Case 20 Google Inc.: What's the Corporate Strategy?

June 2012

The launch of Google's email system, Gmail, in April 2004 marked the beginning of a host of new product launches and new business initiatives at Google. With $1.67 billion from its initial public offering (IPO), Google expanded rapidly. Between its August 2004 IPO and the end of 2011, Google acquired 99 different companies.[1]

Initially, new products extended the scope of Google's information search and its ability to exploit the advertising potential of its search engine. However, with the acquisition of YouTube, the video-sharing website, for $1.65 billion in 2006, the launch of the Android operating system for mobile devices in 2007, and the introduction of the Chrome web browser in September 2008, which was followed by the announcement that Chrome would be extended into an open-source computer operating system, several observers were baffled as to the direction and rationale of Google's corporate strategy. A key concern was that Google's many ambitious initiatives were adding cost and distracting management at a time when advertising revenues were being squeezed by the economic downturn. Chris O'Brien of the *San Jose Mercury* summed up the feelings of many in a blog entitled "Google's growing identity crisis":

> There are a handful of reasons people generally cite for Google's success. The power of its search engine algorithm. The elegance of a business model that matches text ads to searches. A restless, innovative culture continually striving to improve and evolve its products.
>
> Here's what always struck me about Google: its simplicity. At the start, Google did one thing phenomenally well. Its search engine was so superior that the company's name became synonymous with search itself. And its home page was, and remains, a visual model of simplicity: a sea of white space, the Google logo, a search box, a couple of links—and no ads.
>
> The homepage aside, though, Google increasingly feels like a company running in a thousand directions at once. Over the past year, it has released a steady stream of high-profile products that seem to have little or no relation to the core identity expressed on its corporate homepage: "Google's mission is to organize the world's information and make it universally accessible and useful." The problem is that in expanding into so many different areas—productivity applications, mobile operating system, a Web browser—that the identity of Google itself has become

---

> muddled. No doubt, this all follows some clear logic from inside the Googleplex. But from the outside, it's getting harder every day to articulate what Google is. Is it a Web company? A software company? Something else entirely?[2]

The replacement of CEO Eric Schmidt by co-founder Larry Page on April 4, 2011 was viewed as the end of "adult supervision" for Google's youthful founders. Schmidt, a Silicon Valley veteran, had been installed as CEO by Page and Brin in 2001. After Page's first year at the helm, *Wired* magazine's discerned a new era of focus in Google's strategy:

> Page's reign has been characterized by focus. Focus on product. Focus on the threat from a social networking movement embodied by Facebook. A focusing of Google itself, from a collection of disparate services to a single one with intermeshed components. And a more focused leadership structure where every employee can cite a single name when asked who is in charge. Google is Larry's company now.[3]

However, concerns about Google's propensity for reckless expansion resurfaced with its acquisition of Motorola Mobility, the wireless handset maker, for $12.5 billion—Google's first multi-billion-dollar acquisition. Whereas all Google's prior acquisitions had been of software companies, with Motorola Google had now become a hardware producer as well.

The concern of many stock analysts was that most of Google's diversifying initiatives had done little to boost revenue, let alone generate profit. The *Financial Times*' Lex column had dubbed Google a "one-trick pony": "Google has what amounts to a license to print money. By inserting itself between the shops and shoppers of the world, the search provider takes a small commission every time it connects the two." Beyond its core search business, Google's activities added cost, but little revenue: "Just look at YouTube . . . running costs will be between $500m and $1bn this year, while revenues will only be in the region of $240m . . . the economics appear unsustainable.[4] The Motorola acquisition reinforced these fears:

> Even in the best of scenarios, digesting Motorola will be a challenge. The company, with 20,000 employees, lost 20 percent of its market share in 2011 . . . Motorola will likely drag down Google's earnings for years to come. Barclays' analyst Anthony Di Clemente assumes that the combined company will deliver profit margins of 41 percent in 2012, vs. 55 percent if Google remains separate from Motorola.
>
> Google's dive into hardware could also alienate device makers like Samsung and HTC, which rely on the Android operating system for almost all their phones. If Google prioritizes Motorola over its competitors—say, giving it earlier access to Android upgrades—they might rely more on other operating systems, such as Microsoft's soon-to-be-released Windows 8. "They need to be very careful that they don't damage the ecosystem they've so carefully built," says Bill Whyman, an analyst with International Strategy & Investment Group. Otherwise, he warns, the results could be "disastrous."[5]

Independent investment analysis Henry Blodget was even more skeptical: "Google is taking on the extraordinary challenge of buying a dying smartphone manufacturing elephant—Motorola—and going into the hardware manufacturing game. This is a huge, risky, and distracting move for Google, and the odds are that it will fail spectacularly."[6] Table 1 lists Google's key financial data.

TABLE 1 Google Inc.: Key financial data, 2004–2011 ($million)

	2004	2005	2006	2007	2008	2009	2010	2011
Income data								
Revenues	3,189	6,139	10,605	16,594	21,796	23,651	29,321	37,905
Costs and expenses								
Cost of revenues	1,469	2,577	4,225	6,649	8,622	8,844	10,417	13,188
R & D	395	600	1,229	2,120	2,793	2,843	3,762	5,162
Sales and marketing	296	468	850	1,461	1,946	1,984	2,799	4,589
General and administrative	188	387	752	1,279	1,803	1,668	1,962	2,724
Total costs and expenses	2,549	4,121	7,055	11,510	15,164	15,339	18,940	26,163
Income from operations	640	2,017	3,550	5,084	6,632	8,312	10,381	11,742
Net interest income	10	124	461	590	316	69	415	584
Income before income taxes	650	2,142	4,011	5,674	5,854	8,381	10,796	12,326
Net income	399	1,465	3,077	4,204	4,227	6,520	8,505	9,737
Balance sheet data								
Cash and marketable securities	2,132	8,034	11,243	14,218	15,845	24,485	34,975	44,626
Long-term liabilities	43	107	128	611	1,226	1,746	1,614	5,516
Total stockholders' equity	2,929	9,418	17,039	22,689	28,238	36,004	46,241	58,145

Source: Google, 10-K report, 2008.

The History of Google, 1996–2012

The Google Search Engine

Larry Page and Sergey Brin were PhD students at Stanford University. In January 1996, Page's search for a dissertation topic led him to examine the linkage structure of the World Wide Web. Page and Brin developed a page-ranking algorithm that used backlink data (references by a web page to other web pages) to measure the importance of any web page. Although several rudimentary web search engines were in existence, most selected web pages on the basis of the frequency with which a particular search word appeared. They called their search engine "Google" and on September 15, 1997 registered the domain name "google.com." They incorporated Google Inc., on September 7, 1998 in Menlo Park, California. Google's "PageRank" algorithm was granted a patent on September 4, 2001.

Search engines met the need of the rapidly growing number of people who were turning to the World Wide Web for information and commercial transactions. As the number of websites grew exponentially, locating relevant web content became

a critical need. Page and Brin were not alone. Among the early crawler-based web search engines were WebCrawler, Lycos, Excite, Infoseek, Inktomi, Northern Light, and AltaVista. Several of these search engines became popular *portal sites*—websites that offered users their first port of entry to the web. Other portal sites soon recognized the need to offer a search facility. Yahoo! licensed AltaVista's search engine, then in 1998 replaced AltaVista with Inktomi.

The Google search engine attracted a rapidly growing following because of its superior page ranking and its simple design—it did not compromise its search functionality by attempting to become a portal. In 2000, Google began selling advertisements—paid web links associated with search keywords. These "sponsored links" were brief, plain text ads with a click-on URL, which appeared alongside with web search results for specific keywords. Advertisers bid for keywords; it was these "cost-per-click" bids weighted by an ad's click-through rate (CTR) that determined the order in which a sponsored link would appear. In offering a web-based advertising system linking third-party advertisers to a search engine of informational website, Google's system copied many of the features of the then market leader, Overture. After 2000, Google experienced explosive growth and was boosted in May 2002 by AOL's decision to adopt Google's search engine and its paid listings service.

After two rounds of venture capital funding, Google became a public company on August 19, 2004 when an IPO of about 7% of Google's shares raised $1.67 billion, giving Google a market capitalization of $23 billion.

Organizing the World's Information

The financial boost provided by Google's IPO fueled even more rapid development of its business. In its core web search business, Google was continually seeking to improve users' search experiences while finding ways to better monetize its dominance of web search through advertising. However, the most striking feature of Google's development was its determination to grow beyond its core web search business. This expansionist urge reflected the company's raison d'être: it had never seen itself just as an internet search engine. Its declared mission was "to organize the world's information and make it universally accessible and useful." Google's IPO prospectus had elaborated this intent:

> We serve our users by developing products that enable people to more quickly and easily find, create and organize information. We place a premium on products that matter to many people and have the potential to improve their lives, especially in areas in which our expertise enables us to excel.
>
> Search is one such area. People use search frequently and the results are often of great importance to them. For example, people search for information on medical conditions, purchase decisions, technical questions, long-lost friends and other topics about which they care a great deal. Delivering quality search results requires significant computing power, advanced software and complex processes—areas in which we have expertise and a high level of focus.[7]

Google's quest to meet the information needs of society caused it to continually seek opportunities for accessing new information and provide it through additional media channels. As Exhibit 1 shows, Google's quest to provide accessibility to the

world's information had taken it into new communication media (notably wireless telephony, but also radio, TV, and video games) and sources of information beyond third-party websites.[8] These new sources of information included images (Google Image Search), maps (Google Maps), academic articles (Google Scholar), books (Google Book Search), satellite imagery (Google Earth), news (Google News), patents (Google Patent Search), video (Google Video; YouTube), finance (Google Finance), and web logs (Google Blog Search).

However, Google's entrepreneurial and technological dynamism also resulted in initiatives that extended beyond the accessing and organizing of information. Since the introduction of Gmail in 2004, Google offered a widening array of software and services for communicating, creating, and manipulating 2D and 3D images, producing documents, creating web pages, managing time, and social networking. For example, Google Docs is a suite of office productivity software for creating, storing, and sharing text documents, spreadsheets, and presentations; Blogger is software that allows individuals to create their own web logs; Google Groups allows individuals to establish and support communication within a group formed around a particular interest or identity; Orkut and Google+ are social networking services; and Picasa is downloadable software for organizing, editing, and sharing photographs. Appendix 1 provides a timeline of Google's development.

Most of these additional products and services offered no new revenue opportunities for Google. However, Google was also expanding its advertising-based revenue model. Google's primary source of advertising revenue was AdWords, which was launched in 2000. Advertisers specify the words that should trigger their ads and the maximum amount they are willing to pay per click. When a user searches google.com, short text advertisements appear as "sponsored links" on the right side of the screen.

AdSense uses an advertisement placement technology developed by Applied Semantics (acquired in 2003). It allows Google to place ads on third-party websites. In 2011, 28% of Google's advertising revenue was derived from partners' websites, and 72% from its own websites (Table 2). Appendix 2 explains AdWords and AdSense in greater detail.

TABLE 2 Google's revenues, 2006–2011 ($million)

	2006	2007	2008	2009	2010	2011
Advertising revenues of which:						
—Google websites	6,332.8	10,624.7	14,413.8	15,723.0	19,444.0	26,145.0
—Google Network websites	4,159.8	5,787.9	6,714.7	7,166.0	8,792.0	10,396.0
—Total advertising revenues	10,492.6	16,412.6	21,128.5	22,889	28,236	36,531
Licensing and other revenues	112.3	181.4	6,67.1	762.0	1,085.0	1,374.0
Total revenues	10,604.9	16,594.0	21,795.6	23,651.0	29,321.0	37,905.0

Source: Google Inc., 10-K report, 2008.

In 2007 and 2008, Google's diversification efforts took a dramatic new turn with Google's entry into mobile telephony and web browsers.

Android and Mobile Telephony

Google acquired Android Inc. in 2005 and accelerated the development of its Linux-based operating system for mobile devices. In 2007, it formed the Open Handset Alliance, in which 86 hardware, software, and telecommunication companies devoted themselves to advancing open standards for mobile devices. In November 2007, it launched the Android wireless communication software platform. *PC Advisor* commented:

> Google's announcement of the Android mobile development platform . . . is yet another example of the lengths the company will go to keep its advertising business growing at a jaw-dropping rate. It is also another awe-inspiring—or terrifying, depending on one's perspective—display of the engineering and business resources Google can unleash and of the power it has to influence, disrupt and rearrange markets . . . In a nutshell, Google announced a free, open-source application development platform called Android for mobile devices with the intention of eclipsing existing operating systems from Microsoft, Symbian, Palm and others . . . Android will have a complete set of components, including a Linux-based operating system, middleware stack, customizable user interface and applications. Google envisions that with Android, developers will flood the mobile market with new applications and online services that can be written once and deployed in many phones, something that, as Google sees it, the current mobile technical fragmentation prevents . . . Ultimately, what is propelling Google in this effort is its core advertising business, which the company recognizes it must extend to the mobile market.[9]

The following month (December 2007), Google entered the Federal Communication Commission's auction of 700MHz wireless spectrum. Interestingly, Google had no desire to win the auction. Its intention was to force the major telecom service providers into the auction so that a new section of the wireless spectrum would be developed for the wireless internet service. Google's lobbying had already ensured that whoever developed this portion of spectrum would be required to allow users to download any software application they wanted on their mobile device and to use any mobile devices they liked on that wireless network. The auction was won by AT&T and Verizon (who bid a total of $16 billion). Some thought the real winner was Google: while AT&T and Verizon would bear the costs of developing the 700MHz waveband, Google would be able to offer its Android system and mobile internet services without the need for any upfront investment.[10]

By May 2012, it was clear that Android was a spectacular success not only in preventing the domination of the smartphone and tablet market by Apple but also in establishing market leadership (Table 3). Android's success can be attributed to two main factors. First, its adoption by a large number of handset manufacturers of which by far the most important had been Samsung with 45% of the Android phones shipped in the first three months of 2012. Second, the ability of Android to attract large numbers of application developers. By May 25, 2012, there were an estimated 450,000 applications for Android.

TABLE 3 Shipments of smartphones, classified by operating system, 2011–2012

Mobile operating system	Unit shipments		Market share	
	2012 Q1 (million)	2011 Q1 (million)	2012 Q1 (%)	2011 Q1 (%)
Android (Google)	89.9	36.7	59.0	36.1
iOS (Apple)	35.1	18.6	23.0	18.3
Symbian (Nokia)	10.4	26.4	6.8	26.0
Blackberry OS (RIM)	9.7	13.8	6.4	13.6
Linux	3.5	3.2	2.3	3.1
Windows Phone 7, Windows Mobile (Microsoft)	3.3	2.6	2.2	2.6
Other	0.4	0.3	0.3	0.3
TOTAL	152.3	101.6	100.0	100.0

Source: IDC Worldwide Mobile Phone Tracker, May 24, 2012. Reproduced with permission of IDC.

Chrome

Google's announcement of its Chrome web browser on September 2, 2008 generated huge publicity, but little surprise. It was widely known that founders Brin and Page had wanted to launch a web browser since Google's early days. For several years Google had been a major source of technical and financial support for Mozilla's Firefox browser. According to Google's head of product development, Sundar Pichai: "Google's entire business is people using a browser to access us and the web." Google's explanation of its decision to launch its own browser emphasized the improved functionality for users: "Google Chrome is a browser that combines a minimal design with sophisticated technology to make the web faster, safer, and easier," claimed Google's website. Microsoft's Internet Explorer (IE), by contrast, was limited by the legacy of its 15-year history.

However, most observers believed that Google's strategic intention was not simply a superior user experience. Google also saw a threat from the new version of Microsoft's IE. Version 8 of IE, launched in beta mode in August 2008, allowed an "InPrivate" protection mode that would delete cookies and make it more difficult to track users' browsing habits. The result would be to limit Google's ability to use such information for targeted advertising.

Others believed that Google's primary intention was not so much to protect itself against Microsoft as to launch a direct attack upon Microsoft's dominance of personal computing and to speed the transition of computing to a new online environment:

> [Google Chrome] is an explicit attempt to accelerate the movement of computing off the desktop and into the cloud—where Google holds advantage. And it's an aggressive move destined to put the company even more squarely in the crosshairs of its rival Microsoft.[11]

The announcement ten months later that Google would add an operating system to its Chrome browser was seen as confirmation that the primary motivation of Chrome was to strike against the core of Microsoft's market strength.

The Motorola Acquisition

Google's own explanation for its acquisition of Motorola placed considerable weight on Motorola's rich portfolio of patents relating to wireless communication. Since July 2011, when a consortium of technology companies led by Apple and Microsoft purchased more than 6,000 mobile-device-related patents from Nortel Networks for about $4.5 billion, Google's Android was vulnerable. Motorola's patents would give Google a bigger bargaining chip and make it stronger for countering legal threats from competitors armed with their own patents, and Apple in particular.

Other commentators emphasized a different aspect of the acquisition: Google's potential to integrate more closely hardware and software development in the smartphone and tablet market. According to Phil McKinney of HP: "Everyone is figuring out that if you want to survive, you really want to control the experience end to end. The ability to control both the hardware platform and OS is absolutely critical."

The Motorola acquisition might also support Google's efforts to build its presence in mobile internet use. Motorola's Motoblur, a user interface that pulled together Twitter, Facebook, and other social sites, into a single stream of data, was viewed as having considerable potential for Google, especially if integrated with Google+. Larry Page also saw value in Motorola's expertise with other web-connected devices found around the home, including TV set-top boxes: "I think there's an opportunity to accelerate innovation in the home business by working together with the cable and telco industry as we go through a transition to internet protocol."[12] Motorola Mobility's CEO, agreed: "Our home business is uniquely positioned to capitalize on the convergence of mobile and home environments in partnership with our key customer."[13]

The unanswered question was the implications of Google having an in-house smartphone producer for its relations with Samsung, HTC, and other Android partners.

Google+

Google's first foray into social networking was the launch of Orkut in January 2004, the result of a project by a Google software engineer, Orkut Büyükköktenas. Orkut became successful in certain countries, most notably Brazil, India, and Estonia, but in most of the world was eclipsed by Facebook. Google's subsequent attempts to establish itself in social networking included Google Friend Connect (launched 2008, retired in March 2012) and Google Buzz (launched 2010, retired in 2011).

By 2011, Google executives began to view Facebook as Google's most dangerous competitor. The initial warning came in March 2010 when Facebook overtook Google as the most visited website within the US. The battle to capture internet users was one arena of competition; however, of greater financial significance to Google was competition for advertising:

> If you were an advertiser, who would you rather place your ads with? On the one hand, you have a company that will attempt to gear ads to things like the search history of its users. On the other hand, you have a company that knows where its users went to college, where they work, who they are friends with, what they're reading and sharing, and their favorite bands, books, foods, and colors. Advertisers want to target their ads to the people most likely to be receptive to them, and information is the key to targeting. The more information available, the better the targeting.[14]

There was also the threat that Facebook might compete directly with Google's core search business. In 2011, Facebook received a patent for a search algorithm—"Visual tags for search results generated from social network information"—which generated search results and ranked them according to popularity within a person's group of Facebook friends. *Business Insider*'s Pascal-Emmanuel Gobry commented: "It's at least conceivable that with enough tweaking Bing and Facebook could combine in some way into serious competition for Google."[15]

Google's Management and Capabilities

Google's phenomenal growth and capacity for innovation rested upon a management system that was unique, even by the unorthodox standards of Silicon Valley. Management scholar Gary Hamel identified several key features of this system:

- *Hiring policy*: Google's hiring was highly selective: "Google's leaders believe that one exceptional technologist is many times more valuable than one average engineer; hence they insist on hiring only the brightest of the bright—folks out on the right-hand end of the bell-shaped curve. They also believe that if you let one 'bozo' in, more will surely follow. Their logic is simple: A-level people want to work with A-level people."[16] This also meant that Google was a target for other software companies: Facebook's employees included large numbers of Google alumni.
- *A "dramatically flat, radically decentralized" organization*: According to Hamel: "In many ways, Google is organized like the internet itself: it's highly democratic, tightly connected, and flat. Like so much of Google's culture, the source of the company's radical decentralization can be traced back to Brin and Page, both of whom attended Montessori schools and credit much of their intellectual independence to that experience. Says Mayer: 'They don't like authority and they don't like being told what to do.' Brin and Page understand that breakthroughs come from questioning assumptions and smashing paradigms."[17]
- *Small, self-managing teams*: "Roughly half of Google's 10000 employees—all those involved in product development—work in small teams, with an average of three engineers per team. Even a large project such as Gmail, which might occupy 30 people, is broken into teams of three or four, each of which works on a specific service enhancement, such as building spam filters or improving the forwarding feature."[18] Teams appoint their own leaders, and engineers can switch teams without the need for permission from the HR department.
- *Rapid, low-cost experimentation*: "Evolutionary adaptation isn't the product of a grand plan, but of relentless experimentation . . . Google's 'just-try-it' philosophy is applied to even the company's most daunting projects, like digitizing the world's libraries . . . Google Book Search began with a makeshift experiment aimed at answering a critical question; in this case: how long does it take to digitize a book? To find out, Page and Mayer rigged up a piece of plywood with a couple of clamps and proceeded to photograph each page of a 300-page book, using a metronome to keep pace. With Mayer flipping

> pages, and one half of Google's founding team taking digital snapshots, it took 40 minutes to turn the ink into pixels. An optical character recognition program soon turned the digital photos into digital text, and within five days the pair had ginned up a piece of software that could search the book. That kind of step-wise, learn-as-you-go approach has repeatedly helped Google to test critical assumptions and avoid making bet-the-farm mistakes."[19]

The result was a constant impetus towards creativity, innovation, and entrepreneurial initiative. Indeed, given the caliber and characteristics of Google's employees, it was difficult to see how Google could not be a hotbed for innovation:

> Our employees, who have named themselves Googlers, are everything. Google is organized around the ability to attract and leverage the talent of exceptional technologists and business people. We have been lucky to recruit many creative, principled and hard working stars. We hope to recruit many more in the future. We will reward and treat them well . . . Because of our employee talent, Google is doing exciting work in nearly every area of computer science . . . Talented people are attracted to Google because we empower them to change the world; Google has large computational resources and distribution that enables individuals to make a difference. Our main benefit is a workplace with important projects, where employees can contribute and grow.[20]

The culture of creativity and innovation was institutionalized through Google's "70-20-10" rule, which stipulated that Google would devote 70% of its engineering resources to developing the core business, 20% to extend that core into related areas, and 10% allocated to fringe ideas. As a result, Google employees are able to spend a significant amount of their time working on pet projects of their own choosing.

Underlying Google's capacity for innovation and the effective implementation of new initiatives was a set of resources that few other technology-based companies could match. With an operating cash flow of $7.9 billion in 2008 and a cash pile of $15.8 billion, Google was a financial powerhouse matched only by Microsoft, IBM, HP, and Apple. This financial strength allowed Google to buy its way through acquisition into almost any market or area of technology. Most of the time Google did not need to buy its way into a new market: it was ranked as the world's second-most-valuable brand (after Apple), with a value of $111 billion in 2011.[21] Most important was a user base unmatched by any other IT company. With 776 million unique visitors to its website every day, it reached an estimated 77% of the world's internet audience daily.

Future Challenges

Google's first-quarter results announced on April 12, 2012 allayed fears that it might be losing its market dominance in online advertising. Its gross revenues for the quarter were up 24%, to $10.65 billion year-on-year; earnings were up 60% to $2.89 billion. Ninety-six percent of revenues came from advertising, compared to 97% the previous year. The US accounted for 46% of revenues. Cost-per-click was down 12% year-on-year, but this was the result of the shift of Google's business toward mobile internet access.

In terms of immediate threats, Google biggest concerns arose less from the market and more from the government and judicial arenas. These threats fell into three main areas:

- *Privacy*: The US Federal Trade Commission's privacy framework had tried to ensure that Google could not link its tracking data to identifiable individuals. European regulators were particularly concerned about the privacy policy that Google put into effect on March 1, 2012. Google did away with privacy rules for individual products and instead put in an umbrella policy that covered all 60 or so of Google web services. However, this aggregation of data into large single-user profiles was believed by the EU to contravene its data protection guidelines. In addition, Google's Street View aroused intense concern over invasion of individual privacy.
- *Antitrust*: Google's dominant share of internet search meant that it was a monopoly in terms of the competition laws of many countries of the world. In May 2012, its main threats were from the EU. The EU's competition commissioner had notified Google of four concerns it had of Google's business practices, which the Commission believed might constitute an abuse of market dominance: Google's promotion of its own products over rivals' in searches for items such as shopping; its copying and re-display of content from restaurant sites; its restrictions on competitors' ads appearing alongside its own; and the portability of advertising campaigns from Google's AdWords system.
- *Patent infringement claims*: Google had attracted a number of claims of patent infringement. One of the biggest, Oracle's claim that Android infringed its Java patents, was dismissed in May 2012.

However, when asked at a Google customer conference about the threats the company faced, CEO Larry Page did not hesitate: "Google," he responded. "There are basically no companies that have good slow decisions. There are only companies that have good fast decisions. As companies get bigger, they slow down decision making, and that's a big problem."

The speed with which Apple and Facebook had replaced Microsoft as Google's primary threats pointed to Google's need for vigilance and responsiveness. Page's concern about the impact of Google's expansion was echoed in its annual report for 2012:

> We have experienced rapid growth in our headcount and operations, which has placed, and will continue to place, significant demands on our management, operational, and financial infrastructure. If we do not effectively manage our growth, the quality of our products and services could suffer, which could negatively affect our brand and operating results. Our expansion and growth in international markets heighten these risks as a result of the particular challenges of supporting a rapidly growing business in an environment of multiple languages, cultures, customs, legal systems, alternative dispute resolution systems, regulatory systems, and commercial infrastructures. To effectively manage this growth, we will need to continue to improve our operational, financial and management controls, and our reporting systems and compliance procedures. These systems enhancements

and improvements will require significant capital expenditures and management resources. Failure to implement these improvements could hurt our ability to manage our growth and our consolidated financial position.[22]

These risks were amplified by the strains of integrating Google's many acquisitions. These included: "Diversion of management time and focus from operating our business to acquisition integration challenges; implementation or remediation of controls, procedures, and policies at the acquired company; integration of the acquired company's accounting, human resource, and other administrative systems, and coordination of product, engineering, and sales and marketing functions."[23]

Given the breadth of the challenges that Google faced, had the time come for Google's leading trio—Page, Brin, and Schmidt—to scale back Google's ambitions and draw boundaries around Google's corporate strategy?

Appendix 1: Google Timeline

January 1996	Larry Page and Sergey Brin begin collaborating on a search engine called BackRub.
September 1998	Google Inc. incorporated in Menlo Park, California; hires its first employee.
June 1999	Google obtains $25 million in venture capital funding. Moves to new Googleplex HQ in Mountain View, California.
September 1999	Google.com officially launched.
January – December 2000	Continued enhancements to Google. First ten non-English language versions. Google becomes the world's most widely used search engine. Introduction of AdWords. Google Toolbar allows users to perform a Google search without visiting Google homepage.
February 2001	Acquires the assets of Deja.com, organizes its Usenet archive into a searchable format.
August 2001	Dr Eric Schmidt, former CEO of Novell and CTO of Sun Microsystems, appointed CEO.
September 2001	Google becomes profitable.
December 2001	Launch of Google Image Search and Google Catalog Search (for searching mail-order catalogues).
February 2002	Google Search Appliance introduced: allows search to be extended beyond firewalls to company intranets, e-commerce sites, and university networks. Google Compute allows available processing on users' computers to solve computation-intensive scientific problems.
May 2002	AOL selects Google to provide search and advertising to its 34 million members.
September 2002	Google News launched: access to 4500 leading news sources worldwide.
December 2002	Froogle, a product search service, launched.
April 2003	Acquisition of Applied Semantics. Launch of Google AdSense allows highly targeted ads to be placed adjacent to their content.
January 2004	Local Search allows geographically focused web search and personalized search on Google Labs, enabling users to specify their interests and customize their search results.
April 2004	Launch of Gmail, a web-based mail service. Gmail also delivers relevant ads adjacent to mail messages.
July 2004	Acquires Picasa Inc., helps users to organize, manage, and share their digital photos.
August 2004	IPO of GOOG on NASDAQ through a Dutch auction process.
October 2004	Release of Google Desktop Search. Also Google SMS launched. Acquisition of Keyhole Corp., a digital and satellite image mapping company.
November 2004	Google index of web pages exceeds eight billion.
December 2004	Launch of Google Groups: allows users to create and manage their own email groups and discussion lists. Google Book Search begins scanning of books from the world's leading libraries.

January 2005	Launch of Google Maps: provides map views and satellite views.
June 2005	Google Labs offers Personalized Homepages. Launch of Google Earth.
August 2005	Launch of Google Talk: free internet telephony.
September 2005	Release of Google Blog Search.
October 2005	Launch of Google Reader combines blog, web page, and news sources onto a single screen.
November 2005	Launch of Google Base for uploading of content in a structured, searchable format. Google Analytics replaces Urchin as an online advertising management tool.
January 2006	Google Video Store offers range of content using a new Google Video Player. Google domain in China announced.
February 2006	Google Chat: integrates email and instant messaging within a web browser. Updated version of Google Desktop released. Google Page Creator facilitates creation of web pages.
March 2006	Debut of Google Finance: financial and business information.
April 2006	Release of Google Calendar for easy accessing and sharing of personal calendars.
June 2006	AdWords launches click-to-play Video Ads. Google Checkout launched: provides faster, more convenient online shopping. Google Maps available to businesses for embedding in their own websites.
August 2006	SketchUp acquired. Google partners with EarthLink to offer free Wi-Fi for the city of San Francisco.
November 2006	Google Apps for Education offers Google services to teachers and students. Google for Educators offers elementary teachers Google Certification through the Google Teacher Academy.
October 2006	Acquisition of YouTube. Release Web-based applications Docs and Spreadsheets. Acquisition of Jobspot, a collaborative wiki platform, which later becomes Google Sites.
December 2006	Release of Patent Search indexing more than seven million US patents.
January 2007	Partnership with China Mobile announced.
February 2007	Acquisition of Adscape, producer of in-game advertising producer.
April 2007	Acquisition of DoubleClick. Froogle changed to Google Product Search. Acquisition of Zenter, software to create and share online presentations. Acquisition of TiSP, a home broadband service.
June 2007	Acquisition of FeedBurner, provider of tools for site feed management and analysis.
September 2007	AdSense for Mobile introduced.
November 2007	Android, an open-source platform for mobile devices, announced. Program to invest in low-cost electricity from renewable sources announced.
January 2008	Google bids for license in the 700MHz spectrum auction.
February 2008	Launch of Google Sites (following acquisition of JotSpot), allows creation of collaborative web-sites with embedded videos, documents, and calendars.
May 2008	Release of Google Health for the online collection, storage, and management of individuals' medical records and health information.
June 2008	Google Finance offers real-time stock quotes. Launch of Google Site Search: site owners can enable Google-powered searches on their own websites.
September 2008	Announcement of Chrome web browser. T-Mobile announces the G1, the first phone built on the Android operating system.
February 2009	Google Latitude for mobile devices allows sharing your location.
March 2009	Launch of Google Ventures to invest in innovation and new technology.
June 2009	Launch of Google Squared allows complex search queries, and the collection and organization of facts from the web. All for Good, a search interface for volunteer activities. Release of beta version of AdSense for Mobile Applications.
July 2009	Google Chrome OS announced.
August 2009	Acquisition of On2 Technologies, a video compression technology company.
September 2009	Introduction of DoubleClick Ad Exchange, a real-time marketplace for online publishers and ad networks/agency networks to buy and sell display advertising space.
October 2009	Introduction of Google Maps Navigation, a GPS navigation system that includes 3D views and voice guidance.

(*Continued*)

January 2010	New China policy: Google will no longer censor search results on Google.cn.
February 2010	Google to build and test ultra-high-speed broadband networks in US cities.
May 2010	Acquires AdMob, a mobile display advertising company. Google invests in a utility-scale renewable energy project.
August 2010	Acquires Slide, a social technology company that builds new ways for people to connect online across numerous platforms.
October 2010	Place Search allows search organized around specific locations.
December 2010	Google eBookstore allows browsing and search through more than three million e-books.
April 2011	Invests $168 million in Californian solar energy power plant and $100 million in wind farm in Oklahoma.
June 2011	Launch of Google+. Google's electric vehicle charging infrastructure is the largest in the country. Google invests $280 million in solar installations for homeowners.
August 2011	Acquisition of Motorola Mobility agreed.
September 2011	Acquisition of Zagat: to be a cornerstone of Google's local offerings. After its 90-day field trial, Google+ moves to open signups.
November 2011	Google Music launched: users can buy, play, and share music, and store it in the cloud.
January 2012	Launch of "Search, plus Your World": when a user performs a signed-in search on Google, the results page may include Google+ content from Google+ contacts together with relevant Google+ profiles and Google+ pages.

Source: Google Inc., "Our history in depth," http://www.google.com/about/company/history. Reproduced with permission from Google Inc.

Appendix 2: Extract from Google, 10-K Report for 2011, Item 1: The Business

Overview

Google is a global technology leader focused on improving the ways people connect with information. We aspire to build products that improve the lives of billions of people globally. Our mission is to organize the world's information and make it universally accessible and useful. Our innovations in web search and advertising have made our website a top internet property and our brand one of the most recognized in the world.

We generate revenue primarily by delivering relevant, cost-effective online advertising. Businesses use our AdWords program to promote their products and services with targeted advertising. In addition, the third parties that comprise the Google Network use our AdSense program to deliver relevant ads that generate revenue and enhance the user experience . . .

Our business is primarily focused around the following key areas: search, advertising, operating systems and platforms, and enterprise.

Search

We maintain a vast index of websites and other online content, and make it available through our search engine to anyone with an internet connection. Our search technologies sort through an ever-growing amount of information to deliver relevant and

useful search results in response to user queries. We integrate innovative features into our search service and offer specialized search services to help users tailor their search. In addition, we are constantly improving and adding to our products and services, to provide users with more relevant results so that users find what they are looking for faster.

Advertising

Google Search With AdWords, advertisers create simple text-based ads that then appear beside related search results or web content on our websites and on thousands of partner websites in our Google Network, which is the network of third parties that use our advertising programs to deliver relevant ads with their search results and content. Most of our AdWords customers pay us on a cost-per-click basis . . . We also offer AdWords on a cost-per-impression basis that enables advertisers to pay us based on the number of times their ads appear on our websites and our Google Network Members' websites as specified by the advertiser.

Our AdSense program enables websites that are part of the Google Network to deliver ads from our AdWords advertisers that are relevant to the search results or content on their websites. We share the majority of the revenues generated from these ads with the Google Network Members that display the ads.

Google Display Display advertising comprises the videos, text, images, and other interactive ads that run across the web on computers and mobile devices, including smart phones and handheld computers such as netbooks and tablets. The Google Display Network provides advertisers services related to the delivery of display advertising across publishers participating in our AdSense program, publishers participating in the DoubleClick Ad Exchange, and Google-owned sites such as YouTube and Google Finance.

Through our DoubleClick advertising technology, we provide to publishers, agencies, and advertisers the ad serving technology, which is the infrastructure that enables billions of ads to be served each day across the web. Our DoubleClick Ad Exchange creates a real-time auction marketplace for the trading of display ad space.

In addition, YouTube provides a range of video, interactive, and other ad formats for advertisers to reach their intended audience . . . YouTube also offers analytic tools to help advertisers understand their audience and derive general business intelligence.

Google Mobile Mobile advertising is still in relative infancy, though the mobile device is quickly becoming the world's newest gateway to information . . . Google Mobile extends our products and services by providing mobile-specific features to mobile device users. Our mobile-specific search technologies include search by voice, search by sight, and search by location. Google Mobile also optimizes a large number of Google's applications for mobile devices in both browser and downloadable form. In addition, we offer advertisers the ability to run search ad campaigns on mobile devices with popular mobile-specific ad formats, such as click-to-call ads in which advertisers can include a phone number within ad text.

Google Local Google is committed to providing users with relevant local information. We've organized information around more than 50 million places globally from

various sources across the web. Users can find addresses, phone numbers, hours of operation, directions and more for millions of local queries like shops, restaurants, parks and landmarks right on Google.com, on Google Maps and on Google Maps for mobile. They can also discover more places that are right for them by rating the places they've been, and getting customized recommendations based on their tastes and those of their friends directly within Google Maps. Our products and services also help local business owners manage their online presence and connect with potential customers. Millions of business owners have verified their free business listings via Google Places to ensure that users have up-to-date information about their establishments, and to contribute additional details such as photos and products/services offered. Google Offers brings people daily deals from local and national businesses, redeemable for discounted goods or services. From restaurants to spa treatments to outdoor adventures, Google has deals from the best businesses a city has to offer as well as popular national brands.

Operating Systems and Platforms

Android Working closely with the Open Handset Alliance, a business alliance of more than 75 technology and mobile companies, we developed Android, a free, fully open source mobile software platform that any developer can use to create applications for mobile devices and any handset manufacturer can install on a device . . .

Google Chrome OS and Google Chrome Google Chrome OS is an open source operating system with the Google Chrome web browser as its foundation. Both the Google Chrome OS and the Google Chrome browser are built around the core tenets of speed, simplicity, and security. Designed for people who spend most of their time on the web, the Google Chrome OS is a new approach to operating systems. We are working with several original equipment manufacturers to bring computers running Google Chrome OS to users and businesses. The Chrome browser runs on Windows, Mac, and Linux computers.

Google+ In June 2011, we launched Google+, a new way to share online just like users do in the real world, sharing different things with different people. Google+ has added new users every week since its launch. As of January 2012, over 90 million people have joined Google+.

Google TV Google TV is a platform that gives consumers the power to experience television and the internet on a single screen, with the ability to search and find the content they want to watch. The Google TV platform is based on the Android operating system and runs the Google Chrome browser.

Google Books The Google Books platform (including reading applications, an electronic bookstore (eBookstore), book search, and personal library management) is designed to help people discover, search, and consume content from printed books online. Through the Google eBookstore, we make available for sale popular books in electronic book format to complement our large collection of free public domain books.

Enterprise

Google's enterprise products provide familiar, easy-to-use Google technology for business settings. Through Google Apps, which includes Gmail, Google Docs, Google Calendar, and Google Sites, among other features, we provide hosted, web-based applications that people can use on any device with a browser and an internet connection. In addition, we provide our search technology for use within enterprises through the Google Search Appliance (real-time search of business applications, intranet applications, and public websites), on their public-facing sites with Google Site Search (custom search engine), and Google Commerce Search (for online retail enterprises). We also provide versions of our Google Maps Application Programming Interface (API) for businesses (including fully interactive Google Maps for public and internal websites), as well as Google Earth Enterprise (a behind-the-company-firewall software solution for imagery and data visualization). Our enterprise solutions have been adopted by a variety of businesses, governments, schools, and non-profit organizations. Google Apps is the first cloud computing suite of message and collaboration tools to receive US government security certification.

Competition

Our business is characterized by rapid change and converging, as well as new and disruptive, technologies. We face formidable competition in every aspect of our business, particularly from companies that seek to connect people with information on the web and provide them with relevant advertising. We face competition from:

- General purpose search engines, such as Yahoo and Microsoft's Bing.
- Vertical search engines and e-commerce websites, such as Kayak (travel queries), Monster.com (job queries), WebMD (for health queries), and Amazon.com and eBay (e-commerce). Some users will navigate directly to such websites rather than go through Google.
- Social networks, such as Facebook and Twitter. Some users are relying more on social networks for product or service referrals, rather than seeking information through general purpose search engines.
- Other forms of advertising, such as television, radio, newspapers, magazines, billboards, and yellow pages, for ad dollars. Our advertisers typically advertise in multiple media, both online and offline.
- Mobile applications on iPhone and Android devices, which allow users to access information directly from a publisher without using search engines.
- Providers of online products and services. A number of our online products and services, including Gmail, YouTube, and Google Docs, compete directly with new and established companies, which offer communication, information, and entertainment services integrated into their products or media properties.

Source: Google, 10-K Report for 2011, Item 1: The Business. Reproduced with permission from Google Inc.

Notes

1. "List of mergers and acquisitions by Google," *Wikipedia*, http://en.wikipedia.org/wiki/List_of_acquisitions_by_Google, accessed May 25, 2012.
2. "Google's Growing Identity Crisis," Chris O'Brien's blog, July 19, 2009, http://www.mercurynews.com/ci_12853656?IADID, accessed July 20, 2009.
3. S. Levy, "Larry Page's First Year as Google CEO: Impatience Is a Virtue," *Wired*, April 4, 2012. http://www.wired.com/epicenter/2012/04/opinion-levy-page-first-year/all/1, accessed May 24, 2012.
4. "Lex: Google the One-trick Pony," *Financial Times*, April 17, 2009.
5. "Google's Bid to Be Everything to Everyone," *Business Week*, May 24, 2012. http://mobile.businessweek.com/magazine/googles-bid-to-be-everything-to-everyone-02162012.html, accessed May 24, 2012.
6. H. Blodget, "Apple's iPhone has staged a monster comeback, Android is now dead in the water," *Business Insider*, March 30, 2012, http://articles.businessinsider.com/2012-03-30/tech/31258390_1_tablet-market-smartphone-market-iphone, accessed September 27, 2012.
7. Google Inc. SEC form 424B3, filed November 23, 2004.
8. At the March 2008 Federal Communications Commission's auctioning of licenses to "C-block" spectrum, Google was one of the bidders. Google was delighted to lose out to winning bids from AT&T and Verizon that together amounted to over $18 billion because the FCC had decreed that the new spectrum owners would be required to open their networks to third-party providers. Hence, Google would be free to offer its wireless service without the need to invest in infrastructure. See: "An Auction that Google was Content to Lose," *New York Times*, April 4, 2008, www.nytimes.com/2008/04/04/technology/04auction.html?_r51&oref5slogin, accessed October 23, 2009.
9. "Analysis: Google's Android Mobile Strategy Explained," *PC Advisor*, November 6, 2007, http://www.pcadvisor.co.uk/news/index.cfm?newsid511248, accessed July 21, 2009.
10. "Wireless Auction: Google Likely Out, and Happy," *Forbes*, February 6, 2008.
11. "Inside Chrome: The Secret Project to Crush IE and Remake the Web," *Wired*, October 16, 2008.
12. "Why Google Wants Motorola," *MIT Technology Review*, August 15, 2011, http://www.technologyreview.com/printer_friendly_article.aspx?id=38320, accessed September 27, 2012.
13. "Why Google Wants Motorola," *MIT Technology Review*, August 15, 2011, http://www.technologyreview.com/printer_friendly_article.aspx?id=38320, accessed September 27, 2012.
14. J. Carney, "Why Facebook is a Threat to Google's Earnings," April 12, 2012, http://www.cnbc.com/id/47030496/Why_Facebook_Is_a_Threat_to_Google_s_Earnings, accessed May 26, 2012.
15. A. Chansanchai, "Future Facebook Searches a Threat to Google?" http://www.technolog.msnbc.msn.com/technology/technolog/future-facebook-searches-threat-google-124436, accessed May 26, 2012.
16. G. Hamel, *The Future of Management* (Harvard Business School Press, Boston, 2007).
17. G. Hamel, *The Future of Management* (Harvard Business School Press, Boston, 2007).
18. G. Hamel, *The Future of Management* (Harvard Business School Press, Boston, 2007).
19. G. Hamel, *The Future of Management* (Harvard Business School Press, Boston, 2007).
20. Letter from the Founders, "An Owner's Manual," for Google's Shareholders, http://investor.google.com/ipo_letter.html, accessed 30 March, 2008. Reproduced with permission from Google Inc.
21. "Brandz Top 100 Ranking," *Financial Times*, May 9, 2012.
22. Google Inc., 10-K report to the SEC for 2011, p. 16. Reproduced with permission from Google Inc.
23. Google Inc., 10-K report to the SEC for 2011, pp. 11–12.

A video clip relating to this case is available in your interactive e-book at **www.wileyopenpage.com**