Google, Inc.: Searching for New Avenues for Growth

This case was written by Tangirala Vijay Kumar, under the direction of Debapratim Purkayastha, IBS Center for Management Research. It was compiled from published sources, and is intended to be used as a basis for class discussion rather than to illustrate either effective or ineffective handling of a management situation.
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"...Google is no longer in the business of sending users to the best sources of information on the Web. It now hopes to become a destination site itself for one vertical market after another, including news, shopping, travel, and now, local business reviews..." 

- Jeremy Stoppelman, CEO, Yelp, in September 2011.

In August 2011, Google, Inc. (Google), the undisputed leader in online search, took many by surprise when it announced that it was taking over Motorola Mobility Holdings Inc., the mobile device manufacturer. The surprise was understandable, given the fact that Google, which had previously focused on web services and software, was getting into a brick-and-mortar business, where the margins were wafer thin, and which required skills that it did not possess. In fact, the only way that Google and Motorola were related was that both operated in the technology sphere. So could substantial synergies be derived from the deal, was the question on people’s minds. Also, with Google morphing into a complete mobile device manufacturer, other smart device makers that had previously worked with it to make the Android operating software a roaring success, would in all probability, take a relook at their alliance with it. Analysts wondered whether Google, which had previously achieved phenomenal growth without going anywhere near hardware, was actually making a mistake.

BACKGROUND NOTE

With the growth of the Internet, there was a felt need among users for a search mechanism to get the information they sought from websites. One of the pioneers of search services was Yahoo! Inc., which used human editors to sort websites. As Internet usage exploded, this human-powered search proved inadequate. AltaVista, a search engine, deployed computer programs called spiders or crawlers that checked various websites and listed the relevant ones. The relevance of the web pages and their ranking was based on the frequency of keyword occurrence. But this process, in many cases, threw up irrelevant results. For instance, in a search for Oracle, the pages of vendors of Oracle products might rank above Oracle Corporation’s website as the vendor pages might feature many Oracle products. This problem was addressed by Larry Page (Page) and Sergey Brin (Brin), two students of Stanford University. In 1998, Page and Brin came out with a search engine named Google, the result of a project they had undertaken at the university. Key to this search engine was the algorithm PageRank which gave a serialized ranking to each constituent

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1 Yelp is a portal focused on providing user reviews of local businesses and services.
2 Motorola Mobility Holdings Inc was one of the two companies into which the telecommunications company Motorola Inc. was split in January 2011. Besides mobile phones, it was a major player in the cable set-top boxes business. For the year ended December 31, 2010, it had net revenues of US$11.46 billion and US$86 million.
3 Yahoo! Inc. is an Internet company operating in the areas of search, portals, and other web services. For the year ended December 31, 2010, it had revenues of US$6.32 billion, net income of US$1.23 billion, and cash and cash equivalents of US$1.53 billion.
of any hyperlinked batch of notes (as was the World Wide Web), with the objective of assessing its comparative significance within the batch. In the case of the World Wide Web, PageRank ranked web pages according to their importance, which was a derivative of the number of websites that were linked to it. They launched their paid search ads under the name AdWords in October 2000.

Around the same time, Overture, a search engine, came up with the concept of making money out of generating search results. Text-based advertisements, referred to as paid listings, were displayed with the organic search results. Advertisers parked ads with Overture and Overture answered search queries with a menu of ads sequenced according to the advertisers’ bids for the key words. The advertiser had to pay the agreed amount every time a user clicked on its listing. This practice came to be known as pay-per-click. Overture was the advertising sales partner of some of the then major websites. In turn, it shared a part of this revenue with its partners. In February 2002, Google reintroduced AdWords, equipped with the click-through-rate (CTR) model of paid listings which involved a modification of Overture’s pay-per-click auction model. Google calculated the CTR for an ad by dividing the number of clicks the ad had secured by the number of times the ad was shown on its search results. This was a more robust model because CTR resulted in more relevant ads being featured at the top of paid listings, resulting in more clicks for these ads, and culminating in increased revenue for Google. Google was increasingly making Overture’s dominance a thing of the past. By 2002, Google had cornered a 29.2 percent share of the US web search market, with 36 million visitors.

In March 2003, Google came out with a new paid search advertising service called AdSense, a technology that provided for ads to be displayed on a webpage depending upon its content. Google had crawlers that could visit every webpage and ascertain the subject matter on display. There was no dearth of advertisers willing to pay and put up their ads on web pages with related content. Google’s share of the online search market in the US increased to 35% in 2004, to 43.7% in 2006, and further to 63.1% in 2008.

Google’s promoters were hesitant to go in for an Initial Public Offering (IPO) as they were apprehensive that the public scrutiny and financial regulations would make the company less agile. But due to the demands of Venture Capitalists who wanted to cash out, Google filed for an IPO in April 2004. In the IPO prospectus, Google’s founders attached a letter subtly warning potential subscribers that Google was not a conventional company and did not aim to be one. The dual class equity structure proposed by Google’s founders proved controversial. Google’s IPO comprised only the issue of Class A shares, each of which was entitled to a single vote. Google’s founders, venture capitalists, and other insiders held Class B shares which were entitled to 10 votes per share. Critics lambasted this share structure as they felt that it gave the founders significant management control and could lead to potential management abuse. But Page and Brin defended the structure on the grounds that it would help them fulfill their long-term vision for the company without getting bogged down by short-term financial demands.

Google was equally in the limelight for its statement of philosophy which, the founders claimed, it adhered to all the time (Refer to Exhibit I for the full statement of Google’s philosophy). One of its tenets that drew considerable attention over the years was about Google striving for the best without doing evil – Google’s founders claimed that they never tinkered with the search rankings to serve their own interests.

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IV Organic search results are the listings that show up on the search result pages due to their pertinence vis-à-vis the search words.

V AOL Inc. is an Internet company focused on providing online content and display advertising services. For the year ended December 31, 2010, it had revenues of US$2.42 billion, net loss of US$0.78 billion and cash and cash equivalents of US$2.96 billion.
Over the years, Google had fanned out into hosting services like video and mapping, enterprise services, e-mail and chat, social networking space, payment gateway services, mobile operating software, and wireless device sales. One of the results of these endeavors was the impressive financial muscle that Google had built up. For the year ended December 31, 2010, Google had generated revenues of US$29.3 billion and a net income of US$8.5 billion. It also had cash and cash equivalents of US$13.63 billion (Refer to Exhibit II for Google’s financial performance over the years).

ORGANIZATIONAL DNA

INVESTMENT IN HARDWARE TECHNOLOGY

A distinct facet of Google’s overall strategy was its heavy investment in hardware technology that would enable its search engine process queries faster. Google felt that the faster the results showed up, the greater would be the users’ tendency to stick to its search engine. This in turn, would enable Google to push more of its paid listings. It was estimated that in 2010, Google had a total of 900,000 servers.

NURTURING INNOVATION

During the US recession in 2008, Google’s share price plummeted 35% between early 2008 and April 17, 2008 – when Google was to declare its first quarter results. Google’s business was expected to contract, in sync with the economy. But Google came up with strong numbers, resulting in its share price rocketing up 20% on April 18. This was attributed to Google’s endeavor to encourage innovation in the company, resulting in its coming out with disruptive technologies from time to time.

Google’s employees had to spend 20% of their time on new ventures that interested them and where they could explore new horizons. Some of Google’s bellwether products evolved from this initiative. Google fostered entrepreneurship throughout the company by constituting small teams and allowing them to function as startups. The bestowing of decision-making authority to small teams resulted in bottom-up and not top-down innovations, which helped avoid decision-making slacks. With Google’s employees working on hundreds of projects, the 70-20-10 system was evolved. Each employee had to devote 70 percent of his/her time to Google’s bread-and-butter businesses like search, 20 percent to new ventures like mobile search, and 10 percent to new ideas. Google knew that an important ingredient in making innovation all-encompassing was to instill a sense of fearlessness among the employees — fearlessness to come up with untouched and high-reaching ideas. One of Google’s product management directors said, “If you’re not failing enough, you’re not trying hard enough, The stigma (for failure) is less because we staff projects leanly and encourage them to just move, move, move. If it doesn’t work, move on.”

LINES OF BUSINESS

SEARCH

Google kept its focus on coming out with new search tools that significantly improved the search process. In early 2004, Google introduced personalized web search that let browsers filter search results according to their interests. A user could create a repository of his/her interests and use a “glider” slab that cropped up above the search results to have the results tuned to his/her pursuits.

In September 2002, Google launched Google News. Google News collected headlines from 4500 online news publishers globally, clustered similar topics, and gave links to articles on these content providers. Google News used a crawler that crept into various news sites, ferreted out ‘story clusters’, graded the sources, estimated whether the story was big or small, deciphered geographic attributes, and compiled the pages for different geographic releases. In 2009, Google introduced its paid ads in Google News. In some cases, Google shared its ad revenue with the news
publishers. Some online news publishers alleged that Google used their content for Google News without their permission. Google retorted that the publishers had the option to not be included in the search or to restrict access.

Google also focused on penetrating the online local search advertising business as a fifth of the searches on Google were for local information. In March 2004, Google launched its local search service Google Local, wherein a user, by feeding a keyword and the address or the just the city in the Google search site or a distinct website Local.google.com, could locate maps, the appropriate local websites, and lists of the local enterprises offering the products or services, with their addresses, contact numbers, and driving directions. Google Local also benefitted advertisers by helping them to pitch ads to customers in their vicinity. In February 2005, the Google Local tab was included on the default Google search page for users in the US and Canada.

In October 2006, Google launched testing software called Website Optimizer (WI) for its advertisers. WI, which was available for free, helped advertisers to convert clicks into actual sales. A popular WI was Google Analytics which allowed advertisers to identify keywords and design patterns to attract users. These innovations created a robust revenue stream for Google. In 2006, Google cornered 58.7% of the amount spent on paid listings in the US compared to Yahoo!’s 15%.

In April 2007, Google acquired the technology to put up online display or banner advertisements by buying out DoubleClick, a dominant player in this segment. This deal also gave Google access to DoubleClick’s relationships with important websites and advertisers with deep pockets.

Google began to increasingly consider that its prospects were intertwined with the fortunes of the wireless segment. In November 2009, Google purchased AdMob, a prominent wireless ad platform player. AdMob was a pioneer in the business of placing ads on mobiles. Google was expected to corner a sizeable chunk of the wireless ad business by blending its search ad technology with AdMob’s display-ad-segment mastery. Innovations were introduced in AdMob like the click-to-call function whereby users could click a phone number provided in the ad to get in touch with the concerned company immediately on the phone. AdMob catapulted Google to the top position in the US wireless ad segment, capturing a share of 59% by 2010. Globally, the number of ad clicks on AdMob had increased to 2.7 billion per day by April 2011.

On June 30, 2010, Google acquired ITA Software (ITA), vendor of flight travel information software, for US$700 million. ITA’s QPX Technology allowed one to streamline information including plane timings, flight availability, and fares. With this, Google was expected to compete better with flight data providers like Microsoft’s Bing Travel and Kayak.com for a piece of the US Internet travel business pie, valued at US$80 billion, of which US$44.8 billion was accounted for by air ticket sales. In September 2011, Google introduced a Flight Search feature in the US. This allowed a user to click on his/her departure location on a map and see on the map itself air fares to different destinations. Experts felt that Flight Search made AdWords more effective. When a user clicked to purchase a ticket, airline ads were displayed along with search results, giving a direct link to their e-ticket counters.

According to a March 2011 report of the financial services firm Macquarie Capital (USA), Google had cornered 98% of the US wireless search revenues. More than 75% of the total search advertising expenditure in the US had gone to Google. Google’s slice of the total web advertising revenue pie in the US was 41%. As of October 2011, Google had a share of 65.6% of the US online search market (Refer to Exhibit III for the breakup of the US search share in October 2011). Globally, Google had a more dominant status, accounting for a share of 82.4% and 91.1% of desktop searches and mobile searches respectively (Refer to Exhibit IV and Exhibit V for breakups of worldwide desktop search shares and mobile/tablet search shares in October 2011 respectively).
Google’s ad services, on occasion, proved controversial. Advertisers complained that their paid listings sometimes appeared with unconnected searches, resulting in reduced conversion of clicks into sales. In January 2011, some US advertisers complained that session-based clicks resulted in considerable wastage of advertising money. In a session-based click, an ad appeared frequently during a query session even when the browser moved to other searches. This was estimated to result in an advertiser frittering away 12% to 14% of its advertising finances. Users also expressed concern about Google’s targeted advertising. Google and other search engines sold users’ records based on their browsing patterns to advertisers for ad targeting. This, it was felt, violated users’ privacy. It was also alleged that the search service providers also included information drawn from external sources to sculpt user profiles. Google suffered the biggest dent to its reputation in August 2011 when it paid the US Government US$500 million for infringing on the country’s laws by allowing a Canadian pharmacy to sell medicines illicitly to US citizens through its paid listings. Apart from this being a financial setback, Google’s reputation also took a beating with questions being raised on whether the top management of Google had knowingly turned a blind eye to this potential contravention of law.

HOSTING SERVICES

In 2004, Google launched the Google Books project, wherein it collaborated with universities globally to scan the entire stocks of their library books, and create an online data mine of these digital copies for text search. By March 2011, 12 million books had been scanned. Google deployed its paid ads adjacent to the search results depending upon the keywords. In 2005, the Authors Guild in USA and the Association of American Publishers sued Google alleging that it was profiting from the illicit sale of copyrighted books. In a settlement, Google agreed to pay US$125 million to these bodies and continue to upload digital versions of books whose copyrights had expired and books of consenting publishers. It would also digitize the copyrighted books wherein the copyright holders neither accepted nor rejected the settlement because they could not be contacted (orphan books). The US federal court rejected this settlement as it felt that Google might have a monopoly over orphan books and charge exorbitant prices.

In February 2005, Google introduced a mapping tool called Google Maps, wherein a user could click on a specific location on a map and drag it to see an enlarged shot of the location spring up. Once a user selected the map of a particular location, he/she could feed in a keyword and all the places in that area offering the product or service would pop up. Google Maps was helpful in locating local enterprises and obtaining driving directions to them. In October 2005, Google merged Google Local and Google Maps. Under the new service one could type out the name of the product or service one was looking for in a locality, and the location map would appear along with location pop-ups of all concerned enterprises. If the user clicked on a particular enterprise, its details like address and contact number would be visible.

In June 2005, Google launched Google Earth, a tool that provided images in 3D format, blending visuals captured by satellites, aerial pictures, an interface akin to the one used for video games, Google Maps; and Google’s search tool which enabled a user to see any place on Earth. One could zoom in to a location and zoom out and hop to another turf on the globe. Google Earth helped in archeological discoveries, humanitarian assistance in civil war or natural calamity wrecked regions, research on oceans, tracking a space shuttle post-launch, climate change studies, illicit mining detection, epidemic-tracking, etc. It was felt that Google Earth, besides being commercially useful to Google, was helping it earn goodwill.

In October 2006, Google bought YouTube for US$1.65 billion. YouTube was the major player in the web video market, with a market share of 60%, where users could upload, see, and share videos. It was an avenue through which Google could display video ads with videos. By March 2011, YouTube was receiving 2 billion visits every day. In August 2007, Google introduced a new format of video ads on YouTube called overlay ads. Overlay ads were contextual video ads that

In October 2011, Google launched its own search engine, known as Google+.
appeared at the bottom of the screen. Approximately 15 seconds into a user watching a video clip, the overlay ad appeared, occupying 20% of the screen space. The ad then ran for 10 seconds. It was in a see-through form, so the user could keep watching the video. If the user clicked it, the ad ran in full screen mode with the video on a standstill. However, if not clicked, the overlay ad disappeared. YouTube’s gross ad revenue was expected to be US$1.1 billion in 2011, with Google’s share, after paying the copyright owners, being US$700 million.\textsuperscript{60}

In February 2008, Google launched Google Sites, a tool that allowed users to incorporate and show a range of information including videos, presentations, calendars, text, and attachments to share and fine-tune with a small group, an organization, or the whole world.\textsuperscript{61} Google Sites proved popular with small businessmen, educationists, etc., who were averse to technical complexities. In 2009, Google allowed Google Sites users having AdSense accounts to monetize their websites by displaying ads.

In September 2011, Google acquired Zagat, a prominent player in the business of eat-out joints’ reviews. Zagat published small books comprising opinions and ratings. In February 2011, Zagat had started offering its services online. Google could have a major shot at content play by combining Zagat’s rich data mine about eat-outs and hotels, with Google Maps.\textsuperscript{62,63} This also signaled Google’s intentions to emulate Microsoft and Yahoo’s strategy to create part of the content dished out in its search results.

**ENTERPRISE SEGMENT**

Google launched a major assault on Microsoft in October 2006 when it introduced Google Docs, akin to Microsoft Office. Google Docs was an online dossier of word processor, spreadsheet, and presentation tool. A user’s document was saved to his/ her Google User Account in Google’s servers.\textsuperscript{64} Though Google Docs lacked Microsoft Office’s sophistication, it bettered the latter by allowing users, 50 at a time, to share documents and to work on them simultaneously online.\textsuperscript{65} Google Docs offered other useful features missing in Microsoft Office. One, any change made to a file in Google Docs was saved automatically. Second, Microsoft Office files could be saved to Google Docs where they were automatically reformatted.\textsuperscript{66} Third, unlike Microsoft Office, one could access Google Docs on any operating system with a reasonably good web browser.\textsuperscript{67} In February 2007, Google introduced Google Apps Premium, a package of Google Docs with superior features, priced at US$50 per user per year.\textsuperscript{68} This was seen as an initiative by Google to not be solely dependent on paid ad revenue.

Google’s web centric approach was reinforced with its massive investment in Cloud computing technology. Cloud computing enabled one to accomplish one’s work online without having to set up hardware or software and without storing data at one’s end. Cloud computing benefitted businesses in terms of lower working costs, larger data repository, portability, and superior information protection. It provided for data backup and retrieval of data from the web in the event of damage to one’s hardware.\textsuperscript{69} Under Google’s Cloud computing, any of its applications could be accessed through any device having an Internet browser and online connectivity. Experts felt that Google’s preference for Cloud computing stemmed from its strategy of providing free access to the content or information created by others, around which it made money from search and advertising services.

**COMMUNICATIONS SPHERE**

Google took the Internet domination battle to the doorsteps of Yahoo! and Microsoft, which had improved their search engine services, by launching its email service Gmail in April 2004.\textsuperscript{70} Google equipped Gmail accounts with a 1 GB storage ceiling. In contrast, Microsoft’s Hotmail and Yahoo! offered only 2 MB and 4 MB storage respectively.\textsuperscript{71} Google generated revenue from Gmail by attaching ads with e-mails based on their subject matter. This mail scanning was a point of contention with privacy groups who alleged that it violated users’ privacy. Concern was also
expressed about Google’s commercial use of this data. Google said this was an automated system with very little human intervention and that Gmail subscribers had the option to either enable or disable this application. Google also introduced useful add-ons like Gmail integrated text, video, and SMS chat. In July 2011, Google launched in the US, on a limited basis, localized ads in Gmail which users could also forward to their friends. 

Google Wave, launched in September 2009, showed that Google had set its ambitions high even in the online communications realm. Google Wave had features of email, instant messaging, Internet chat, social networking, and project management, and could be used for real-time communication and sharing. It allowed users to see in real time the characters that others were typing, could be implanted on any website, was open, and allowed developers to sculpt their own applications, allowed users to sift through prior communication, rectified spelling errors, and did not require documents to be attached, allowing for them to be dragged and dropped instead. However, Google Wave did not gain traction as it was felt that it tried to offer too many things and users were not yet ready for this kind of a tool. In August 2010, Google announced that it was pulling the plug on Google Wave.

SOCIAL NETWORKING

In 2004, Google entered the social networking space with the launch of Orkut. Orkut was expected to generate valuable user data for Google by tracking the social interactions of the users, and, be a money spinner through ads hosted on personal pages. Though Orkut did not prove popular in the US, it was an undisputed leader in Brazil, the world’s eighth largest Internet market. Google also deployed its paid ad listings with search results on Orkut. In 2007, Google stopped its paid ad service on Orkut due to protests in Brazil that it earned revenue from ads displayed with query results for child pornography.

On February 9, 2010, Google launched Google Buzz, viewed as an attempt to take on entrenched social networking players like Facebook. Google Buzz formed a part of Gmail and allowed users to share personal updates, Picasa pictures, and YouTube videos. However, soon after Buzz’s introduction, users raised a furor over its features that they felt violated their privacy. Google Buzz automatically created for the users, social groups comprising individuals to whom they mailed the most. Users did not necessarily feel the need to have the people with whom they exchanged mails, official in many cases, to be a part of their social network. Further, each of the users’ social networks was visible to other Buzz subscribers. Buzz was automatically connected to Google Reader, resulting in a user’s network being privy to what he/she read. Following these criticisms, Google stopped automatic creation of social groupings. Users could decide whether they wanted their friends’ list to be visible to others. The default connection of Buzz with Picasa and Google Reader was also stopped. Privacy violation suits were filed against Google which reinforced the thinking that it did not care for user privacy. In a November 2010 settlement, Google agreed to pay US$8.5 million. In March 2011, the Federal Trade Commission (FTC) concluded that Google’s systems to enable users to opt out or reject enrollment into Buzz and to protect personal data were inadequate. It charged Google with infringing privacy by using Gmail users’ personal information for Buzz without their approval, and deceptively enrolling them. Buzz did not prove popular and, in October 2011, Google shut it down.

In June 2011, Google launched, on a limited basis, a social networking website called Google+, its most formidable salvo till date against Facebook. The key features of Google+ were Circles, Hangouts, Sparks, and Mobile. Circles enabled users to form separate sets of contacts for relatives, friends, office colleagues, etc. The user could determine the information that each of these clusters could access. Sparks allowed users to access online news, enabling them to sign up for different areas of interest, make customized sections, and exchange them with friends. The Hangouts feature allowed a user to locate groups of his/her friends chatting online. If the person wanted to join the group, he/she could have a video chat with it. Mobile allowed users to transfer photos
taken with their handsets to others and also to send text messages. Through Google+, Google intended to study the behavior patterns of each its users, to improve its products like ads, search, YouTube, and Maps. On September 21, 2011, Google+ was made accessible to the general public. On October 13, 2011, Google announced that the number of subscribers to Google+ exceeded 40 million.

UTILITIES

In June 2006, Google launched Google Checkout, a payment gateway for online buyers where they had to record their credit card details. Besides faster payment, shoppers did not have to share their credit card details with retailers. At the time of launch, Google charged retailers 20 cents plus 2% of sale value. If a company spent US$1 on AdWords, it got a fee waiver on every US$10 of sales. Besides the AdWords’s revenue, this access to the shoppers’ buying patterns helped Google fine-tune its ad targeting.

In September 2008, Google launched its Internet browser Google Chrome. As of August 2011, Chrome had cornered a 15.51% share of the desktop browser market (Refer to Exhibit VI for the breakup of the worldwide desktop browser market share in October 2011). Google Chrome’s rapid rise was attributed to improved versions of it being launched within short time spans, and its uncomplicated design. Other superior features were its speed, security, and ability to function on any desktop interface.

OPERATING SOFTWARE

Google had bought the Andy Rubin-led Android Inc., a 22-month-old company, in July 2005 for an estimated US$50 million. Android was focused on making software for mobile devices. In November 2007, Google launched the mobile operating platform Android, which was developed by its Android team. Google developed Android with a consortium of technology giants like T-Mobile, HTC, Motorola, Qualcomm, etc. Android, a complete software assemblage for mobile devices, comprised an operating system, middleware, user interface, and related tools. For mobile phone makers, the advantage was that Android was available for free and they were not be required to pay license fees to Google. This was expected to result in reduced prices for their handsets, driving their sales. According to Google, Android was made available for free as that it would broadband web usage by making more people access the Internet on their mobile devices. This would result in increased usage of Google’s search and applications like Gmail, creating scope for users to click on Google’s paid ads and boost its ad revenue. Also since users always carried their mobile devices with them, it would help Google serve targeted ads better.

In September 2008, the first Android handset was launched. Within one and a half years of this, the number of Android phones sold ballooned to 60,000 per day. This was partly due to Google’s strategy of sharing its mobile search’s ad revenue with carriers and handset manufacturers that deployed Android. Device manufacturers specifically preferred Android in price-sensitive markets. As of July 2011, Android powered 130 million smart devices globally, with the count going up by 0.55 million every day. Android became the largest selling smartphone operating software across the world. By June 2011, Android had a 43.4% share of the global smartphone operating market (Refer to Exhibit VII and Exhibit VIII, respectively, for the breakups of the worldwide mobile browser market share in October 2011 and the worldwide smartphone operating software share in the second quarter of 2011). As of August 2011, Android was deployed by 39 device makers and 231 carriers across 123 countries.

vi HTC was the sixth largest cellphone manufacturer globally, with sales of 11 million units in the second quarter of 2011.
MOBILE PLAY

In January 2010, Google made its foray into the smartphone device business with the launch of the Nexus One smartphone. Nexus One, manufactured by HTC, was designed and sold by Google.\textsuperscript{109} Nexus One was to be sold only online by Google, a strategy which it claimed would significantly alter the way phones were hawked.\textsuperscript{110} However, Nexus One just sold 135,000 units in the first 74 days of its launch.\textsuperscript{111} This weak demand was attributed to the fact that customers did not have the option to physically check out the product before they bought it. Though Google subsequently stopped selling Nexus One online and instead opted for physical stores, its sales could not be salvaged. In July 2010, Google announced that it was pulling the plug on Nexus One.\textsuperscript{112}

Though Android enjoyed the number one position in the smartphone operating platform market, it had a few chinks in its armor. It did not have many patents to its credit, a weakness which was well exploited by Google’s rivals such as Apple, Microsoft, and Oracle. These competitors filed multiple law suits against Android device manufacturers, alleging patent violation. In some of these cases, Android device manufacturers had to agree to pay royalties to the plaintiffs. Increasingly, mobile device manufacturers found it expensive to deploy Android due to potential royalty dole outs.

FORMIDABLE COMPETITORS

FACEBOOK

Facebook was a leader in the online social networking space globally. Since its inception, Facebook had concentrated on this segment, and was expected to have an edge over Google in attracting Internet traffic.\textsuperscript{113} It was estimated that users in the US devoted 9.9\% of their web browsing time in August 2010 to Facebook when compared to 9.6\% for Google. As users spent more time on Facebook, advertisers preferred it.\textsuperscript{114} In 2010, Facebook beat Google to emerge as the most visited website in US.\textsuperscript{115} In the first quarter of 2011, Facebook recorded 346 billion display ad clicks which represented 31.2\% of all display ad clicks in the US compared to Google’s 2.5\%.\textsuperscript{116} This was all the more significant as in 2010 the growth of display advertising outpaced that of search by 23\%.\textsuperscript{117} Facebook, being a social community, had the stickiness. The more relationships one built on the network, the more difficult it was for one to stop using the service. Experts also felt that since users stayed in touch with one another through Facebook, they were using less of e-mail services like Gmail.\textsuperscript{118} Google could not match up to Facebook in terms of the depth of information it had about each of its users as it was just a path whereas Facebook was a destination. As Facebook was privy to the social preferences of its users based on the friends they interacted with and who influenced them (whose data it again had) and, amongst other things, the music they listened to, it was the most valuable asset for advertisers for targeted marketing.\textsuperscript{119} Experts felt that Facebook’s invincibility in social networking would not be challenged as Google+, despite being a good product, was not drastically superior to Facebook to convince the latter’s 750 million users to shift to it.\textsuperscript{120}

APPLE

Apple was a leading player in smartphones. Some observers felt that it had a status that the other players, including Google, could only aspire to. In the low-margin hardware industry, Apple consistently stood apart with operating profits of around 32\%, due to its brand equity which enabled it to charge a premium.\textsuperscript{121} Apple had a stellar line of products like the iPad, the iPhone, and its mobile operating system the iOS. As of June 2011, the iPhone and the iPad recorded sales of US$13.3 billion and US$6 billion respectively.\textsuperscript{122} Apple had deep pockets with a market capitalization of roughly US$347 billion as of August 2011.\textsuperscript{123} As of July 2011, the total number of downloads from the Apple’s App Store exceeded 15 billion, which was 200\% more than the Google apps downloads.\textsuperscript{124}
MICROSOFT

Globally, Microsoft was the undisputed leader in office productivity software, despite costless or low-priced substitutes like Open Office and Google Docs. It was estimated that 71% of all IT arms of North American and European companies used Microsoft Office, as it offered features which were absent in its competitor products and which led to enhanced employee productivity. In May 2009, Microsoft had taken the battle directly to Google’s doorsteps by launching its search engine Bing. Bing was especially popular for its search facilities in the fields of travel, shopping, and entertainment. It was reportedly steadily eating into Google’s search market share. As of August 2011, Bing had a share of 14.7% of the US search market. In February 2011, Microsoft and Nokia entered into a deal whereby Microsoft’s Windows Phone 7 would be the main operating platform for Nokia’s smartphones. The combination of the robust build quality of Nokia phones and Windows Phone 7’s popular applications was expected to be a major threat to Android. For the year ended June 30, 2011, Microsoft had revenue of US$69.94 billion, net income of US$23.15 billion, and cash and cash equivalents of US$9.61 billion.

ANTITRUST SCRUTINY

Google’s dominance over the online search segment was, over time, proving to be a double-edged sword. Over the years, there were growing protests among Google’s competitors and government authorities in the US as well as in Europe that Google was abusing its search leadership position. Critics contended that Google’s invincibility in the search business placed it in a position to determine what browsers could locate on the web. Since Google had fanned out into new service domains like mapping, travel, and shopping, it was felt that Google was favoring its own sites in ranking the search results. This was not only detrimental to the interests of small and innovative firms but also to consumers who were served suboptimal results. The European Union was investigating whether Google tinkered with its search algorithm to negatively impact the ranking of its competitors in the search results. The US Antitrust authorities were also investigating whether Google was distorting its search outcomes to benefit its advertisers, and, its own products or services. Google’s defense had always been that users’ access to its competitors’ services was only a click away. If consumers were not happy with Google’s search results they could shift to another search engine. Google also said that right from the beginning it had maintained a single minded focus on serving its users the best and not necessarily other portals. Analysts felt that the real impact of these investigations on Google was in terms of the time its top management had to spend on defending itself instead of concentrating on its businesses. The US Government authorities were also taking considerable time in clearing any of the deals in which Google was involved. It had taken the US Government authorities 6 months and 15 months, respectively, to clear the AdMob and ITA acquisitions. There were also some missed opportunities for Google as some of the companies that Google intended to take over shied away from the deals, fearing antitrust hounding. In 2010 Groupon did not agree to be acquired by Google for a price of US$6 billion, partly due to apprehensions that Google’s involvement in the deal might attract antitrust scrutiny, delaying the takeover by at least a year.

BITING OFF MORE THAN IT CAN CHEW?

On August 15, 2011, Google revealed that it had acquired the mobile device manufacturer Motorola Mobility Holdings Inc. (MM) for a price of US$12.5 billion. Through this acquisition, Google now owned Motorola’s 17,000 patents and 7,500 yet-to-be-certified patents, which it could

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vii Nokia is the largest selling mobile phone manufacturer in the world. For the year ended December 31, 2010, it had net sales of €42.45 billion, net profit of €1.34 billion and cash reserves of €1.95 billion.

viii Groupon is a website that offers a best discount deal everyday. This ensures that customers get the lowest prices and also benefits businesses by assuring them a critical mass of customers.
use to file counter suits against Android’s detractors. Also through this deal, Google was expected to come up with better Android devices by integrating the hardware and software on its own, as Apple had done.

Some analysts questioned whether Google had got itself into a mess by acquiring MM. Running a hardware business required skill sets new to Google – skills such as operating factories, monitoring physical stocks, managing supply chains, achieving manufacturing efficiencies, liaising with distribution channels, and retail advertising/marketing. Many observers also expected MM’s acquisition to be the beginning of the dismantling of the formidable network that Google had put up for Android. Owning a hardware manufacturer now pitted Google directly against the other device manufacturers that used Android to drive their smartphone ambitions. These phone makers could hesitate to invest further in Android, fearing that MM would be given undue favors over them. They were expected to spread their risks by investing in competing operating systems like Microsoft Windows. It was reported that post Google’s acquisition of MM, Samsung’s top management had decided to strengthen its open operating software called Bada. Android was expected to receive a huge setback if Samsung shifted from it as Samsung sold the highest number of Android enabled devices. In September 2011, HTC, another major Android collaborator, launched two smartphones based on the Windows operating platform. It also announced that it intended to purchase a mobile operating platform.

Industry observers wondered whether the deal, which was portrayed by Google as its attempt to shield Android, would actually lead to the crumbling of Android by reducing the affinity between Google and the device manufacturers who had played a pivotal role in helping Android surge ahead of the other mobile operating systems and in helping the wireless online search market become a major revenue driver for Google. Could Google keep its Android flock together, manage a behemoth like MM effectively, and compete with battle-hardened players like Facebook, Apple, and Microsoft, all under the watchful eyes of the regulatory authorities?
Ten things we know to be true

“The perfect search engine,” says co-founder Larry Page, “would understand exactly what you mean and give back exactly what you want.” When Google began, you would have been pleasantly surprised to enter a search query and immediately find the right answer. Google became successful precisely because we were better and faster at finding the right answer than other search engines at the time.

But technology has come a long way since then, and the face of the web has changed. Recognizing that search is a problem that will never be solved, we continue to push the limits of existing technology to provide a fast, accurate, and easy-to-use service that anyone seeking information can access, whether they’re at a desk in Boston or on a phone in Bangkok. We’ve also taken the lessons we’ve learned from search to tackle even more challenges.

As we keep looking towards the future, these core principles guide our actions.

1. **Focus on the user and all else will follow.**
   Since the beginning, we’ve focused on providing the best user experience possible. Whether we’re designing a new Internet browser or a new tweak to the look of the homepage, we take great care to ensure that they will ultimately serve you, rather than our own internal goal or bottom line. Our homepage interface is clear and simple, and pages load instantly. Placement in search results is never sold to anyone, and advertising is not only clearly marked as such, it offers relevant content and is not distracting. And when we build new tools and applications, we believe they should work so well you don’t have to consider how they might have been designed differently.

2. **It’s best to do one thing really, really well.**
   We do search. With one of the world’s largest research groups focused exclusively on solving search problems, we know what we do well, and how we could do it better. Through continued iteration on difficult problems, we’ve been able to solve complex issues and provide continuous improvements to a service that already makes finding information a fast and seamless experience for millions of people. Our dedication to improving search helps us apply what we’ve learned to new products, like Gmail and Google Maps. Our hope is to bring the power of search to previously unexplored areas, and to help people access and use even more of the ever-expanding information in their lives.

3. **Fast is better than slow.**
   We know your time is valuable, so when you’re seeking an answer on the web you want it right away—and we aim to please. We may be the only people in the world who can say our goal is to have people leave our website as quickly as possible. By shaving excess bits and bytes from our pages and increasing the efficiency of our serving environment, we’ve broken our own speed records many times over, so that the average response time on a search result is a fraction of a second. We keep speed in mind with each new product we release, whether it’s a mobile application or Google Chrome, a browser designed to be fast enough for the modern web. And we continue to work on making it all go even faster.

4. **Democracy on the web works.**
   Google search works because it relies on the millions of individuals posting links on websites to help determine which other sites offer content of value. We assess the importance of every web page using more than 200 signals and a variety of techniques, including our patented PageRank™ algorithm, which analyzes which sites have been “voted” to be the best sources of information by other pages across the web. As the web gets bigger, this approach actually improves, as each new site is another point of information and another vote to be counted. In the same vein, we are active in open source software development, where innovation takes place through the collective effort of many programmers.

Contd...
5. **You don’t need to be at your desk to need an answer.**

   The world is increasingly mobile: people want access to information wherever they are, whenever they need it. We’re pioneering new technologies and offering new solutions for mobile services that help people all over the globe to do any number of tasks on their phone, from checking email and calendar events to watching videos, not to mention the several different ways to access Google search on a phone. In addition, we’re hoping to fuel greater innovation for mobile users everywhere with Android, a free, open source mobile platform. Android brings the openness that shaped the Internet to the mobile world. Not only does Android benefit consumers, who have more choice and innovative new mobile experiences, but it opens up revenue opportunities for carriers, manufacturers, and developers.

6. **You can make money without doing evil.**

   Google is a business. The revenue we generate is derived from offering search technology to companies and from the sale of advertising displayed on our site and on other sites across the web. Hundreds of thousands of advertisers worldwide use AdWords to promote their products; hundreds of thousands of publishers take advantage of our AdSense program to deliver ads relevant to their site content. To ensure that we’re ultimately serving all our users (whether they are advertisers or not), we have a set of guiding principles for our advertising programs and practices:
   - We don’t allow ads to be displayed on our results pages unless they are relevant where they are shown. And we firmly believe that ads can provide useful information if, and only if, they are relevant to what you wish to find—so it’s possible that certain searches won’t lead to any ads at all.
   - We believe that advertising can be effective without being flashy. We don’t accept pop-up advertising, which interferes with your ability to see the content you’ve requested. We’ve found that text ads that are relevant to the person reading them draw much higher clickthrough rates than ads appearing randomly. Any advertiser, whether small or large, can take advantage of this highly targeted medium.
   - Advertising on Google is always clearly identified as a “Sponsored Link,” so it does not compromise the integrity of our search results. We never manipulate rankings to put our partners higher in our search results and no one can buy better PageRank. Our users trust our objectivity and no short-term gain could ever justify breaching that trust.

7. **There’s always more information out there.**

   Once we’d indexed more of the HTML pages on the Internet than any other search service, our engineers turned their attention to information that was not as readily accessible. Sometimes it was just a matter of integrating new databases into search, such as adding a phone number and address lookup and a business directory. Other efforts required a bit more creativity, like adding the ability to search news archives, patents, academic journals, billions of images, and millions of books. And our researchers continue looking into ways to bring all the world’s information to people seeking answers.

8. **The need for information crosses all borders.**

   Our company was founded in California, but our mission is to facilitate access to information for the entire world, and in every language. To that end, we have offices in more than 60 countries, maintain more than 180 Internet domains, and serve more than half of our results to people living outside the United States. We offer Google’s search interface in more than 130 languages, offer people the ability to restrict results to content written in their own language, and aim to provide the rest of our applications and products in as many languages and accessible formats as possible. Using our translation tools, people can discover content written on the other side of the world in languages they don’t speak. With these tools and the help of volunteer translators, we have been able to greatly improve both the variety and quality of services we can offer in even the most far-flung corners of the globe.

   Contd...
9. **You can be serious without a suit.**
   
   Our founders built Google around the idea that work should be challenging, and the challenge should be fun. We believe that great, creative things are more likely to happen with the right company culture—and that doesn’t just mean lava lamps and rubber balls. There is an emphasis on team achievements and pride in individual accomplishments that contribute to our overall success. We put great stock in our employees—energetic, passionate people from diverse backgrounds with creative approaches to work, play, and life. Our atmosphere may be casual, but as new ideas emerge in a café line, at a team meeting or at the gym, they are traded, tested, and put into practice with dizzying speed—and they may be the launch pad for a new project destined for worldwide use.

10. **Great just isn’t good enough.**

    We see being great at something as a starting point, not an endpoint. We set ourselves goals we know we can’t reach yet, because we know that by stretching to meet them we can get further than we expected. Through innovation and iteration, we aim to take things that work well and improve upon them in unexpected ways. For example, when one of our engineers saw that search worked well for properly spelled words, he wondered about how it handled typos. That led him to create an intuitive and more helpful spell checker.

Even if you don’t know exactly what you’re looking for, finding an answer on the web is our problem, not yours. We try to anticipate needs not yet articulated by our global audience, and meet them with products and services that set new standards. When we launched Gmail, it had more storage space than any email service available. In retrospect offering that seems obvious—but that’s because now we have new standards for email storage. Those are the kinds of changes we seek to make, and we’re always looking for new places where we can make a difference. Ultimately, our constant dissatisfaction with the way things are becomes the driving force behind everything we do.

Source: www.google.co.in

### Exhibit II

**Google’s Financial Performance (2005-2010)**

<table>
<thead>
<tr>
<th>Category</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>6,139</td>
<td>10,605</td>
<td>16,594</td>
<td>21,796</td>
<td>23,651</td>
<td>29,321</td>
</tr>
<tr>
<td>Net Income</td>
<td>1,465</td>
<td>3,077</td>
<td>4,204</td>
<td>4,227</td>
<td>6,520</td>
<td>8,505</td>
</tr>
<tr>
<td>Cash &amp; Cash Equivalents</td>
<td>8,034</td>
<td>11,244</td>
<td>14,219</td>
<td>15,846</td>
<td>24,485</td>
<td>34,975</td>
</tr>
<tr>
<td>Total long-term liabilities</td>
<td>-119</td>
<td>129</td>
<td>611</td>
<td>1,227</td>
<td>1,746</td>
<td>1,614</td>
</tr>
<tr>
<td>Total stockholders’ equity</td>
<td>9,419</td>
<td>17,040</td>
<td>22,690</td>
<td>28,239</td>
<td>36,004</td>
<td>46,241</td>
</tr>
<tr>
<td>Net income per share</td>
<td>5.31</td>
<td>10.21</td>
<td>13.53</td>
<td>13.46</td>
<td>20.62</td>
<td>26.69</td>
</tr>
</tbody>
</table>

* million of US$, except net income per share

Source: www.google.com
Exhibit III

**US Search Share (in October 2011)**

- Google, 65.60%
- Yahoo!, 15.20%
- Bing, 14.80%
- AOL, 1.50%
- Ask, 2.90%

*Source: www.comscore.com*

Exhibit IV

**Worldwide Desktop Search Engine Share (in October 2011)**

- Google, 82.40%
- Yahoo!, 6.84%
- Bing, 4.26%
- Others, 2.54%
- Baidu, 3.96%

*Source: www.netmarketshare.com*

Exhibit V

**Worldwide Mobile/Tablet Search Engine Share (in October 2011)**

- Google, 91.10%
- Yahoo!, 7.00%
- Others, 1.90%

*Source: www.netmarketshare.com*
### Exhibit VI

**Worldwide Desktop Browser Market Share (in October 2011)**

- Internet Explorer, 52.83%
- Firefox, 22.51%
- Chrome, 17.62%
- Safari, 5.43%
- Others, 1.81%

*Source: [http://arstechnica.com](http://arstechnica.com)*

### Exhibit VII

**Worldwide Mobile Browser Market Share (in October 2011)**

- Safari Mobile, 62.17%
- Opera Mini, 18.65%
- Android browser, 13.12%
- Symbian, 2.55%
- Others, 3.51%

*Source: [http://arstechnica.com](http://arstechnica.com)*

### Exhibit VIII


- iOS, 18.10%
- Symbian, 22.10%
- Bada, 1.90%
- RIM, 11.70%
- Others, 2.80%
- Android, 43.40%

*Source: [www.eweek.com](http://www.eweek.com)*
Google, Inc.: Searching for New Avenues for Growth

End Notes:

4. www.search-visibility.com/
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