

Alphabet Inc., Google: Advertising Company Risk Map Analysis

Raelene J. Gonzales

Shiley-Marcos School of Engineering, University of San Diego

EML 535

Dr. Silvia De Dea

July 8, 2025

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Risk	Description of risk	Type	Scores		
			Impact	Likelihood	Total score
1	Electricity and data storage consumption increase	Internal	High	Probable	16
2	Environmental studies reduce spending on e-commerce	External	Moderate	Probable	12
3	Major lawsuits based on discrimination and sexism	Internal	High	Frequent	20
4	Privacy concerns leads to distrustful stakeholders	Internal	Extreme	Frequent	25
5	Loss of talent and senior staff	Internal	High	Frequent	20

Electricity and Data Storage Consumption Increase

(Internal, Impact: High, Likelihood: Probable)

1. As of December 2024, data center electricity consumption continues to climb, projected from its current total U.S. electricity rate of 4.4% to reach 6.7-12% of nationwide electricity usage, mapping its numerical jump from 58 TWh in 2014 to 176 TWh in 2023, possibly leaping to 325-580 TWh by 2028 (U.S. Department of Energy). The U.S. The Department of Energy states its plans to “leverage its resources” to meet rising demands for reliable and affordable energy, despite the rising cost effects of “artificial intelligence (AI)”, “domestic manufacturing growth” and “electrification” of common industries. The public expects Google to spend approximately \$75 billion U.S.D. in a single year to compete in the “AI Race”, based on current and competing AI infrastructure analysis (Peters, 2025). To prevent waste on data storage and electricity expenditures, I would recommend the formation of an internal data dumping system and a natural data-training system, led by a team of experienced user-testers/software engineers to guide Google’s future data into meaningful insights. The data-dump and data-training system would focus on safely ignoring/filtering harmful, repeating and irrelevant data. Additionally, costs can be saved by “switching to renewable energy sources” and becoming “energy-efficient” and investing in “cutting-edge cooling techniques”, as CSJM University recommends for large-consumption data centres (Bajaj & Saxena, 2025).

Environmental Studies Reduce Spending on E-commerce

(External, Moderate: High, Likelihood: Probable)

2. Although e-commerce has a negative impact on the global environment through transportation (carbon emission), data (energy use) and packaging material (waste footprint), customers are relatively uninformed about how their online purchases affect the environment and companies are not rewarded for sustainable decisions (Bajaj & Saxena). On the other hand, sustainability efforts are described as “crucial” and “vital” because the e-commerce supply chain cannot viably sustain such a lifestyle in the future (Bajaj & Saxena). A scientific research study used organic food advertisements (6) in a grocery store to prove that advertisements aimed to support “environmentally friendly” products, especially in “personal health and family health”, are likely to increase environmental awareness in customers’ purchase decisions and support “altruistic”/“self-transcendent” values (Bullock et. al, 2017). In 2024, Google’s advertising revenue consisted of \$264.59B U.S.D. compared to its \$305.63B U.S.D. total revenue (Statista, 2025A). Seeing as the company’s advertising profits make 86.57% of total revenue, Google Ads has the opportunity to offer internal algorithm rewards (such as showing 6 daily eco-friendly advertisements), avoiding any future profit decrease due to negative environment footprints caused by Google advertisement and increasing profit from ad-paying companies selling sustainable products. AI systems can reward customers who follow environmentally friendly purchasing behaviors by showing even more relevant sustainable products that promote personal health, family health, package reduction, transportation efficiency and less data consumption.

Major Lawsuits Based on Discrimination and Sexism

(Internal, Moderate: High, Likelihood: Frequent)

3. Initially, Google settled a \$118M U.S.D. court case of *Ellis v. Google*, involving 15,500 claims from former women employees since 2013, underpaying and low-placing female workers with denied promotions/transitions (Garret, 2022). As of March 2025, Google is subject to pay \$28M in *Ana Cantu v. Google LLC* U.S. court settlement, ‘giving white and Asian employees better pay and career opportunities than other ethnicities’, although it rejects such claims (Silva). Following up in May of 2025, a *Curley v. Google LLC* U.S. court case ended in a Google settlement of \$50M settlements for black employees affected by systemic racial bias; however, claims were still denied by Google (Katsha). The last three quarters of the year after Google settled for gender discrimination, total revenue almost came to a tanking halt before slowly gaining traction in 2024; however, Google’s profit has tanked once again starting 2025’s first quarter (Statista, 2025B). Although increasing costs of lawyer fees and settlement claims have done little to impact Google’s total revenue according to its 2024 annual increase in profits measured by hundreds of billions, future stalls in profit from the recent settlements’ public effects seen in the drop in revenue after the first court case’s reveal. Signs of early problems with diversity and inclusion could have been spotted by Google’s chief diversity officer, Danielle Brown, suddenly quitting to join a start-up to support doctor’s offices (HRD, 2019). In response to the first lawsuit, Google dropped its Diversity, Equity and Inclusion goals entirely, claiming no aspirations for diversity in the workplace (Human Resources Director, 2025). Reporting in 2023, Google is also prone to office suicides; a Google engineer in its Manhattan, New York, U.S. office plunged to their death from the 14th floor this year after Jacob Pratt, another office employee, hung himself at home earlier

(Marino & Woods). While working for Google Mountain View in 2017, I heard first-person employee accounts from the San Francisco Youtube office that a wife shot herself in front of her former husband's manager at the San Francisco Youtube office after he had committed suicide earlier that month. To prevent backlash from loss of company reputation and future financial burdens involving the mistreatment of all Google employees despite gender or ethnicity, Google should open an entirely new department supporting employee physical wellness and mental soundness, opening up way for company change in an unexplored territory of supporting its already existing employees. Hiring a chief wellness officer in place of the lost chief diversity officer would restore balance to Google's public reputation, community support and prevent new cases of discrimination based on disability and individual cases. Monthly office off-sites such as painting and local tourist attractions should be offered, as well as monthly in-home physical nutrition packages and weekly mental health meetings.

Privacy Concerns Leads to Distrustful Stakeholders

(Internal, Moderate: Extreme, Likelihood: Frequent)

4. In 2019, Google paid \$13M U.S.D. in a Street View class-action lawsuit from information gathered by panoramic location images, adding on to the \$7M it paid in 2013 for the same project without any changes made (Duffy, 2019). As part of another settlement ordered by U.S. District Judge Yvonne Gonzalez Rogers in June 2020, Google is purging personal data collected from 136M Chrome users, its popular web browser (Liedtke, 2024). In response, Google's chief privacy officer, director of privacy of product and engineering, Responsible Innovation AI operations and governance founder, global chief compliance officer, Latin American chief compliance officer and chief health

equity officer have all quit, leading to the disbanding both the machine learning privacy team and the Responsible Innovation team (Ng, 2024). In 2023, Google settled at \$5B U.S.D. court case for its tracking of users in “incognito” mode, although the Chrome browser claims privacy in that feature (The Associated Press, 2023). As 2025 begins, California has fined Google \$314M U.S.D. for collecting personal mobile activity data without permission and decided that data allowances aren’t considered property for Google; the court plans to fine for additional billions in U.S.D for damages dating back to 2016 (Craske, 2025). The frequent loss of billions of dollars and projected loss puts Google’s finances, product usage and company reputation at a major risk. Instead of tasking chief privacy teams, Google may invest in educating its existing teams’ software engineers in privacy matters through college education initiatives and creating internal engineer training programs. Additionally, a public page on privacy can be launched for each product, stating new measures taken to address the protection of personal data. Following the law would not be an issue if software engineers are correctly informed of potential design flaws in Google products during application development.

Loss of Talent and Senior Staff

(Internal, Moderate: High, Likelihood: Frequent)

5. Samy Bengio, one of Google’s prominent “staff members” and former manager at Google Brain quit and was hired at Apple as Senior Director in AI and ML Research, taking smart AI decisions with him, but leaving a Google Scholar page full of knowledge he acquired while working for the company (Google Scholar, 2025). After losing major staffing (chiefs, directors, managers, senior engineers, etc.) due to value difference, internal law-breaking and even employee suicide, Google is staffed with less of its senior

talent and less truly genius minds seek to work there. Google's CEO, Sergey Brin speaks out on his intentions to work his staff harder, urging them to 'beat the A.I.' and insinuating that his employees who do not work 60 hours a week are "demoralizing" and doing the "bare minimum" (Grant, 2025). Although incredible employees have left Google, there were incredible employees that were honored to work for Google at the time with priceless knowledge and capability. There should be a staff agency and group hired to rehire former Google employees who had the spirit of Google's original intention, to encourage daily activities through technology and profiting off genuine life development. Google can bring back life into its "Googliness" culture by treating former employees who created the backbone of Google's software with compassion and rehabilitation into the company, recognizing that moving forward requires compromise and a company-wide, secure vision. By allowing creative minds to work together on projects, task-forces can be assembled to rotate on Google's current projects and solve unseen problems that would have been prevented by formerly-valued Google employees. By encouraging internal harmony, Google can still pull together talent that it has lost before it moves on to competing corporations, ready to acquire Google secrets and abide by their once appreciated work culture.

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