

Advertising and google assignment

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PREFACE The world has been Googled. We don't search for information, we "Google" it. Type a question in the Google search box, as do more than 70 percent of all searchers worldwide, and in about a half second answers appear. Want to find an episode of Charlie Rose you missed, or a funny video made by some guy of his three-year-old daughter's brilliant ninetysecond synopsis of Star Wars: Episode IV? Google's YouTube, with ninety million unique visitors in March 2009—two-thirds of all Web video traffic—has it. Want to place an online ad? Google's DoubleClick is the foremost digital advertising services company.

Google's advertising revenues—more than twenty billion dollars a year—account for 40 percent of all the advertising dollars spent online. In turn, Google pumps ad dollars into tens of thousands of Web sites, bringing both traffic and commerce to them. Want to read a newspaper or magazine story from anywhere in the world? Google News aggregates twenty-five thousand news sites daily. Looking for an out-of-print book or a scholarly journal? Google is seeking to make almost every book ever published available in <https://assignbuster.com/advertising-and-google-assignment/>

digitized form. Schools in impoverished nations that are without textbooks can now retrieve knowledge for free. The Internet,” said Google’s chief economist, Hal Varian, “ makes information available. Google makes information accessible. ” Google’s uncorporate slogan-“ Don’t be evil”- appeals to Americans who embrace underdogs like Apple that stand up to giants like Microsoft. Google’s is one of the world’s most trusted corporate brands. Among traditional media companies-from newspapers and magazines to book publishers, television, Hollywood studios, advertising agencies, telephone companies, and Microsoft-no company inspires more awe, or more fear. There are sound reasons for traditional media to fear Google.

Today, Google’s software initiatives encroach on every media industry, from telephone to television to advertising to newspapers to magazines to book publishers to Hollywood studios to digital companies like Microsoft, Amazon, Apple, or eBay. For companies built on owning and selling or distributing that information, Google can be perceived as the new “ Evil Empire. ” Google is run by engineers, and engineers are people who ask why: Why must we do things the way they’ve always been done? Why shouldn’t all the books ever published be digitized? Why shouldn’t we be able to read any newspaper or magazine online?

Why can’t we watch television for free on our computers? Why can’t we make copies of our music or DVDs and share them with friends? Why can’t advertising be targeted and sold without paying fat fees to the media middleman? Why can’t we make phone calls more cheaply? Google’s leaders are not cold businessmen; they are cold engineers. They are scientists,

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always seeking new answers. They seek a construct, a formula, an algorithm that both graphs and predicts behavior. They naively believe that most mysteries, including the mysteries of human behavior, are unlocked with data.

Of course, Wall Street's faith in such mathematical models for derivatives helped cripple the American economy. Naivete and passion make a potent mix; combine the two with power and you have an extraordinary force, one that can effect great change for good or for ill. Google fervently believes it has a mission. " Our goal is to change the world," Google's CEO, Eric Schmidt, told me. Making money, he continued, " is a technology to pay for it. " I came away from two and a half years of reporting on Google believing that its leaders genuinely want to make the world a better place.

But they are in business to make money. Making money is not a dirty goal; nor is it a philanthropic activity. Any company with Google's power needs to be scrutinized. I also came away impatient with companies that spend too much time whining about Google and too little time devising an offense. Most old media companies were inexcusably slow to wake to the digital disruption. In 2007, Eric Schmidt told me that one day Google could become a hundred-billion-dollar media company—more than twice the size of Time Warner, the Walt Disney Company, or News Corporation, the world's three largest media conglomerates.

That Google might achieve this goal in less than a generation, in a time when copyright and privacy practices are being upended, when newspapers are declaring bankruptcy and in-depth journalism is endangered, when the profit

margins of book publishers are squeezed along with their commitment to serious authors, when broadcast television networks dilute their programming with less expensive reality shows and unscripted fare, when cable news networks talk more than they listen, when the definitions of community and privacy are being redefined, and the way citizens read and process information is being altered, and when most traditional media models are being reconfigured by digital companies like Google—all this means that it's important to put Google under the microscope. Brilliant engineers are at the core of the success of a company like Google.

Drill down, as this book attempts to, and you'll see that engineering is a potent tool to deliver worthwhile efficiencies, and disruption as well. Google takes seriously its motto, " Don't be evil. " But because we're dealing with humans not algorithms, intent sometimes matters less than effect. A company that questions everything and believes in acting without asking for permission has succeeded like few companies before. Unlike most technologies that disrupted existing business—the printed book that replaced scrolls, the telephone that replaced the telegraph, the automobile that replaced the horse and buggy, the airplane that supplanted cruise ships, the computer that supplanted typewriters—Google search produces not a tangible product but something abstract: knowledge.

This makes Google both less and more vulnerable to challenge. Less because Google's prodigious Mount Everest of data is unrivaled. More because Google depends for its continued success on users and governments that trust it will not abuse this knowledge. Whether one applauds or fears this eleven-year-old company, there is no question that Google demands our attention. PART

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ONE Different Planets CHAPTER ONE Messing with the Magic W ith his suit and tie and closely cropped gray hair, Mel Karmazin stood out as he crossed the Google campus in Mountain View, California, passing people in baggy T-shirts holding their laptops before them like waiters' trays.

On this sunny June day in 2003, Google was nearly five years old, and Karmazin was among the first major executives from the old media to visit its headquarters. As the CEO of Viacom, he represented the world's then fourth-largest media company—the owner of the CBS network, of TV and radio stations, Paramount Studios, MTV and its sister cable networks, Simon & Schuster publishers, Blockbuster video, and an outdoor advertising concern, among other holdings. Short and pugnacious, Karmazin was by his own admission “ always paranoid” about competitors. Two of Viacom's biggest competitors, AOL and Time Warner, had merged to forge the world's largest media conglomerate, and Karmazin was on the prowl for new business partners. The son of a Queens cab driver,

Karmazin, then fifty-nine, had begun his career at age seventeen selling radio advertising. He was said to be so pushy that advertisers capitulated just so he would leave their offices. He became a master salesman who did not play golf or tennis or tolerate long books, and whose idea of fun was pitching advertisers and Wall Street. He was an old-fashioned, show-me-the-money guy, and he was skeptical of Silicon Valley companies that boasted of their traffic and page views, but were mum about their balance sheets. At the time of his visit, Google was a private company, and he had no way of knowing whether it was making or losing money, or even how many employees it had.

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The actual financial figures—the January before Karmazin’s visit Google’s private books revealed 2002 revenues of \$439. 5 million and a profit of \$99. 6 million—would be unimposing figures to a man accustomed to dealing in billions. Nevertheless, a trusted associate, an Allen & Company investment banker, Nancy B. Peretsman, had convinced Karmazin that Google was a wave maker. She joined him and Viacom’s then chief financial officer, Richard J. Bressler, on the trip. Karmazin’s destination that day was Building 21 at 2400 Bayshore Parkway, offices Google had acquired from the giant computer and software vendor Sun Microsystems. The two-story uilding shaded by trees was called the Googleplex, home to the company’s engineers and separate from the building housing Google’s finance and sales staff. Just outside the conference room on the second floor the visitors paused before a twenty-one-inch CRT monitor resting on a small table, which displayed a rotating three-dimensional globe flashing with bursts of colored light, each burst representing millions of Google searches being conducted all over the world. The screen was dark only in places like central Africa and Siberia, where the lack of electricity precluded searches. A second monitor showed samples of the search queries being conducted around the globe at that moment. “ You realized the power of it,” said Bressler. “ And at the same time, you walked into this ratty conference room. Waiting to greet them in the cramped Yellow Room was Google cofounder Larry Page, then thirty. With jet-black eyebrows, short black hair pushed down on his forehead, a permanent five-o’clock shadow, dark eyes that often remain fixed on the floor, and wearing a dark T-shirt and jeans, he seemed strange to Karmazin, as he does to many who meet him for the first time. He was stonily silent. Sitting next to Page was Google CEO Eric Schmidt, whose shirt

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and tie, frameless glasses, and relatively old age—he was then forty-eight—were more welcoming. “ Eric looked like me,” said Karmazin. Google’s cofounder, Sergey Brin, born the same year as Page, arrived late and out of breath in a T-shirt, gym shorts, and on Rollerblades.

Karmazin began the meeting with what he thought was a joke: “ Don’t worry, guys, I’m not here to buy you! ” Over the next several hours, the three computer scientists and the mogul sat in mismatched chairs on a tan and soiled shaggy carpet, discussing their respective businesses. Schmidt and Brin did most of the talking, and they spent as much time speaking of Google’s culture—engineers who always worked in teams and were given a sense of freedom, three free and healthy meals a day, free massages, hair-cuts, and medical attention—as about technology. As they adjourned for lunch, Karmazin, walking past offices crowded with engineers and dodging colored physio balls used for stretching or as chairs for staff meetings, saw the evidence.

Lunch was served in the employee cafe—six white Formica tables surrounded by metal folding chairs—where free buffet meals were dispensed daily by Charlie Ayers, whom the Google founders proudly introduced as the former chef for the Grateful Dead. To Karmazin, a corporate belttightener who had endeared himself to Wall Street by selling the Picassos off the walls of CBS headquarters, the perks seemed extravagant. Google’s corporate mission statement proclaims an aim “ to organize the world’s information and make it universally accessible and useful. ” It quickly became apparent that Sergey Brin and Larry Page saw themselves as missionaries. Karmazin’s only corporate mission is to make money.

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Schmidt and Brin explained that Google was a digital Switzerland, a “neutral” search engine that favored no content company and no advertisers. Their search results were “objective,” based on secret algorithms, and no one could bribe his way to the top of a search. They explained how search worked. The speed of each search—now averaging about a half second to answer each query—relied on an elaborate infrastructure. Google in 2002 had scanned or indexed 3.1 billion Web pages, about 80 percent of what was then the World Wide Web. (By early 2009, there were an estimated 25.2 billion Web pages.) These pages were stored in a giant database and indexed by subject.

Google software distributed each query among many hundreds of thousands of PCs and servers that are stacked in data centers and which work in tandem, simultaneously collecting different document links. The search is accelerated because Google stores on its servers three copies of its previous searches. Thus, Google does not have to scan the entire Web each time the same question is asked. When a question is typed into the Google search box, the task is to divine the searcher’s intention: when you wrote “Jobs” in the query box, did you mean employment or Steve Jobs? The query may produce thousands of links, but the promise of Google—what Google considers its secret sauce—is that the ones that appear near the top of the search results will be more relevant to you.

The company’s algorithms not only rank those links that generate the most traffic, and therefore are presumed to be more reliable, they also assign a slightly higher qualitative ranking to more reliable sources—like, for instance, a New York Times story. By mapping how many people click on a link, or <https://assignbuster.com/advertising-and-google-assignment/>

found it interesting enough to link to, Google determines whether the link is “relevant” and assigns it a value. This quantified value is known as PageRank, after Larry Page. All this was interesting enough, but where the Google executives really got Karmazin’s attention was when they described the company’s advertising business, which accounted for almost all its revenues.

Google offered to advertisers a program called AdWords, which allowed potential advertisers to bid to place small text ads next to the results for key search words. Nike and Adidas might, for example, vie for ad space adjacent to keywords such as sneakers or basketball. All auctions for ads are run online, through an automated system. The highest bidder gets to place a small text ad appearing at the top of a gray box to the right of the search results; up to ten lower bidders win ad space below the coveted top listing. The minimum bid per keyword is set by Google. A commonly searched word or phrase like eBay or Jet Blue might cost only a penny or two, while a more esoteric phrase like helicopter parts might fetch fifty dollars per click.

In a second advertising program, AdSense, Google served as a matchmaker, marrying advertisers with Web destinations. If Intel wanted to advertise on technology blogs or a hotel in London wanted to promote itself on travel sites, Google put them together via a similar automated system. In both auctions, there were no ad reps, no negotiations, no relationships. Unlike the ads Karmazin and traditional media had sold for more than a century based on the estimated number of people reading a newspaper or watching a program (called CPMs, or cost per thousand viewers), Google’s system (CPC,

or cost per click) ensured that advertisers were charged only when the user clicked on an ad.

It was Google's ambition, Schmidt and Page and Brin liked to say, to provide an answer to the adman's legendary line " I know half of my advertising works, I just don't know which half. " To help them sort through the digital clicks, Google and other new media companies relied on what are called cookies, software files that reside on a user's browser and keep track of their activities online: search questions asked, Web pages visited, time spent on each Web page, advertisements clicked on, items purchased. Because of these cookies, Google's searches improve with use, as they become more familiar with the kind of information the user seeks. Although the cookie doesn't identify the user by name or address, it does assemble data advertisers crave and couldn't get from traditional media companies like Karmazin's.

And unlike traditional analog media companies, which can't measure the effectiveness of their advertising, Google offered each advertiser a free tool: Google Analytics, which allowed the advertiser to track day by day, hour by hour, the number of clicks and sales, the traffic produced by the keywords chosen, the conversion rate from click to sale—in sum, the overall effectiveness of an ad. Thus, the several hundred million daily searches Google performed in 2003 (today the number is 3 billion) provided a tantalizing trove of data. Google helped advertisers target consumers not just by age, sex, income, profession, or zip code, but by personal preferences for leisure time activities, frequently visited locations, product preferences, news preferences, etcetera. Google took much of the guessing out of

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advertising. “ Our business is highly measurable,” Schmidt said. “ We know that if you spend X dollars on ads, you’ll get Y dollars in revenues per industry, per customer. ” Karmazin was aghast.

Most of the American media—television, radio, newspapers, magazines—depended for their existence on a long-entrenched advertising model. In the old method, at which Karmazin excelled, the ad sales force depended on emotion and mystery, not metrics. “ You buy a commercial in the Super Bowl, you’re going to pay two and one-half million dollars for the spot,” Karmazin said. “ I have no idea if it’s going to work. You pay your money, you take your chances. ” To turn this lucrative system over to a mechanized auction posed a serious threat. “ I want a sales person in the process, taking that buyer out for drinks, getting an order they shouldn’t have gotten. What would happen if advertisers expected measured results from the \$3 million spent for each thirty-second ad for NBC’s 2009 Super Bowl, or for the approximately \$60 billion spent on television advertising in the United States each year? Or the estimated \$172 billion spent in the United States on advertising, and the additional \$227 billion spent on marketing, including public relations, direct mail, telemarketing, and sales promotions? “ That’s the worst kind of business model in the world,” he said—the worst, that is, if you’re an old-school ad man. “ You don’t want to have people know what works. When you know what works or not, you tend to charge less money than when you have this aura and you’re selling this mystique. ” For sixty years, network television sold much of its advertising in an “ up-front” each spring and summer after the new fall shows were announced.

Even as audiences were declining, executives created a cattle-stampede mentality by convincing advertisers they'd get shut out of the hit shows if they didn't buy early. Karmazin and the networks continued to charge ever-steep rates because, he said, "advertisers don't know what works and what doesn't. That's a great model." The Google executives were equally appalled. They thought Karmazin's method manipulated emotions and cheated advertisers; just as egregiously, it wasn't measurable and was therefore inefficient. They were convinced they could engineer a better system. By then, Karmazin knew there was little he and Google could do for each other. "I was selling twenty-five billion dollars of advertising," he said. Did I want someone to know what worked and what didn't? "Like the aging Falstaff, he had "heard the chimes at midnight." Karmazin trained his eyes on his Google hosts, his hands folded on the table, his cuff links gleaming, and protested, only half in jest, "You're fucking with the magic!" DAYS LATER, that line was still echoing in the halls of the Googleplex. Every Friday afternoon, Google employees assemble for what they call TGIF. They nibble on snacks and drink beer or soft drinks and sit in a semicircle as Schmidt and the company founders make surprisingly candid disclosures—about the latest financial results, visitors who've come that week, deals pending—and answer employee questions.

Marissa Mayer, who joined the company in 1999 as an engineer and is today vice president, search products & user experience, remembered the meeting vividly. Schmidt, flanked by Page and Brin, said, "Mel Karmazin, the head of Viacom, came and found us interesting. They really don't know what to think of us. We really don't know what to think of them." "The choice quote that

characterizes the whole meeting,” Brin chimed in, “ was when the head of Viacom said, ‘ You’re fucking with the magic! ’” For Googlers, as they often refer to themselves, Karmazin’s deference to tradition was anathema; they questioned everything. Mayer said the Google founders always asked, “ Why does this have to be the way it is?

Why can’t you ‘ fuck with the magic? ’” Since Google’s birth in 1998, as Schmidt acknowledges, Google has set out systematically to attack the magic. “ If Google makes the market more efficient, that’s a good thing,” he said. Unlike Karmazin, Google engineers don’t make gut decisions. They have no way to quantify relationships or judgment. They value efficiency more than experience. They require facts, beta testing, mathematical logic. Google fervently believes it is shaping a new and better media world by making the process of buying advertising more rational and transparent. In its view, the company serves consumers by offering advertising as information.

It invites advertisers to bid for the best price, and invites media companies to slim their sales forces and automate part of their advertising and to reach into what author Chris Anderson dubbed “ the long tail,” in this case to those potential clients who rarely advertised but would if it was targeted and cheap to do so. Google also invites users to freely search newspapers, books, and magazines in what it sees as both free promotion and an opportunity for publications to sell advertising off this traffic. It invites television networks and movie studios to use YouTube, which Google acquired in 2006, as both a promotional trampoline and as a new online distribution system for their products. It invites advertisers to use DoubleClick, the digital advertising

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service company they acquired in 2007, for their online ads. Still, Page told me, he does not see Google as a content company.

Google's computers can " aggregate content; we can process it, rank it, we can do lots of things that are valuable. We can build systems that let lots of people create content themselves. That's really where our leverage is. " That leverage, inevitably, makes it easier for audiences to migrate away from old media. This will cause some distress, but satisfying everyone, including traditional media companies, is not Google's goal, he said; serving users is. " You don't want to do the wrong things in a way that is causing real damage to the world or to people. But you also need to make progress, and that's not always going to make everybody happy. " Armed with this conviction, Page and Google's engineers have made many media companies very unhappy indeed.

It wouldn't happen all at once. In the early days of the new century, few old media companies had yet lapsed into panic mode. Newspapers saw their circulation and ad revenues slipping. From a peak daily newspaper circulation of sixty-three million in 1984, circulation slid an average of 1 percent each year until 2004, when the drop became more precipitous. Publishers did speak of moving aggressively to create digital newsrooms, and in the nineties the Tribune Company and Knight Ridder, among others, made digital investments. But the chains that owned most newspapers were predominantly interested in getting bigger in order to gain more leverage.

There was little urgency to move to the Web; online newspapers were usually stepchildren of print editions, not allowed to break stories or employ

their own separate staff, not allowed to look or feel much different from a print newspaper. Network television viewing had similarly been eroding. On a typical night in 1976, 92 percent of all viewers were watching CBS, NBC, or ABC; today, those networks (along with Fox) attract about 46 percent of viewers. The networks responded to the decline by cutting costs, buying local TV stations and cable properties, producing and syndicating more of their own shows, and-like the movie studios-putting their faith in hits like NBC's Seinfeld, to save them. The media buzzwords were convergence and synergy.

The common credo was that the advantage accrued to vertically integrated corporate giants-to Viacom, AOL Time Warner, News Corporation, Disney, Gannett, Tribune-those able to control every step in the process from an idea to its manufacture to its distribution. The synergies would come not from partnering with other companies but from owning content and the means to distribute it. With that in mind, media companies pushed to blur the borders between traditional industries: broadcast networks acquired cable networks; telephone companies acquired cable distribution companies; cable system owners invested in content companies and telephone services; Hollywood studios bought broadcast networks along with music and game and book companies; newspapers bought local cable and radio.

Advertising agencies were also convinced size equaled leverage, so they acquired one another, consolidated their media-buying services, and purchased public relations and direct mail and marketing firms, aware that marketing and public relations spending was double the money spent on traditional advertising. Four giant worldwide firms now insisted on being <https://assignbuster.com/advertising-and-google-assignment/>

called marketing companies. Meanwhile, music companies, rather than marketing singles as they once did, continued to push the sale of entire albums; as Napster and its clones delighted young fans by offering free digital downloads of their music, they refused to make a deal, choosing instead to prosecute not just Napster but its users—the music companies' own customers.

For their part, movie executives continued to spend profligately and were distracted by piracy in China. Like music executives, they often blamed their flattening sales on the failure to come up with a hit like *Titanic* or on outside mischief. They believed content was King. Cable and telephone companies swallowed their smaller peers and vied to expand their broadband wires, convinced that he who controlled distribution was King. Book publishers merged while sales sputtered and bookstores closed, dwarfed by chains like Barnes & Noble. Publishers resisted electronic books, as a decade earlier they had resisted CD-ROMs. Old media companies were trapped in the “the innovator's dilemma,” what Clayton M.

Christensen described in his book of that name, as well-managed companies that, confronted by new technologies or new business models, floundered by fiercely defending their existing business models and not changing fast enough. Christensen described how Xerox became defensive about its large, high-volume copying centers and missed the market for desktop photocopier machines, and how IBM was late to move from its lucrative large mainframe computer business and delayed entering the minicomputer business, and how Sears, Roebuck and Co. pioneered chain stores and catalogue sales but was eclipsed by discount retailing. Old media faced excruciating choices. “

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Your choices suck,” Karmazin said. “ Either you keep your head in the sand and say, ‘ No, no, I’m only going to make my content available on my network. Or you listen to your employees, who say ‘ Why don’t we go on the Internet? ‘ And then you go on the Internet and see yourself more fragmented and you see yourself not able to charge as much for your advertising because your audience is down. ” The money generated by the Internet, and its promotional value, does not compensate for this loss. “ There are no easy answers. ” Defensiveness mixed with fear fueled resistance to change. In a 1994 speech to the National Press Club in Washington, Viacom chairman Sumner Redstone proclaimed, “ I will believe in the 500-channel world only when I see it.... ” The Web, he said, was just another “ distribution technology,” more “ a road to fantasyland” than a game changer.

He envisioned that traditional media—movies, television, books, all content—would remain “ King,” concluding: “ To me it seems apparent that the Information Superhighway, at least to the extent that it is defined in extravagant and esoteric applications, is a long way coming if it comes at all. ” In 1995, Craig Newmark launched craigslist. org , a Web site where people could post apartments for rent, job openings, services for hire, products for sale, dating invitations. In retrospect, it seems clear that this posed a threat to newspaper classified sections, which produced about a third of their ad revenue. But newspapers usually saw craigslist as a quaint Web bulletin board.

Vinod Khosla, a founder of Sun Microsystems and later a thriving Silicon Valley venture capitalist, once told Vanity Fair of a meeting he convened in <https://assignbuster.com/advertising-and-google-assignment/>

1996 with nine of the ten major American newspaper companies, including the New York Times, Washington Post, and Gannett. To save their classified business from the Internet, Khosla urged them to join New Century Network to sell advertising on the Web. His advice was rejected. " They couldn't convince themselves that a Google, a Yahoo, or an eBay ... could ever replace classified advertising. " Newspaper classified advertising plummeted from nearly eighteen billion dollars in 2005 to about nine billion dollars in 2008. Like Google's founders, Newmark was an engineer who devised a really cool free service. Drowning newspapers was not Newmark's intent; creating a more efficient system for consumers was, as it was Google's.

Newmark likens the digital revolution to " a tsunami, which when you're in the ocean is only a foot high but when it hits shore it's bigger. " Vastly bigger. TRADITIONAL MEDIA COMPANIES did not see themselves as potentially superfluous middlemen. They fervently believed relationships mattered—with advertisers, with Hollywood talent, with writers. They believed in professional storytellers, not amateurs producing " user-generated" content. They tended to believe most digital devices were too complicated, too unfriendly to consumers. They clung to a conviction that people preferred to lean back rather than lean forward to be entertained, to relax on a couch rather than sit upright at a desk. They believed few of their customers would read a newspaper, magazine, or book online or on a handheld device. It was too hard on the eyes, screens were too small, desktop computers were not portable. They believed consumers would gravitate toward their bundled services, pleased to receive a single bill for a variety of offerings. They knew Google had bested many of the search firm pioneers—Excite, Alta Vista,

Inktomi, Infoseek, GoTo, Lycos. But to most old media executives, Google was an exotic search service with puny text ads and a cute corporate motto. They were wrong about how a new generation interacted with their electronic devices. And they were wrong about Google. Technology moved fast, and was no friend to entrenched media companies.

Only a dozen years before Karmazin's 2003 visit, there was no World Wide Web, no DVDs, no satellite TV, no mobile phones or PDAs, no Tivos or DVRs, no digital cameras, no iPods, no PlayStation or Wii games, no blogs. By May 2009, Nielsen reported that 230 million Americans had Internet access, 93 percent had high-speed access (broadband) and digital cable service, and 228 million used a mobile phone. Advertising dollars for newspapers, broadcast television, and radio were receding. In 2008, more Americans got their national and international news from the Internet than from any other medium save television, according to a national survey by the Pew Research Center. More choices meant a shrinking mass audience.

The number one network television program in the 1988-1989 season was The Cosby Show, which was watched by 41 percent of all households owning television sets; twenty years later, the top show was American Idol, and it reached just one-fifth of those watching television. Information and entertainment were rapidly democratizing, as technology empowered consumers not just to unearth any fact from a Google search but to copy and share it, to access a variety of opinions, to watch television on their own schedule, to program their own music, publish their own blogs, shop online, carry portable devices untethered to a wire, bypass the post office or the Yellow Pages, communicate instantly with an associate or a loved one. By <https://assignbuster.com/advertising-and-google-assignment/>

April 2009, an estimated 1. billion people worldwide connected to the Internet, less than onequarter of whom were located in North America. While digital companies burgeoned, between 2000 and 2007 traditional media companies lost 167, 600 jobs, or one out of every 6. Newspapers, which traditionally claimed nearly a quarter of the just under two hundred billion dollars spent on advertising in the United States, by 2007 were watching their share of ads plunge below 20 percent, and this number was projected to soon fall to 15 percent or lower. These shifts do not lead to the conclusion embraced by many in Silicon Valley that the digital age is the most liberating and meaningful period of technological change the world has yet experienced.

Even if one were to discount fire, the wheel, Guten berg's printing press, or the combustion engine, what about Mr. Edison? Without electricity, there would be no Internet, no computers, no wireless devices, no subways, not to mention no lightbulbs, no air-conditioning, no telephone, radio, or television. But what does set this era apart from others is velocity. It took telephones seventy-one years to penetrate 50 percent of American homes, electricity fifty-two years, and TV three decades. The Internet reached more than 50 percent of Americans in a mere decade; DVD penetration was faster, taking just seven years. Facebook built up a community of two hundred million users in just five years. Because the digital realm is made up of bits, it does not run ut of supplies or have space constraints. Events were moving so rapidly that even the smartest people were guessing, and often guessing wrong. In the nineties, Rupert Murdoch, among others, was convinced his News Corporation could grow by acquiring more local TV stations; Bill Gates

of Microsoft asserted that the Internet would kill television networks, which it didn't; Time Warner mistakenly bet that television, not the Internet, would be the preferred interactive medium; telephone companies rushed to acquire cable companies, only later to sell them; investors clamored to bet on companies that later faded, such as Excite, Netscape, Wang Laboratories, Commodore, Lycos.

Israeli entrepreneur Yossi Vardi, whose company was behind the invention of instant messaging, compiled a chart of thirty-four technology stocks that were ranked as premier growth stocks in 1980. By 1999, only one, Intel, was a consistent growth company, while twenty-three had drowned and the others were treading water. Meanwhile, as traditional media was slicing employees, Google in early 2008 was receiving 1 million job applications per year, adding 150 employees per week, and employing nearly 20,000. After the company went public in 2004, its ledger sheet astonished the media. Its revenues, which were \$3.2 billion in 2004, zoomed to \$16.6 billion in 2007; in that same span, its net profits climbed from \$399 million to \$4.2 billion. Defying a worldwide recession, its 2008 profits were \$4.2 billion and its revenues rose to \$21 billion (97 percent of it from advertising). Google had become a juggernaut; it now produced two-thirds of all Internet searches in the United States and nearly 70 percent worldwide. Its index contained one trillion Web pages in 2008, and according to Brin, every four hours Google indexed the equivalent of the entire Library of Congress. In early 2009, users were clicking on and off billions of pages per day and receiving tens of billions of daily advertising impressions. Google's wingspan was also getting wider. In 2006, it acquired YouTube, the largest user-generated video Web

site, with an estimated twenty-five million unique daily visitors in November of that year.

In 2007, it acquired DoubleClick, the foremost digital marketing company; that year, DoubleClick posted seventeen billion display ads daily. Google now hogged 40 percent of both the twenty-three billion dollars spent to advertise online in the United States, and the fifty-four billion dollars worldwide online advertising. Google's ad revenues in 2008 matched the combined advertising revenues of the five broadcast networks (CBS, NBC, ABC, Fox, and the CW). By 2011, Web advertising in the United States was expected to climb to sixty billion dollars, or 13 percent of all ad dollars. This meant more dollars siphoned from traditional media, with the largest slice probably going to Google.

And Google had started initiatives to sell advertising for television, radio, and newspapers, which could boost its market share. Google also introduced other services: Gmail, Google News, Google Earth, Google Maps, Google Video, Picasa for sharing digital photographs, Google Books to search every book ever published, Orkut, a social network site, or additional "cloud computing" applications such as Desktop or Docs. By 2008, Mel Karmazin was no longer alone in questioning Google's intentions. Nor were those intentions obscure. In the disclosure documents it filed with the SEC in 2008, Google declared, " We began as a technology company, and have evolved into a software, technology, internet, advertising and media company all rolled into one. When Google adds mobile phones and a full menu of software applications to its cloud computing, and if it figures out a way to monetize YouTube, Eric Schmidt told me, he thinks it is conceivable that <https://assignbuster.com/advertising-and-google-assignment/>

Google can become the first media company to generate one hundred billion dollars in revenues. It irritated media executives to hear Schmidt say, " We are in the advertising business," yet hear Google employees constantly say they were on a quest to bring information to the masses, as if they toiled for a nonprofit that awarded no bonuses. Marc Andreessen, thirty-eight, who transformed the Internet into a mass medium by helping invent what became the Netscape browser when he was a student and who is today a successful Internet entrepreneur seeking to build his third billion-dollar-plus company, is suspicious of Google's intentions: " Their game plan is to do everything. Google is Andy Kaufman.

The whole thing with Andy Kaufman is you could never tell when he was joking. Google comes out with a straight face and said, ' We're just going to be a search engine. We're not going to be doing any of this other stuff"- competing with advertising agencies, with telephone companies by getting into the cell phone business, with Hollywood, with publishers, with newspapers. " But I am quite sure they're joking. " THERE IS A DISCONNECT between the way Google is often perceived and the way it perceives itself. " I sometimes feel like I live on another planet and speak a different language from traditional media companies," Eric Schmidt said. And in a sense, Google does live on a separate planet.

When it moved to its first Mountain View campus in August 1999, the move reflected the determination of its two young founders to keep employees focused inward. The current Googleplex in Mountain View is a collection of two-and three-story buildings with outdoor tables and park benches shaded by trees, a vegetable garden, and walkways pulsing with people and

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bicycles. Employees enjoy free meals and luxurious snacks (at a cost to Google of about seventy million dollars per year), and are offered bicycles to travel between buildings containing massage rooms and gyms staffed with trainers. Employees eat at large cafeteria tables, take breaks in lounges with pool tables and espresso machines. No need to leave campus for a car wash or oil change; they're available on Thursdays.

Also available are barbers, dry cleaners, day care, dog care, dentists, and five physicians to dispense free physicals and medical care. Comfortable, Wi-Fi-equipped, biodiesel commuter buses transport employees to and from campus from as far away as San Francisco, and they run from early morning to late at night. No need to buy laptop computers; employees choose their own for free. Maternity leave consists of five months off at full salary, and new dads can take seven weeks off at full pay. Most employees are allotted a day a week, or 20 percent of their time, to work on projects they feel passionate about. This has produced more than a few of Google's technological breakthroughs. Just as important, it conveys a sense of freedom. It's a way of assuring people that they are scientists and artists," said Indian-born engineer Krishna Bharat, who used his 20 percent time to invent Google News. It's also a way to encourage engineers to push the envelope, to assume that their mission is to disrupt traditional ways of doing things. There is at Google a utopian spirit not unlike that found at Burning Man, the annual anarchic-animistic retreat in Nevada's Black Rock Desert that culminates in the burning in effigy of a giant wood and desert brush " man. " It does not go unnoticed by their friends that Brin and Page have been

regular attendees at this weeklong retreat in August, whose Woodstock-like spirit is captured in

Burning Man's ten stated principles, which include a devotion "to acts of gift giving"; creating "social environments that are unmediated by commercial sponsorships, transactions, or advertising"; and "a radically participatory ethic" that can lead to "transformative change." "Google is a cross between a start-up and graduate school," said Peter Norvig, Google's director of research, who joined the company in 2001 and wears bright Hawaiian shirts and sneakers with laces left untied. "Formal rules don't matter. There's still a loose feel. The disadvantage of being a start-up is the fear that you will run out of money. There is stress. Google is more like graduate school in that you don't have that stress. You expect one day that the guys in suits will take over. That hasn't happened." The engineers remain in charge. Google aims to be nonhierarchical.

Stacy Savides Sullivan, who joined the company in December 1999 and said she was its fiftieth employee, is Google's chief cultural officer. She described the culture as "flat," and said her mission is to ensure that it stays that way. The reason the founders "smashed together" employees—making them share offices and work in teams on projects—is to "create a company everyone wants to work at," to impose a team culture. She described her task this way: "My role is to help facilitate and orchestrate the culture." It is no accident, many Googlers believe, that in 2007 and 2008 Fortune magazine christened Google the best U. S. company to work for. Google is both egalitarian and elitist.

Salaries are modest, and there are no executive dining rooms. The two founders and CEO Schmidt (all now billionaires) have insisted on being paid \$1 a year and have declined stock option grants since 2004; they were each paid bonuses of \$1, 700 in 2007 and declined bonuses altogether in 2008. The top salary of \$450, 000 was paid equally to the other members of the executive committee, who in most cases received bonuses equal to 150 percent of their salary. Most employees are invited to share the riches. Google projected that stock option grants to employees in 2008 would total \$1. 1 billion. These grants confer millionaire status on many Googlers.

Google's approach to users is also egalitarian, from its reliance on " the wisdom of crowds" approach to search results to its demonstrated faith in " open source" systems. It is a close-knit culture. Google is not egalitarian about sharing information with outsiders. Ask just about any Googler basic questions-How many searches does Google perform each day? How many of its employees are non-Americans? What is the starting salary of engineers? - and you'll receive a robotic, " We don't disclose those numbers for competitive reasons. " Google has deliberately set out to build a team culture composed of elite performers, and an inevitable consequence is that it can be an opaque and insular culture. Google's hiring practices are certainly elitist.

On the first day of work at Google, new employees attend an all-day orientation session at which they are told how few of the more than one million yearly applicants were hired at Google. They are reassured that more applicants are accepted by Harvard (about 7 percent) than are hired by Google (about 1 percent). The screening process relies on measurable

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things, like grades and SAT scores. The applicants most scrutinized are the engineers and technical employees, who make up half of Google's work force. " It's an engineering-driven and -focused culture," said a former Google executive who did not wish to be identified. " The founders don't value marketing"-or most nonengineering disciplines.

Larry Page is aggressively disdainful of marketing and public relations. In early 2008, Page instructed Google's public relations department, which consisted of 130 people, that he would only give them a total of eight hours of his time that year for press conferences, speeches, or interviews. The thirst to quantify everything drove several visual designers to quit Google in early 2009. Douglas Bowman, who was hired as Google's first visual designer in May 2006, wrote a blog explaining why he left. " When a company is filled with engineers, it turns to engineering to solve problems," he wrote. Google wanted to test market every color, every design.

Unlike Apple, Google was more concerned with functionality than taste, elegance. Management, said Bowman, pushed to " reduce each decision to a simple logic problem. Remove all subjectivity and just look at the data.... And that data eventually becomes a crutch for every decision, paralyzing the company and preventing it from making any daring design decisions. "

Google honors its engineers as creators, treating them the way the legendary management consultant Peter Drucker suggested a half century ago that companies should treat " knowledge workers," said Hal R. Varian, Google's chief economist. But an engineering-dominated culture has drawbacks. In some ways, they have not done enough to communicate what they are doing internally or externally," said Paul Buchheit, Google's twenty-
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third employee, the one who coined their “ Don’t be evil” motto and who left with three other Googlers to launch a social network, FriendFeed, in 2006. “ Part of the culture is not to communicate. That’s what we did when we started Gmail. We put it out without an announcement. ” In beta testing new products, Google does get feedback from users. But something else is at work here as well. Engineers are rarely accomplished communicators. Google is a culture dominated by a belief in science, in data, and facts, not instinct or perception or opinion. This reflects not just a disdain for public relations, but also a whiff of arrogance. Whether the employee is an engineer, a manager, or a marketer, a belief in the company’s virtue is central to the Google culture.

From day one, Google forfeited advertising revenues by refusing to run ads on its home page and by refusing to allow advertisers—as competitors like GoTo did—to pay to get their products ranked higher in search results. Google could run more ads than it does, but instead discards ads that don’t attract clicks or are not deemed “ relevant” to users as information. At the core of the Google value system, said engineer Matt Cutts, is the belief that the user experience matters most, and if the user experience is simple, and fast, and uncluttered with ads, and if Google makes no attempt to steer users to its own sites, a bond of trust will form. We maintain a church/state wall” between the information a Google search provides and advertising, said Larry Page, who likened what Google does to how newspapers strive to keep the influence of advertisers away from the reporting of news because “ there is an inherent conflict between the two. ” Google won friends among users by being free; it won friends among advertisers by charging only if users

clicked on the text ad; it won friends among news readers with Google News, which is both free and until early 2009 was ad-free; it won friends among Web sites and small businesses by generating advertising dollars and new customers. From its second auction program, AdSense, Google said it pockets 20 percent of the revenues, giving the rest to these Web sites, or what Google calls its business partners. (Actually, and several of those partners, Google also charges 10 percent of “overhead” costs, so partners net about two-thirds.) Google, in 2008, provided a total of over five billion dollars to its hundreds of thousands of “partners.” Little wonder, then, that Google was often seen as a savior by those dependent on the Web. Jason Calacanis, who cofounded Weblogs, Inc. , a company that publishes blogs, said AdSense generated in 2008 a total of four thousand dollars a day in advertising income for his bloggers. Google does its part to address global warming. It places on its roofs the largest installation of solar photovoltaic panels of any corporate campus in the United States, generating sufficient electricity to power one thousand homes.

It has solar-powered stations in its outdoor parking lots to charge its fleet of hybrid cars, and offers subsidies (five thousand dollars at first and now three thousand) to any employee who purchases a hybrid that gets at least forty-five miles per gallon (one thousand employees have received this subsidy). The company earmarks 1 percent of its profits to its philanthropic arm, the Google Foundation. CEO Schmidt sometimes lapses into speaking of Google as a “moral force,” as if its purpose were to save the world, not make money. Al Gore, who has served as a consultant and adviser to Google since soon after he left the White House in 2001, likes to talk of Google’s “great

values. " He told me he believes these values are spreading to other companies.

Those who attribute Google's success to its algorithms or " the law of increasing returns," he said, fail to fully appreciate " the extent to which Google's superior talent recruitment stems from its unusual empowerment of employees and the attention they pay to the quality of the employee experience at Google. " The best engineering schools produce a few near geniuses each year, and the reason he said Google is " getting more than their fair share of the most talented" is that they target them. " I've called college seniors for them," he said, adding, " It's not only in the recruiting and retention of the higher-quality employees. It also has to do with their alignment with community values, with trying to make the world a better place. People unlock a higher fraction of their creative potential when they feel that what they're doing is about more than making a buck, or more than enhancing the business scorecard and building the value of the company.

When they think that what they're doing is something that makes the world a better place, I don't think that's just touchy-feely stuff. " THE REST OF THE world, particularly the media part of it, doesn't always have a " touchy-feely" view of the company. Google has been sued by Viacom for allegedly allowing YouTube to pirate its television programs, by publishers and the Authors Guild for digitizing their books without permission, and came close to being sued by the Associated Press for linking to its stories without paying compensation. Newspapers and magazines are alarmed that Google News and Google search link to their content and don't pay for it. Hollywood frets that YouTube enlarges its own audience and diminishes theirs.

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Advertising companies are alarmed that Google and DoubleClick retain so much information that their advertising clients might turn to Google to purchase their online advertising, and maybe design their ads. Telephone companies are alarmed that Google is pushing into their mobile phone business. All feared Google would devise a navigation system for their media akin to what search was for the Web, and thus would be poised to become the traffic cop for all media. Schmidt said he, Brin, and Page often ask themselves: " How can you grow big without doing evil? " He believes Google has become a lightning rod, particularly for old media. " In our society bigness is often associated with bad," he said. " There is no question that a company with the ambitions of Google will generate controversy, will have people upset with us.

The question is: Where does it come from? Is it coming from a competitor? Is it coming from a business whose business model is being endangered by the Internet? Or is it because we're behaving badly? " Schmidt believes the hostility comes from threatened competitors who scapegoat Google. " When you have a technology that is as engrossing as the Internet, you're going to have winners and losers," he said. " I'm not trying to sound arrogant. I'm trying to sound rational about it. The Internet allows people to consume media in a different way. They're going to do it. " Schmidt acknowledged that, in his own naivete, Google has probably fanned paranoia. Google is run by three computer scientists," he said. " We're going to make all the mistakes computer scientists running a company would make. But one of the mistakes we're not going to make is the mistake that nonscientists make. We're going to make mistakes based on facts and data and analysis. "

Schmidt's summation understates the mistakes Google will make, and has made, because its computer scientists live on their own planet and often harbor disdain for the way others think. Terry Winograd, who was Larry Page's graduate school mentor at Stanford, and who still serves as an engineering consultant to Google, recounted a discussion at a TGIF he attended where an employee raised the question of one day splitting Google's stock and asserted that a stock purchased at, say, four hundred dollars a share that was now selling at forty dollars per share because it had been split, would be perceived as not a good thing for employees because the perception would be that their stock was worth less. Page erupted, " It's stupid. If you own ten shares at forty dollars and one share at four hundred dollars, it's the same thing! You just need to know how to divide. " This is " logically true," said Winograd. " But there is an emotional issue here. He felt that those who disagreed were not thinking logically, were being stupid. " Logic, however, is not always universal. The planet is occupied by humans, who often make decisions under the guise of a logic that others deem stupid. Great leaders have the empathy to factor this wisdom into their deliberations.

They know Robert Louis Stevenson understood a broader truth when he wrote: " No man lives in the external truth among salts and acids, but in the warm, phantomagoric chamber of his brain, with all the painted windows and storied wall. " That Larry Page and Sergey Brin-and many Google employees-are brilliant is a conclusion cemented by the tale of Google's rise. Whether they are also wise is not as clear-cut. PART TWO The Google Story CHAPTER TWO Starting in a Garage I n early 1998, Bill Gates couldn't

envision what was to come. Microsoft was at the apex of its power, with revenues that would reach \$14.5 billion by year's end, with ever-rising profits, a soaring stock valuation, more than twenty-seven thousand employees, and a market share of computer operating systems that encompassed more than 90 percent of all desk and laptop PCs.

The government had not yet sued it for monopolistic practices, or convinced two federal courts that Bill Gates's company was guilty. At the time, Microsoft was so flush that it had flirted with investing in Hollywood, having already dispatched its chief technology officer and dealmaker, Nathan P. Myhrvold, to spend an anthropological week with DreamWorks cofounder Jeffrey Katzenberg. It was in that confident time that I visited Gates in his office on the sprawling Microsoft campus in Redmond, Washington, in 1998. In the course of our interview, I asked him to describe his competitive nightmare: "What challenge do you most fear?" He rocked gently back and forth, sipping from a can of Diet Coke, and silently pondered the question.

When he finally spoke he did not recite the usual litany of prominent foes: Netscape, Sun Microsystems, Oracle, Apple. Nor did he cite the federal government. Instead, he said, "I fear someone in a garage who is devising something completely new." He had no idea where the garage might be—or even what country it might be in—nor could he guess the nature of the new technology. He just knew that innovation was usually the enemy of established companies. As it happens, in 1998, in a Silicon Valley garage, Bill Gates's nightmare came alive courtesy of Larry Page and Sergey Brin. Page and Brin had met three years before, at orientation for incoming Stanford graduate students. They had much in common.

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Their fathers were college professors and their mothers worked in science; both were born in 1973 and raised in homes where issues were rigorously debated; both attended Montessori elementary schools, where they were granted freedom to study what they wished, and as public high school students they were besotted by computers; both were pursuing Ph. D. ' s in computer science. They shared what John Battelle described as “ a reflexive belief that whatever the status quo is, it's wrong and there must be a better solution”; both, as Mark Malseed observed, had a “ penchant for pushing boundaries-without asking for permission ... ” SERGEY MIKHAILOVICH BRIN'S PATH to Stanford started in Moscow, where he was born into a family steeped in science.

His grandfather was a math professor; his great-grandmother had left the Soviet Union to study microbiology at the University of Chicago; his parents, Michael and Eugenia, were mathematicians. There were obstacles to their pursuit of science, though. Despite Michael's Ph. D. , anti-Semitism impeded his career: at Moscow State University he was not permitted to study his preferred subject, astrophysics, because it fell into the same department as nuclear research, and Jews were deemed too untrustworthy to enter that field. Eugenia Brin, a civil engineer, was more welcome in the renowned research lab of the Soviet Oil and Gas Institute, but she, too, felt constraints. “ We were quite poor,” recalled Sergey, describing a three-hundred- to four-hundred-square-foot Moscow flat he shared with his parents and his grandmother, an English teacher. “ My parents, both of them, went through periods of hardship. My life, in comparison, has been easy. ” In 1977, Michael Brin attended an international conference in Europe, and when he returned

home he insisted that the family must apply for visas to escape the USSR. When he submitted an application the following year, though, he was abruptly fired. Warned of retribution, Eugenia quit her job. They eked out a life doing temporary work, schooling four-year-old Sergey at home. It wasn't until two years later that their exit visas were granted.

With assistance from the Hebrew Immigrant Aid Society, they immigrated to America, leaving most of their possessions behind. They rented a cinder-block house in a multiracial, working-class suburb of Baltimore, near the University of Maryland. As in Moscow, they were poor, relying on the support of local Russian Jews. " My parents sort of lived in the dining room," Sergey remembers. " There was no wall between the dining room and the kitchen. They used that as their bedroom. " Eventually, Michael became a professor of mathematics at the University of Maryland, where he specializes in Riemannian geometry; Eugenia Brin became a scientist at NASA's Goddard Space Flight Center. They had a second son, Sam, fourteen years Sergey's junior.

Sergey enrolled in the local Montessori school where classes were comprised of students in a three-year age range. Typical of Montessori programs, the school adapted itself to the child. " It's not like somebody is telling you what to do," Sergey said. " You have to plot your own path. " Because he initially spoke little English, he retreated into math puzzles, science projects, and maps. For his ninth birthday, his parents gave Sergey a Commodore 64 computer, a seminal gift for a man who now gleefully describes himself as a nerd. Some years later, when a friend got an early Macintosh computer, they

began to devise artificial intelligence programs and software to simulate gravity.

Sergey's prowess at math was en