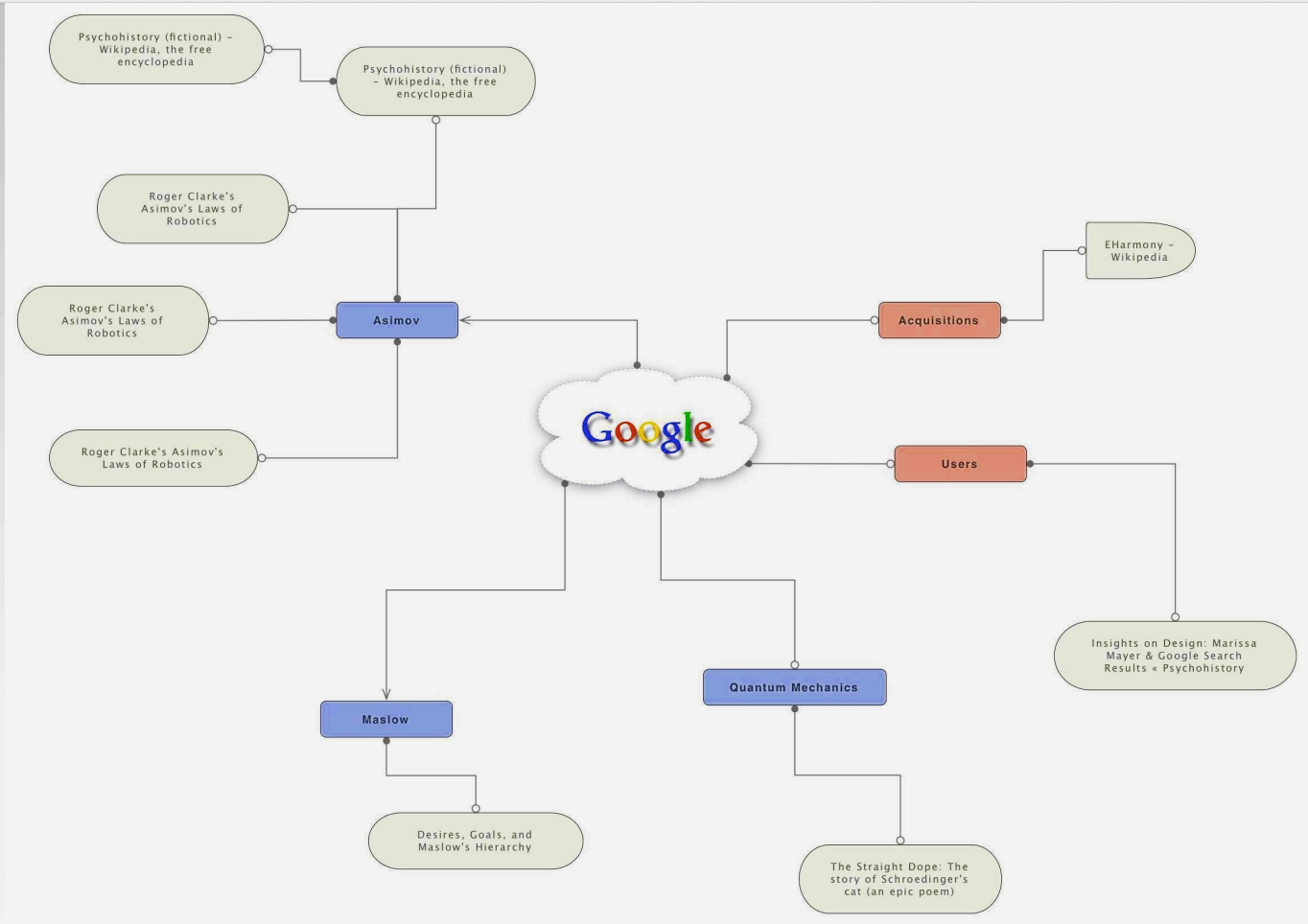
Issac Asimov

- Invest in R&D » **Innovation** » Search algorithms and communications
- Pursue strategic alliances » Google search integration and interoperability
- Manage the Google brand » Avoid marketing » risks alienation of users
- Promote academic exchange » Link relevant disciplines across universities
- Support dialogue in education » Critical issues impacting Internet access

Strategic Cloud

"It takes more than capital to swing business.
You've got to have the A.I.D. degree to get by – Advertising, Initiative, and Dynamics."

Issac Asimov



Thank You

Amy Boynton

Tuesday, November 28, 2006

T2b MGT 526

Marylhurst University

MGT 526 – Strategic Planning

CASE ANALYSIS – GOOGLE

Student's name: T2 - Amy Boynton

Course: 526

Project title: Google

Date: 11/28/06

Professor: Alain Gracianette

I. EXECUTIVE SUMMARY

Google is widely acknowledged as the "world's best search engine" because it is fast, effective, easy to use, and provides information that's relevant to a search query. Google is all about the business of information, organized for speed and access. The company was founded on the principle of making the information on the Internet more accessible and thereby more useful; their proprietary search engine algorithms offer users the ability to quickly sort information by means of keywords and/or phrases. These search services are now available worldwide, and they are free to all users. This simple equation has forever changed the sum and substance of how business gets done.

Google's business model generates revenue by providing advertisers with an opportunity to deliver online advertising, directly matched by keyword to a user's search query. This is the true sweet spot for advertising; the ability to offer measurable and cost-effective ads at the very moment a potential customer is most likely to be interested. These ads are displayed on search page results, but are clearly distinguishable from the search page listings of results to the user's original query. This separation constitutes a dividing line that substantiates Google's credibility, and is the basis for integrating the company's mission with their strategic intent. Google's vision can only be achieved by means of using an unbiased algorithm to rank data relevancy; the separation from bias offered by their search algorithm is also the key to its popularity and effectiveness. Combined with an underlying respect for the user, this impartiality allows Google to pursue their mission while concurrently seeking their goal; "having the strongest advertising network and all the world's information." (Eric Schmidt; CEO of Google)

Google's growing market power resides in their people-oriented principles, their love of creating solutions to data-specific problems, and a scientific-systems mindset applied to information dispersal; all of which are based upon and channeled through a vast internal network of innovative and technological acumen. Google is positioned to rapidly expand their current role in the information value chain; their core competencies of search technology and their vast information infrastructure provide the company a platform from which to expand. The market players that adapt fastest and collaborate across industry sectors will be in the best position to lead the emerging model of networked and collaborative business practices.

The intertwining of global economic markets has required businesses to compete on more platforms and across multiple channels for marketing and advertising. This requires new ideas; capable of redefining the value advertising can offer. Google has filled this gap by means of incorporating paid advertising into users' free search results, which has propelled Google's rapid ascent and growing leverage. The transformation and convergence of markets is displacing the traditional industry boundaries between media, advertising, marketing, Internet services, and technology. As the wave of convergence in media and communications evolves, the telecommunications industry faces challenges from a need to integrate data, voice, and video interoperability across networks and devices. This has reconfigured entire industries built on existing protocols and physical distribution channels, and poses a direct threat to economic interests vested in the current model, who tend to oppose trends toward collaboration and transparency. These are not only essential to rebuilding the net loss of public trust, but are also the critical elements underlying the process of innovation. The critical challenge to Internet use concerns issues around Net Neutrality, a movement that seeks government safeguards to ensure that broadband providers treat all lawful traffic across their networks equally, thus serving to protect the free flow of ideas, information, and commerce across the Internet.

II. INTRODUCTION

A. Company Background

Google's name originates from the mathematical term "googol", representing the value of the number ten, raised to the power of 100 (10^{100}). The 2005 annual report describes the company's mission succinctly; "Google is a global technology leader focused on improving the ways people connect with information. Google's mission is to organize the world's information and make it universally accessible and useful." At Google, mission drives method: the mindset at Google is founded on the belief that the process of organizing the world's information and making it universally accessible will truly make the world a better place. Consequently, the company demonstrates the value they invest in their people by fostering a culture that can support the fragile balance between cost and risk, known in today's vernacular as innovation. Content towers over financial incentive in terms of corporate priorities; in both the short and long term. Innovation to improve a users' experience always takes precedence when strategic actions and initiatives are reviewed for resource allocation.

Google is widely acknowledged as the "world's best search engine" because it is fast, effective, easy to use, and provides information that's relevant to a search query. The bulk of the company's revenues proceed from online advertising for corporate clients. Search-based ads are not only cost-effective, but because they are contextually tagged and matched by keyword to a users search query, they are also very effective. This provides genuine value for advertisers as well as users.

Google is all about the business of information, organized for speed and access. The company was founded on the principle of making the information on the Internet more accessible and thereby more useful; their proprietary search engine algorithms offered users the ability to quickly sort information by means of keywords and/or phrases. These search services are now available worldwide, and they are free to all users. This simple equation has forever changed the sum and substance of how business gets done.

B. Google: Mission and Values

1. Google's Mission

Mission Statement: Google's mission is to organize the world's information, making it universally accessible and useful.

" …As Google grows, we touch more parts of society. This visibility means we have a responsibility to be transparent about what we do, to work in partnership with existing industries, and to explain how our moral compass — "don't be evil" — guides us in making hard choices."

-- Sergey Brin & Larry Page, founders; Google: 2005 AR

Sergey Brin and Larry Page founded Google while engaged in their graduate studies at Stanford University; when they met in 1995, they were both researching methods for searching and organizing large data sets. Google incorporated in 1998 and is headquartered in Mountain View, CA., where the company maintains the largest index of online websites available in the world, accessible through use of their automated search technologies. Originally Google displayed no ads in search results; displaying only the information created a foundation upon which a loyal user base has grown. The original mission statement of Google, "Don't be evil", is the fundamental principle upon which an empire has been built; however, this empire is of a very different order.

Google's growing market power resides in their people-oriented principles, their love of creating solutions to data problems, and a scientific-systems mindset applied to information dispersal; all of which are based upon and channeled through a vast internal network of innovative and technological acumen. Google is positioned to rapidly expand their current role in the information value chain; their core competencies of search technology and their vast information infrastructure provide the company a platform from which to expand. Google is poised to sponsor breakthrough systems that can collect, transfer, store, interpret, communicate, and apply the information that is gathered by their proprietary search algorithms.

2. **Values and Vision**

Strategic Intent: Having the strongest advertising network, and all the world's information.

Google's business model generates revenue by providing advertisers with an opportunity to deliver online advertising, directly matched by keyword to a user's search query. This is the true sweet spot for advertising; the ability to offer measurable and cost-effective ads at the very moment a potential customer is most likely to be interested. These ads are displayed on search page results, but are *clearly distinguishable* from the search page listings of results to the user's original query.

This separation constitutes a dividing line that substantiates Google's credibility, and is the basis for integrating the company's mission with their strategic intent. Google's vision can only be achieved by means of using an *unbiased* algorithm to rank data relevancy; the separation from bias offered by their search algorithm is also the key to its popularity and effectiveness. This impartiality allows Google to pursue their mission while concurrently seeking their goal; "having the strongest advertising network and all the world's information." (Eric Schmidt; CEO of Google. NYT: Nov 2006)

III. EXTERNAL ENVIRONMENT ANALYSIS

A. General Environment

B. Trends: Opportunities, Threats, and Implications

1. **Demographic trends**

Opportunities: According to recent estimates, there are 1,086 billion Internet users in the world, making up about 16.5% of the total population. From 2000 to 2006, overall Internet use has risen by 200%. Google's market share of the search engine sector has grown as well, increasing from 45% to 52% in the past year. As higher percentages of the general public in more countries adopt Internet use, and as Internet use is concurrently expanding into wireless sectors, Google will have a sizeable advantage in securing their position as a market leader and a first mover.

Threats: This trend poses a risk to the bricks-and-mortar retail sector, as well as to the established players in the marketing and advertising industries, which control the conventional channels of broadcast, print, and direct promotion.

Implications: As demographic trends in Internet use drive Google's growing reach, the company can expect to capitalize on increases in global economic growth.

2. **Economic trends**

Opportunities: The intertwining of global economic markets has required businesses to compete on more platforms and across multiple channels for marketing and advertising. This requires new ideas; capable of redefining the value advertising can offer. Google has filled this gap by means of incorporating paid advertising into users' free search results, which has propelled Google's rapid ascent and growing leverage. The transformation and convergence of markets is displacing the traditional industry boundaries between media, advertising, marketing, Internet services, and technology.

Threats: Current trends that pose a risk to global economic stability include:

- Socio-political issues: escalating oil prices, greenhouse effects, global labor practices, global pandemics, globalization backlash
- Fiscal & economic risks from: capital flows, global competition, equity imbalances, unexpected business / climatic crises
- Global imbalances: national savings rates, trade deficits, asset bubbles, and currency fluctuations.
- Financial & regulatory pressure: credit flows, interest rates, capital misallocations, hedge funds, trade deficits, regulatory gridlock

- Competitive actions; established industries seeking to preserve power in established markets, in opposition to new market realities

Implications: As a major player in an evolving global market, Google has a responsibility to champion and model global practices that encourage fiscal and social responsibility, and display their commitment to global practices that foster free and fair trade. This concerns not only issues that affect (human) labor policies, but also the governmental regulation of global protocols, which determine boundaries in regards to free trade policies and open standards for technology.

3. **Political/Legal**

Opportunities: The Internet has transformed business so quickly that business has not had enough time to fully adapt. The opportunities offered are as diverse as those redefining business practices. The critical determinants in realizing gains appear to link directly to the level to which a user is given free and open access to information impacting their product, company, market, and industry.

Threats: The Internet has experienced numerous legal and political issues resulting from the rapid growth of technology, and the time needed for legislative bodies to respond to an evolving industry with appropriate legislation. Many Internet companies have participated in deploying this rapid growth in technology, providing them with opportunities to capture the majority of a particular market share or to define a particular industry. As yet, governmental oversight hasn't caught up, and there is an increased need to develop effective security regulations and to establish fair trade practices, which can be implemented across an overall global market.

Implications: The most critical challenge to Internet use concerns issues around Net Neutrality, a movement that seeks government safeguards to ensure that broadband providers treat all lawful traffic across their networks equally. These safeguards will serve to protect the free flow of ideas, information, and commerce across the Internet, yet most Internet users are not even aware that this threat exists. Currently, the big broadband players are opposing legislation in Congress that would favor establishing such safeguards. The larger issues at stake are the role of the Internet in global competitive business practices, and use of the Internet as a forum for public and private debate. A market environment that allows broadband providers the capability of prioritizing traffic flows in the distribution of information will ultimately have unintended consequences, which will ultimately constrain commercial freedoms and civil rights.

4. **Socio-cultural**

Opportunities: Convergence and convenience are leading sociocultural trends affecting individuals in today's various societies and cultures. The Internet has become a powerful means of distribution for email, images, text, video, data, music and more. This has resulted in a wave of convergence impacting all business sectors. Companies that once could focus within a specific industry must now be aware of changes in other industries which possess the potential to siphon revenues from their established market base.

Threats: As the wave of convergence in media and communications evolves, the telecommunications industry faces challenges from a need to integrate data, voice, and video interoperability across networks and devices. This will reconfigure entire industries built on existing protocols and physical distribution channels; this will pose a direct threat to the economic interests vested in the current model. These powerful forces tend to oppose current trends toward collaboration and transparency, which are not only the essential elements in rebuilding the net loss of public trust, but are also the critical elements underlying the process of innovation.

Implications: As an example, Apple Computer looked outside the computer/software industry to develop the iPod; today, the iPod's phenomenal success is driving growth across Apple's more traditional product lines. Awareness of transformation occurring across the entire technological landscape is critical; companies whose core competencies depend on technology need to scan constantly across sectors to plan effective strategic actions and tactical moves.

5. **Global**

Opportunities: The sociocultural trends affecting today's consumer are occurring on a global scale. This requires technology dependent companies to also be global companies. The Internet has fundamentally changed as companies like eBay, Google, Yahoo, and Amazon have used it as the infrastructure for a new system of distribution; transferring information, services, content, and media.

Threats: As the borders between nations become ever more blurred, consistent standards must be developed and applied to environmental, regulatory, labor, and fair trade practices. The lack of consistency in defining acceptable business practice will impact the abilities of markets, corporations, and nations to compete on a level playing field; the current lack of consistent market standards and business practices allows unscrupulous parties to gain unfair competitive advantages.

Implications: As industries continue to converge, geographic constraints have decreased. The companies who can provide information and access in the most useful and versatile formats — for both consumer and enterprise sectors — are the most likely to emerge as the next generation of global market leaders.

6. **Technology**

Opportunities: As innovation generates change, new opportunities emerge; cheaper, faster methods will displace slower, more costly protocols.

Threats: Technology-dependant companies hinge on having access to talent that can create and innovate. However, corporate aversion to risk is increasing as pressures to increase margins build; the market's quarterly expectations impact decisions at upper levels of management. These dynamics trigger a constraining force, opposing the development of environmental conditions necessary within an organizational culture that is able to innovate and adapt.

Implications: The Internet has initiated a systems change across the entire business landscape that affects our fundamental precepts regarding how business gets done. The market players able to adapt fastest and collaborate across industry sectors will be in the best position to lead the emerging model of networked and collaborative business practices.

C. Industry Analysis

1. Industry definition

The Internet Industry is the association of businesses operating under the global umbrella of Internet commerce, content and connectivity. The Internet is a worldwide, publicly accessible system of interconnected computer networks that transfer data using standard Internet Protocol, transmitting data by means of packet switching. The industry of "Internet Information Providers" utilizes technologies allowing fast access to this vast pool of Internet information, universally known as the World Wide Web (www). Historically, the two main approaches to categorizing and searching information have been "Search by Query" (i.e. Google, Ask.com) and "Category Directories" (i.e. Yahoo, Excite, Alta Vista).

Search engine companies (Google, Yahoo, AOL, MSN) allow instant access to the WWW; this vast resource of interrelated documents is linked by specific URLs, IP addresses, and hyperlinks. A vast range of information stored on websites and in databases can be sorted by means of keyword-driven search algorithms that display the results to a user's search query. Since all search services are free, the relevant

drivers of use are speed and relevancy of the results to specific keyword search-queries. Advertising is linked by keywords to a user's search results, and thus generates nearly all the revenue base for companies whose predominant services originate in search.

The dramatic build-up of fiber-optic cables in the late1990s facilitated an extraordinary increase in the data capacity and call volumes possible on global telecommunications networks. Without the lowered cost of calls this allowed, the Internet would not have developed. After decades of discussion, the convergence of IT and telecommunications has become a reality, provided by IPs who perform "networked IT services". Two sources of online advertising exist; one is legitimate, and the other illegitimate. The legitimate side of online advertising provides search engine advertising, advertising networks and opt-in advertising by email. The illegitimate side is dominated by unsolicited spam. Search engine marketing, or SEM, is a set of marketing methods used to increase a website's visibility in search engine results pages (SERPs), displayed in response to a user's search query. The three main methods of SEM are:

Search engine optimization; attempts to improve rankings for relevant keywords in search results by improving a web site's structure and content

Pay per click advertising; uses sponsored search engine listings to drive traffic to a web site. Advertisers bid for search terms, and the search engine ranks ads based on the competitive auction price of keyword search tags.

Paid inclusion; provides a guarantee that the website will be included in the top tier of the search engine's natural listings. (Google doesn't offer this.)

The marketing and advertising industries have been hard hit by the transfer of a staggering amount of their revenues from established sources to the bottom lines of new market players, including Google and Yahoo!. In an economic system based on supply and demand, market demand will ultimately establish the new market leaders.

2. Dominant economic characteristics

a) Market size:

In the one-year period from JUL'05 - JUN'06, the total US advertising revenues for this online advertising hit US$13.6B. By the end of 2006, analysts expect Internet advertising to reach US$16B out of the total US advertising spending of nearly $175B, and global spending for Internet advertising is estimated to reach nearly $24B out of a total of $425B. The IIP Industry sector has a market capitalization of US$ 213B. (Standard & Poors)

b) Stage of life cycle: Growing

As the number of companies with a web presence increases, they will have a greater need for advertising via search engines and related services. As more opportunities are discovered for services that can be integrated with advertising, this growth trend will continue. Online advertising revenues have increased by 38% in the past year alone. The growth cycle hasn't slowed, and will most likely remain high as long as Internet use continues to increase.

c) Scope of rivalry:

The Internet evolved such that the intra-industry rivalry is somewhat difficult to quantify. The original concept used in information display was in the format of directory sites such as those used by Yahoo and Excite, providing topic lists and links to other relevant information. As Internet use evolved, search technologies caused directory lists to become obsolete. Google has the most sophisticated search algorithm on the web, allowing Google to corner the market by leveraging the sales of advertising displayed on the search result pages. Although other approaches to search have been introduced, these have experienced difficulty gaining user awareness due to Google's dominance in the search market.

d) Rival Concentration

The main concentration of rivalry in search is between Google and Yahoo. Currently Google has a greater share of advertising than either Yahoo or MSN.

e) Vertical integration:

There is some degree of vertical integration at Google. One area where vertical integration exists is in the systems of servers that power the entire search process. Google doesn't buy readymade servers; they build their own. Although there is little need for vertical integration in this industry, Google has made acquisitions of new technologies that can offer additional Internet-based services.

f) Pace of change: Rapid & constant

- The pace of change is rapid and unrelenting
- The development of new technologies, services, and protocols is constant

g) Product/service differentiation:

As media channels multiply and diversify, advertisers are forced to spread their advertising resources across a much broader range of channels. Advertisers are faced with a significant challenge in getting their messages to penetrate consumers' diminishing attention; consumer resistance to marketing is at an all-time high, due to marketing's growing intrusiveness.(Yankelovich study) Consumers are difficult to reach, as they become increasingly immune to the constant barrage of media and marketing.

Although all Internet search engines provide their search service at no cost, Google has differentiated their service by providing AdWords and AdSense to advertisers; these clients pay to have direct access to the vast number of Internet searchers who choose Google as their search engine. Because the search results are based on keywords, the advertising is directly linked to the information a user is seeking; this is beneficial for both users and advertisers. This is the reason Google's advertising is more effective than conventional marketing efforts; Google's methodology puts the relevant parties together at the opportune moment to provide value.

h) Economy of scale:

Some degree of economy of scale exists simply in terms of the physical facilities and employees necessary to meet the growing demand. These don't require comparable increases in order to support the rise in users and access. Increasing Internet bandwidth and computing power provide the best support for the exponential rise in use. Both are critical components for fast-turnaround of search results; search engines can't afford slow response times, because users will switch to faster providers.

To some degree, an inherent economy of scale exists due to exponential growth in the amounts of information processed on a daily basis. Although there is more information for search engines and databases to catalog, the search algorithm itself does not require modification to handle the additional information load. However, as the number of businesses utilizing Google's advertising services increase, the search algorithm will eventually require an overhaul.

i) Barriers to entry:

High technology and communication costs are necessary to provide fast access and uninterrupted service; multiple locations must provide reliable and high capacity Internet connections. As growth in the amount of information being processed increases, the barriers to entry will also increase until new technologies can offer a better solution. For a new competitor to successfully enter the IIP industry, they would need to develop a technology that's able to compete with the speed and power of Google search.

3. Porter's Five Forces

Changing Market Forces

Information and access are the new forms of currency to realize competitive advantage in today's market. Google sits at the center of the information industry. Beyond search, Google is transforming the very pattern and practice of how business gets done; the current global market environment is going through unparalleled structural change. Today's businesses require information flows to be optimized for velocity and assimilation across all channels, for all users. The need determines the method and ranks the priority. This is a structural shift with implications that affect not only the future of information and communication, but also the entire value chain for existing and future business practice.

a) Bargaining Power of Buyers: Moderate

In this case, buyers are the companies who pay Google to place their advertising on Google's pages (SERPS), which display a user's search results. Ads also appear alongside email messages and on pages that display Google maps and images. Companies who want maximum exposure as a return on web advertising cash outlays should work with top tier search industry providers.

b) Bargaining Power of Suppliers: Moderate

There are several providers for Tier 1 internet-access. Google can choose from several companies to provide this service. Switching costs would be high if they break a contract that is supposed to run for a certain length of time. Many communication companies will charge the company who switches the outstanding balance of the contract price. Google should have service from multiple providers; in the event of problems, this would provide a backup for uninterrupted service.

Suppliers of computer hardware are fairly similar. IBM, HP and Dell are the major providers of server class hardware. Google builds its own servers from commodity hardware that is less expensive and available from multiple sources. Standardizing configuration is important for simplifying maintenance procedures.

c) Rivalry: Mixed

Google's main rival is the Internet services industry is Yahoo!, who started in the industry around the same time as Google. Currently Google is more successful than Yahoo. Other search engine services that compete with Google are MSN and Ask.

In the larger picture, Google's rivals consist of traditional media properties, who are being forced to realign as they enter the new age of digital, on-demand, consumer-controlled media. In a recently emerging pattern, groups of private-equity firms have proposed a series of deals that have the potential to reshape media ownership. This was evidenced by the recent $18.7B buyout accepted by Clear Channel Communications, in the largest bid to date made by private investors for a media company.

d) Threat of Substitute products: Low

Outside the industry, substitutes for Google, Yahoo and MSN Search are difficult or impossible to replicate. The search industry is quite specific, because Internet use has evolved around the use of web browsers to access information. Search engines return results to search queries that are displayed on the user's web browser. The algorithms that drive search engines are extremely sophisticated, and only a tiny fraction of the populace possesses the technical skill.

e) Threat of new entrants: Moderate

There is always room for a new entrant in the Internet search engine & web-services industry, but factors exist that would require new entrants to have considerable capital funding available. Another deterrent to market entry is the high cost of the highly skilled human capital demanded by this industry; both in terms of technical ability as well as creative skills. New players in this market will be limited by the high costs of both the hardware required to provide reliable high-speed access, as well as the high cost of the actual access to the Internet.

4. **Key survival factors:**
    - Innovation and Interoperability; platforms, internationality, interchangeability
    - Net neutrality & regulatory action
    - Consumer demand for innovative & interoperable products & services
    - Awareness of convergence in media, internet, broadcast, & entertainment
    - Improved search algorithms; fast, accurate, impartial, & easy to use
    - Credibility; financial market perceptions affect access to capital and stock valuation
    - Trust: user security & privacy concerns & protections
    - Effective ROI; accurate matching of targeted advertising to search queries
    - Business demand; tools that offer a competitive advantage
    - Process innovation; information storage, dispersal, speed, & access
    - Awareness of user habits/needs; supply solutions to anticipate & meet needs
5. **Industry attractiveness; Attractive**

   Any industry that is primarily constrained by one's ability to conceive is attractive. As business adapts to the advantages brought about by instant access to unlimited information, new opportunities will emerge as old protocols become obsolete. Google is currently positioned at the epicenter of these market changes, leading the charge into the future with regard to how business will get work done.

IV. COMPETITOR ENVIRONMENT

The search engine sector is a multimarket competitive space - both geographically and categorically. Search engine companies are global in reach and broad in their product offerings, ranging from as e-mail to finance. The goal of a search engine company is to gain the hearts and minds of Internet users, so that they can capture the accompanying stream of ad revenue; for Google, revenues allow them to do what they love.

There are three main competitors among the search engines available on the Internet: Google, Yahoo, and Microsoft. At this point in time, Google is the dominant competitor with the most effective, user-friendly search engine. Yahoo and Microsoft are in the difficult position of having to respond to Google's clear competitive advantage. Google's strategic actions have placed them in the enviable position of being the competitor to beat.

> "…"Don't be evil" has a special meaning to software engineers and others. It's a way of distinguishing Google from Microsoft.
>
> Microsoft began to be seen as the evil empire particularly after the Justice Department filed the antitrust suit. Google uses "don't be evil" as an effective recruiting tool but more than that I think Google tries -- and this is why I wrote the Google story -- Google tries to do things I think that are innovative and are very different. And they see that as progress."
>
> -- David Vise, Washington Post, co-author of the Google story

A. Future objectives

Google's future objectives are integral to their core competency, which is not easy to replicate. Information is their mission: to organize the world's information and make it universally accessible and useful. To meet that goal, they focus on user-based content, regardless of cost. By making expenditures that enhance their capabilities, they have initiated a path that generated tremendous growth in revenue. Yahoo and Microsoft are in the undesirable position of trying to figure out how to respond to the clearly superior actions of the leader in their market. Yahoo is currently working on improving its search engine, and Microsoft trails behind Yahoo. In reality, the two are trying to find a differentiating competency in an attempt to regain market share from Google.

B. Current strategies

All three of the primary competitors have the same overall objective: attract users with a better product in order to generate the resultant ad revenues. However, they currently pursue the objective through different strategies. Google uses a user-centric strategy; Yahoo uses an social-networked, ad-centric strategy; and Microsoft uses an established "brand name-intimidation" strategy. Currently, Google's strategy is the most effective.

C. Assumptions

The assumptions regarding competitive rivalry in the search engine sector are that all competitors have equal opportunities to achieve a competitive advantage, because competitive dynamics change rapidly. This reality requires that for every strategic action taken, the potential strategic or tactical response must first be considered. It is incumbent upon an initiator of a strategic action to assess the nature and force of the possible repercussions flowing from the initial action. For instance, the fact that Google is buying a streaming video powerhouse is creating tremors within the competitive landscape of the media/entertainment sector, indicating the potential inherent to this type of move. Goggle becomes more powerful every day, which causes alliances to form in opposition to their growing market power, such as the recent deal between Cingular, Microsoft, and Yahoo.

D. Capabilities

Google, Yahoo, and Microsoft have both similar and dissimilar capabilities. All three are all financially sound; in fact, they all have the financial clout to afford large acquisitions, or to invest significant financial resources in R & D. All are global; all are household names. The differences that have evolved in their capabilities can be traced to their roots. From the beginning, Goggle was about serving the user. Yahoo was about providing a means to generate ad revenues. Microsoft was about being Goliath; initially their competition was negligible, but later they crushed competitors using their power and position. Currently, Yahoo and Microsoft must reassess their resources and capabilities to decide how to deploy them most effectively. In reality, they must leverage their current resources to develop new capabilities if they hope to compete with Google for the hearts and minds of consumers.

Internet use will continue to evolve. Google has an advantage in efficient organization of information. By means of using an unbiased algorithm to rank data relevancy, Google's impartial search algorithm is also the key to its popularity, because Google users have a greater level of trust. Yahoo has a number of social networks and content advantage. Microsoft's advantage resides in their long reign of global market dominance in business by means of their market share of computer software and operating systems, although they also face risks from this due to global antitrust issues.

E. Comparisons

See Appendix I for Financial comparison Data on Microsoft, Yahoo! And Google

V. INTERNAL ENVIRONMENT

A. Resources:

1. Tangibles resources

a) Financial Resources; Strong

For a company that only incorporated in 1998, and went public only 2 years ago (IPO 2004; $US6B), Google continues to operate as a business enigma, unprecedented in terms of institutional business practices.

- Revenues snowballing; 2002; US$ 440 M ~ 2005; US$ 6.4 B
- High profit margins
- Net income doubled over 3 year span
- Strong free cash flows and liquidity
- Low debt/equity

b) Physical Resources: Strong

- Corporate Headquarters: Google's corporate headquarters is designed to encourage interaction & cross-pollination of ideas. Some of the mechanisms to

accomplish this goal are reflected in the physical layout of their facilities: communal dining areas, in-house recreational facilities, bulletin boards scattered everywhere, and maintaining an informal organizational atmosphere. For example, traffic flows are intentionally designed to encourage random interchange between workers as they move through a workday.

- Portable data processing centers
- Significant assets of dark fiber (unused bandwidth)

c) Technological; Strong

- Focus on maintaining market leader position in technological innovation
- Invest in hiring top talent & providing the resources for continuous innovation
- Develop systems to drive internal innovation, development, & operational effectiveness
- Provide web search and targeted advertising
- Immense network of computers running Google's proprietary software
- Ranks first among search engines: speed, accuracy, objectivity and ease of use

d) Organizational; Strong

- Core commitment to sustaining and nurturing a "start-up" cultural mindset
- Small headcount of 7,000 employees
- Employees have cross-functional skills and responsibilities
- Minimize hierarchy ~ Maximize communication
- High expectations for employee performance

2. Intangible resources

a) Human Resources; Strong

- Core commitment to employees; value ability over experience
- All Google employees are also Google equity holders
- Aggressive non-discriminatory hiring policies
- Support for practices allowing employees to act as hands-on contributors

b) Innovation; Strong

- Information innovation expertise
- Maintain cultural and ownership mindset of a small "start-up"
- Global recruitment efforts to hire the best talent, and nurture their development

c) Product Brand & Reputation; Strong

- Corporate pledge to putting people and principles before revenues
- Company procedures reflect import vested in preserving ethical standards
- Promotion of policies that motivate communication and collaboration
- Champion of free access to information and the open source community

3. Capabilities:

a) Advertising Products and Services

Google generates their revenue stream through online advertising. Google AdWords for Advertisers is an auction-based program enabling businesses to display ads via specific key words or search terms. The "Google AdSense" program allows websites in Google's network to serve targeted ads; AdSense ads are based on search terms and/or web content. Most revenues generated through AdSense are shared with network partners. Google also offers Global Support and Enterprise services.

b) User Products & Services

Google's core search services are built around proprietary technologies such as Google PageRank, Google Hypertext-Matching Analysis, Google Wireless Search, and Google Mobile Access. Google's search services include basic search, advanced search, cached links, file types, image search, phonebook, local search, similar page search, Google Scholar, Froogle, Google Earth and Street Maps, and web page language translation.

Google's service products for users include G-Mail, Google Toolbar, Google personalized user home-pages, Google personalized web-accessible calendars, Google Blogger, Google Analytics, Google Web Spreadsheets, Google Web Documents, Google Groups, and Google Wireless Services. Additionally, Google offers users the ability to access personalized content features, including options such as Google News, Google Video, and Google Music, as well as numerous options that are not Google branded content.

4. Core competencies: Google's SCA in Search and Innovation

GOOGLE CORE COMPETENCIES = SCA	RARE	VALUABLE	COSTLY TO IMITATE	NONSUBSTITUTABLE
Constant Innovation of search algorithms	✓	✓	✓	✓
Impartial algorithms used in ranking data weight	✓	✓	✓	✓
Open and transparent organizational culture	✓	✓	✓	✓
Policies: Implement, then monetize; People > Profit	✓	✓	✓	✓
Corporate Reputation ⇔ Brand Trust	✓	✓	✓	✓
Back net-neutrality interoperability + open source	✓	✓	✓	✓

Google has a Sustainable Competitive Advantage (SCA) in Search Engine algorithms & innovation, based on the company's core competencies.

Google's core competencies are founded on loving what they do, approaching problems with an analytic-scientific mindset, a commitment to constant innovation, a vast information infrastructure, and company policies that advocate people before profit, and implementation before monetization. The ability to constantly innovate proceeds in part from the cultural value placed on human beings and relationships, prompting a highly motivated workforce that demonstrates an ownership mindset. Google stakeholders are represented along the entire value chain; employees, users, customers, competitors, and any other person that interacts with the firm or their search interface.

Google web search technologies and algorithms are the backbone upon which the company's business model is constructed. Google has always implemented innovations first, and found a way to monetize them later. Their long-term commitment to user-interoperability, net neutrality, and information innovation will continue to result in value that proceeds from these core strengths.

5. Google Value Chain

Originally, the Internet was a forum for sharing information among equals. There were no ads, no websites, no revenue streams, and no security concerns. This was an open community that existed primarily in disciplines revolving around scientific/engineering/technological research and development, often found in university settings. The mindset found among the pioneers of the Internet is still present in the open-source architectures on the leading edge of today's innovation. Google was founded in this culture.

There has been a structural shift in the communications industry; radical technological innovation has fundamentally altered the traditional sources for revenue generation. Thus, the value chain dynamic in communications is patterned in a double-helix loop, responding to forces or triggers in the environment arising from regulatory policies, business strategies, societal changes, and technological innovation. As changes occur in technology, business practice, regulation, economic cycles, and society, these events activate business model changes at the micro level that affect the communications value chain on the macro level.

Google's power resides in their value chain dynamic; arising from a culture of people-oriented processes and a vast base of knowledge and information, Google's value chain is channeled through an internal network of innovative, technological, and ethical acumen.

a) Changing business model

Google is no longer simply a search engine company. This is demonstrated by developments in additional products and services for both consumer and enterprise sectors.

b) Value proposition

Enhance e-commerce. Google's customers track exponential growth rates in sales after starting to use Google as a channel for advertising.

c) Positioning

Google is expanding their current role in the information value chain; their core competencies of search technology and vast information infrastructure provide a platform from which to launch superior advertising methodologies, and to sponsor transformational systems for information collection, transfer, storage, interpretation, communication, and application.

6. Key result areas

- Relevant and objective search algorithms & technologies
- Structural change in global business procedures and operations
- Pertinent user-focused communication products
- Increased internet access to global user base
- Providing applicable and useful commercial information
- Exponential growth in sales for clients using Google AdWords/ AdSense
- Search impacts general purchasing behavior in traditional retail outlets: accounting for 49% of online purchases and 42% of retail purchases. (ROI Research)

7. Strategies

- Focus on improving user experiences
- Gather and deliver the most relevant and objective data in the shortest time
- Constant innovation & implementation before monetization
- Improve user experiences and anticipate user needs by developing personalized products and services for consumer sector
- Innovate and improve advertising solutions & business services for enterprise sector
- Protect key talent by investing in Google's culture, protects market advantage
- Focus on Internet video (YouTube) as Google's next frontier
- Prepare to provide services and interfaces for wireless and cell phone sectors

8. **Objective**
    - Organizing all the world's information
    - Making it universally accessible and useful
9. **Strategic Intent**
    - Being the strongest advertising network
    - Having all the world's information
    - Using revenues from advertising to provide access to / increase value of information

B. Financial Analysis:

1. **Financial Overview**

Google is a young, growth company that is systematically outmaneuvering their online advertising rivals. As it continues to catapult ahead of its competition, the company's offerings are rapidly becoming a cast of characters synonymous with "Planet Google". "Google" has become the generic term associated with the action of searching for information on the Internet. The company's unsurpassed search engine along with its fun, playful interaction with an ever deepening consumer base, works together with superior influence when negotiating benefits in tangent with partner capabilities; inspiring optimism both in its global consumer base and business relationships.

At first blush Google may appear expensive, yet when compared to its competition and to its growth prospects, fundamentally it remains extremely attractive. In the current market reality, Google is the rare debt free company with plenty of excess cash on the books to expand capabilities in line with maintaining their position in leading edge expansion by acquisition. One such acquisition was the recently announced acquisition of YouTube by Google for US$ 1.65B.

The principal risk in the valuation relates to its nonlinear growth. The complexity of managing Google's operations is operating in uncharted territory, and likely to be increasing in a quite nonlinear fashion. Revenue and expense trajectories may not move as expected during any given time frame. At the higher valuations at which it trades, and the likely composition of its shareholder base (momentum), the company is subject to potential rapid upward and downward spikes in actual stock price.

2. **Valuation Ratios**
    - Price 10/13/06: $427.30
    - Shares Outstanding: 304.4 billion
    - Market Capitalization: $130 billion

a) **Earnings**
    - 2005A Earnings: $5.57
    - 2006E Earnings: $9.95
    - 2007E Earnings: $13.09

b) **Price/Earnings:**
    - 2005 P/E: 76.7
    - 2006E P/E: 42.9
    - 2007E P/E: 32.6

c) **Growth:**
    - 5 yr. Estimated EPS Growth Rate: 33%
    - 2007E P/E to Growth Rate: 1.0
    - 2007E Price/Sales: 9.0 x

d) **Comparative Ratios**
    - MSFT 07E P/E : Growth Rate: 1.7 x
    - YHOO 07E P/E : Growth Rate: 1.9 x

3. **Current Financial Performance**

Google had US$3.9B in cash and US$4.2B in marketable securities on their books at year-end 2005. The company has a significant cash horde that is readily accessible for identifying strategic acquisitions, as well as for internal investments that encourage organic growth. It generates excess free cash flow at a rapid clip, thus providing a very healthy 23.7% return on equity for its shareholders. With a quick ratio of 11.7x, the company is readily able to handle any immediate cash needs that may arise. The real question for Google is how to effectively manage all that free cash. Financial stability for this player is not the issue. Today Google is worth $120 billion, more than Ford, General Motors, Disney, Amazon, The New York Times, The Washington Post and The Wall Street Journal combined.

Financial Ratios:

- Debt to Capital: Nil
- Current Ratio: Year End 2005: 12.1
- Quick Ratio: 11.7
- Working Capital: $8.2 billion
- Free Cash Flow per share: $2.07
- ROE: 23.7
- ROA: 21.6

4. **Current Operations Overview**

Google is in the sweet spot of elevated operating margins. Due to the nature of its business, these numbers are likely to vary quite significantly. For example, during times of strong ad revenue growth the margins are likely to be very high. On the other hand, when ad revenues slow, margins will probably follow suit, and heavy investment periods will typically compress the margins. Over time, Google will probably see its margins compress to more normal levels. For instance, in early growth spurts Yahoo had a 36% net margin, eBay at 23.8%, and Microsoft at 28.2%. These margins are still extraordinarily high, especially when compared to the net margins of 5-10%, which are found in the retail sector.

In 2006, Google purchased YouTube, an online video website, with the purchase structured as an all-stock trade. The deal is targeted to give Google's online advertising a boost via video clips.

Operating Ratios:

Gross Margins	**Net Margins:**	**Accounts Receivable Turn**
2003: 57.3%	2003: 7.2%	2003: —
2004: 54.3 %	2004: 12.5 %	2004: 35 days
2005: 58.1%	2005: 23.9%	2005: 40 days

VI. SWOT SUMMARY

INTERNAL FACTORS	Strengths	Weaknesses
Management	Leadership vision: user-centric, back net neutrality & interoperability; Implement before Monetize	Backlash from Industry alliances; Rival leaders spread fear & uncertainty
Products	Superior search; relevant & objective algorithms; user-centric service; AdWords & AdSense	Competitor strategic actions; unexpected rival breakthroughs; social networks
Employees	Key talent / human capital; highly motivated, ownership mindset, culture values relationships	Rivals appropriating key talent; high costs of highly skilled capital; recruitment
Finance	Financial stability, no debt, large cash reserves; Exponential growth in revenues & net income	Face possible slowing of high revenue growth; market reaction to unexpected gains
Technology	Transformational systems for data processing; Superior advertising algorithms & methodologies	Intense global competition; broadband and ISP opposition to net neutrality
EXTERNAL FACTORS	**Opportunities**	**Threats**
Suppliers	Forward and/or backward vertical integration; Strategic alliances & joint ventures	Broadband, ISP, and competitor alliances; Global market dynamics
Competitors	Increasing M & A; alliances with competitors to expand advertising growth	Increasing global competition; rival alliances to limit Google's reach & market power
Technology	Invest in R&D innovation; Service + interface for wireless; revolutionary systems of data processing	Internet security: Environmental crises; service interruptions; power grid failures
Economic Factors	Market power in value chain; media & advertising powers in turmoil; structural business shifts	Global economic slowdown; trade barriers, currency fluctuations; government regulation
Cultural Factors	User demand for convergence & convenience; User demands for interoperability; consumer trust	Fickle public opinion; uneducated populace as per technology; security risk-aversion

VII. SYNTHESIS

A. Situational analysis

1. Key Strategic Issues

- Technological innovation; constant stream of breakthrough products and services
- Improve algorithms for fast, accurate search results, distinguishable from ads
- Brand equity management; sustains market valuation
- Awareness of changing dynamic in communication & information value chains
- Competitor, Industry, and Regulatory risks to net neutrality
- First to innovate, fastest to adapt, last to monetize
- Prepare for inevitable revenue slowing, reflecting compression in profit margins.
- Retain sufficient cash reserves to react quickly to market opportunities
- Maintain Google's reputation as defining the standard for excellence in search
- Foster and prioritize core competencies: love of creation, innovating search, vast information infrastructure, and putting people first
- Innovating the entire concept which currently defines information management

2. General Problem Statement

How to maximize the potential to the user offered by Google's current position as a leading conduit that connects users with relevant content and relevant advertisers. In combination with cultivating the unique culture at the heart of Google's success, Google's love for creating and their concern for the user underlies their innovative advantage, and has propelled their sweeping market ascent.

3. **Current Strategies**

"Ultimately, our goal at Google is to have the strongest advertising network and all the world's information. That's part of our mission." - Eric Schmidt; CEO Google, (NYT:11/12/06)

- Differentiation; Gather & deliver the most relevant, objective data in the shortest possible time
- Improve user experience/anticipate user needs
- Develop personalized products/services for consumers
- Innovate & improve advertising solutions & business services: enterprise sector
- Protect key talent by investing in Google's culture, protects market advantage
- Focus on Internet video (YouTube) as Google's next frontier
- Prepare to provide services and interfaces for wireless and cell phone sectors

B. Strategic Alternatives

- Continue and expand upon current strategies
- Pursue strategic alliances; enable Google search to integrate with wireless networks
- Acquisitions to hasten reach & scope in multiple markets; i.e. YouTube
- Increase interoperability & give users unlimited remote-access to information/search
- Anticipate, support, & expand users' emotional~rational bond with Google brand
- Develop a steady stream of user-centric tools and services.
- Diversification; vertical and/or horizontal integration
- Invest in R&D and initiatives that foster improved search algorithms
- Stimulate constant innovation of the information/communication value chain
- Sponsor academic exchange: across relevant disciplines & leading global universities
- Remain alert, ready to deploy rapid response - competitor actions / regulatory threats
- Improve platforms from which to best launch superior advertising methodologies

C. Evaluation of alternatives

Clarity in communication is the heart of establishing an authentic competitive edge in today's market environment. Identifying the necessary components to achieve authentic connections with users demands focused clarity to meet that goal. By means of providing free and impartial search services, and offering paid advertising services that target and correlate with search-query results, Google is following a dominant-business diversification strategy, based on revenues generated primarily through advertising. Since Google is also a transnational company, they are positioned at both the forefront and the cross-roads of the information revolution.

Today's market environment is defined by two approaches to business; the division line exists between companies that attempt to make the world a better place, or those only interested in making their world a better place. This dynamic tension parallels the flow between the open source architectures that activate radical innovation, and the closed systems of established distribution that rely on centralized controls and proprietary standards. This pits incentives to integrate and lock-in competitive advantage against ever-increasing pressures for openness; triggering radical transformation of the dynamics in the communication/information value chains. In planning strategic actions, it is critical that the architects of the strategy understand where their company exists within this helix, so the action chosen is compatible with the company's core competencies. If it's not well-matched, the strategic action will probably fail.

D. Strategic Recommendations

These recommendations for Google are based on a careful analysis of the emerging reality of business evolution, the industry and competitor environment in which Google operates, and knowledge of Google's history, principles, dramatic market rise, and prior strategic actions.

1. **Invest in R&D: Stimulate innovation - search algorithms and communications**
   - Implement new innovation ASAP; find ways to monazite later
   - Explore capital investment as a possible source for funneling the best and brightest ideas to Google through equity funding of handpicked innovation startups. Providing capital funding to innovation startups will lead to breakthrough technologies in disciplines relevant to information.
   - Encourage dialogue & exchange across sectors and among like-minded leaders to stimulate hope, encourage social responsibility, and limit reactions based on fear
2. **Pursue strategic alliances: Google search integration and interoperability**
   - Seek alliances with like-minded companies that promote open source standards
   - Extend the reach of Google's search into the wireless sector
   - Seek alliance with wireless network provider or create a Google wireless network
   - Offer users unlimited remote-access to information and search
   - Investigate alliance with Verizon, or another wireless network partner
   - Seek alliance with Apple; develop a WiFi/Bluetooth/GPS enabled device; target results from users search queries through a location-specific interface that combines the best features from Apple's iPhone, WiFi Network, and Google's mobile search capability.
   - Seek ways to monetize environmental and wireless search through advertising
   - Seek ways to monetize video advertising through YouTube acquisition
   - Monetize new search patent: "Multiple Index Based Information Retrieval System", capable of expanding current index of Web pages it can retrieve to over 100 billion
3. **Manage the Google brand: avoid marketing - risks alienation of users**
   - Anticipate, support, & expand users' emotional~rational bond with the Google brand by anticipating their needs, and developing tools that meet them
   - Avoid marketing Google's brand; critical risk of alienating proven user base
   - Developing a steady stream of user-centric tools and services.
   - Careful assessment and due diligence in planning strategic activities that complement and augment Google's mission and values, building brand equity
   - Allow users to have interactive access and control over their own personal information, increasing its usefulness and building trust in Google's brand
   - Maximize the potential offered to users by offering them the ability to sort, track, secure, categorize, protect, and utilize their own records, histories, searches and data paths.
   - Scan environment for opportunities that add value, and ideas that empower
4. **Promote academic exchange: Link relevant disciplines and leading universities**

   Google is aware of the overlaps and gaps occurring in how international cultures integrate the technological innovations that are becoming available. To identify and address opportunities and threats in the larger market environment, Google should sponsor collaborative initiatives to fund interdepartmental academic exchange across relevant disciplines, both between functional departments and between leading universities around the world.

a) **Sponsor a "GoogleChair" to represent participating universities**
   - Plan, attend, and foster regularly scheduled interactive seminars
   - Assimilating dispersing the information and insights gathered
   - Identify and initiate linkage among relevant parties and disciplines

b) **Initiate dialogue across disciplines and departments**
   - Social anthropology
   - Technological media/computer programming interoperability
   - Business management
   - Economic theory, free trade, and international government policies
   - International legal systems, regulatory oversight, & internet interoperability
   - Neurological research into neural network connections
   - Creativity and innovation; stimuli & deterrents
   - Failure/risk necessity in innovation process
   - Brain processing triggers
   - Emotional-rational, visual-verbal, conscious-subconscious
   - Research human relationship; interaction, collaboration, & conflict

c) **Sponsor interoperability in human relationships & interactions**

   (i) Organizational culture
      - Organizational culture/change management
      - Conflict management; direct vs indirect
      - Open vs. closed management style
      - Management mindset to stimulate learning

   (ii) Leadership Qualities
      - Explicit vs. tacit goals
      - Professed vs. actual intent
      - Perceptions vs. actual understanding of situation reality
      - Stated vs. modeled behaviors

   (iii) Business Innovation
      - Risk/reward triggers prompting innovation
      - Inspiration/threat dynamics in collaboration
      - Open vs. closed access to information
      - Open vs. closed access to communication
      - Expected vs. actual responses to new ideas/tests/experiments

   (iv) Behavioral Dynamics
      - Implied vs. straightforward expectations
      - Mixed messages/tacit implications
      - Logical/emotional links
      - Visual/verbal cues
      - Expected vs actual reaction to failure/risk

5. **Support public education: critical issues impacting Internet access**
   - Net neutrality, regulatory action, and First Amendment rights
   - Open access and Interoperability across platforms
   - Standardization of hypertext mark-up languages & protocols
   - Legislation to assure unbiased treatment of packet switching

VIII. CONCLUSION

Google is motivated by the love of applying scientific logic creatively, used in solving all sorts of problems. Everything else flows from that. Money is the means, not the end; innovate first, and find a way to monazite later. Companies that are successful innovators in current markets are generally motivated by the love of doing what they do best. Apple's workforce is passionate about media and design/technology. Google's people love mathematical modeling applied to systems for data distribution. Google was conceived from a playful intellectual exercise, never envisioned as a revenue channel. Conversely, competitors such as Microsoft seek to lock users in with their proprietary systems. They compete against instead of innovating and creating with; they seek to acquire the ideas of others, rather than investing in developing ideas themselves. Microsoft and its kind are at the opposite pole of this value chain helix. In an environment beset by lightening-fast change, high volatility, hypercompetition, declining prices, global cost parity, compressed margins, and Internet interoperability, only the mindset of relentless realism can offer leaders the necessary vision to overcome these odds. (Bossidy,Charan; 2004)

The failure of leaders to confront reality is the "Management Achilles' Heel", typically prompted by some combination of fear, unrealistic expectations, filtered information, emotional attachments, selective hearing, and the inability to break through existing complacency. (Bossidy,Charan; 2004) Research in the fields of creativity & innovation confirms that embracing risk is integral to the process of innovation. Innovative companies expect employees to allocate a certain part of each day to musing, to exploring, to reflection. Not only do they accept failure, they expect it; as a means to test, quantify, and validate what is actually being conceived, attempted, and implemented. Practicing business realism and fostering innovation require similar sets of skills: keeping an open mind, satiating a passionate curiosity, possessing the intellectual discipline to dissect complexity, engaging in exchange and dialogue, knowing what you stand for, and having the courage to follow your convictions.

IX. Appendix I: Financial Comparisons

2005 COMPANY COMPARISONS	GOOGLE	YAHOO!	MICROSOFT
Total Revenues (US$ M)	6,138.6	5,257.5	39,788.0
Total Net Income (US$ M)	1,465.4	1,775.8	12,254.0
Total Market Cap. (US$ M)	130,000.0	56,034.0	292,243.0
Total Shares Outstanding (Ms)	293.0	1,430.2	10,062.0
Total Number Employees	5,680	9,800	61,000
% Gross Profit Margin	60.1	57.9	82.7
% Net Profit Margin	26	18.7	30.8
Total Equity (US$ M)	9,419	8,566.4	40,104.0
Total Liabilities (US$ M)	852.9	2,265.4	29,493.0
Current Liabilities (US$ M)	745.4	1,204.1	22,442.0
% Return on Equity	20.9	15.0	30.6
% Return on Assets	19.2	11.6	18.9
Price / Earnings Ratio	62.35	34.18	23.4
Price / Sales Ratio	12.11	6.13	6.45
Price / Cash Flow Ratio	33.9	22.62	20.7
Current Ratio	12.08	2.10	2.06
Revenue Per Share (US$)	41.72	4.58	4.61
Working Capital Per Share (US$)	47.64	1.18	2.38
Assets Per Share (US$)	70.25	7.8	6.65
% 12 Month Revenue Growth	77.5	28.7	12.4
% 12 Month EPS Growth	63.0	46.4	6.7
% 12 Month Net Income Growth	86.5	(26.5)	0.5
Days of Sales Outstanding	42.2	46	72.01
Net Receivables Turnover Flow	11.3	9.0	5.6

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