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Chaos by design

The inside story of disorder, disarray, and uncertainty at Google. And why it's all part of the plan. (They hope.)

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(Fortune Magazine) -- Spend just a few minutes on Google's sprawling campus in Mountain View, Calif., and you'll feel it right away: This is a company thriving on the edge of chaos. Google (Charts), age 8, is pulling in $10 billion a year in revenue and is worth about $125 billion, but the vibe is far more freshman mixer than profit-seeking firm whose every utterance is scrutinized for deeper meaning.

The 1.3-million-square-foot headquarters is a mélange of two-story buildings full of festive cafeterias (yes, they're all free), crammed conference rooms, and hallway bull sessions, all of it surrounded by sandy volleyball courts, youngsters whizzing by on motorized scooters, and -- there's no better way to put this -- an anything-goes spirit. It's a place where failure coexists with triumph, and ideas bubble up from lightly supervised engineers, none of whom worry too much about their projects ever making money.

An edgy management style

Take the case of Sheryl Sandberg, a 37-year-old vice president whose fiefdom includes the company's automated advertising system. Sandberg recently committed an error that cost Google several million dollars -- "Bad decision, moved too quickly, no controls in place, wasted some money," is all she'll say about it -- and when she realized the magnitude of her mistake, she walked across the street to inform Larry Page, Google's co-founder and unofficial thought leader. "God, I feel really bad about this," Sandberg told Page, who accepted her apology. But as she turned to leave, Page said something that surprised her. "I'm so glad you made this mistake," he said. "Because I want to run a company where we are moving too quickly and doing too much, not being too cautious and doing too little. If we don't have any of these mistakes, we're just not taking enough risk."

When a million-dollar mistake earns a pat on the back, it's obvious this isn't your normal corporation. To figure the place out, I've repeatedly been told the person to see is Shona Brown, the 40-year-old ex-McKinsey consultant who is Google's senior vice president for business operations. That's what it says on her business card, anyway, but she might as well be Google's chief chaos officer. She literally wrote the book on the subject, a 1998 bestseller called "Competing on the Edge: Strategy as Structured Chaos." And fittingly, on the day I'm to see her at the Googleplex, my press escort and I get hopelessly lost. Finding anyone here requires precise navigation and the ability to read color-coded maps. We get so badly turned around -- entering the wrong building's lobby, backtracking through shrubbery to another -- that we arrive 17 minutes late. Even real estate at Google is chaotic.

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Brown has made a career of arguing that anarchy isn't such a bad thing -- which is why Page, co-founder Sergey Brin, and CEO Eric Schmidt hired her in 2003. A business theoretician in a company dominated by engineers, she considers Google the "ultimate petri dish" for her research, though her job is anything but theoretical. In addition to overseeing human resources (called "people operations"), Brown runs a SWAT team of 25 strategic consultants who are loaned out internally on ten or so projects at a time -- restructuring a regional sales force here, guesstimating a market size there.

The company's goal, says Brown, is to determine precisely the amount of management it needs -- and then use a little bit less. It's an almost laughably Goldilocksian approach that Brown also advocates in her book, co-written with a Stanford business professor. The way to succeed in "fast-paced, ambiguous situations," she tells me, is to avoid creating too much structure, but not to add too little either. In other words, just make it not too hot and not too cold, and you're done. "If I ever come into the office and I feel comfortable, if I don't feel a little nervous about some crazy stuff going on, then we've taken it too far," she says.

A "Googley" approach to business

Crazy definitely trumps comfy at Google. You have to keep your wits about you on campus just to avoid smashing into one of Google's 8,000-plus employees. Meetings typically start on the hour, and young Googlers tend to hover outside scarce conference rooms beforehand. They doodle on hallway whiteboards, contributing inside jokes, such as sinister new ways to expand the company's online advertising program. ("AdSense for Eyelids," reads one.) Celebrity sightings are ho-hum. A couple of years ago I was having lunch at Google's sunny outdoor courtyard when Page and Brin sat down at my table with their guest, comedian Chris Tucker. George Soros lectured at Google the day I met Brown. Google advisor Al Gore shows up often.

Nurturing such an off-the-wall culture is a luxury only a company that's performing stupendously well can afford, and Google is certainly doing that. Two years after going public, its stock is up more than fourfold, and it's so profitable that despite helter-skelter spending on everything from mammoth data centers to worldwide sales and engineering offices, Google is generating more than $800 million in cash each quarter. In the process, Google is thrashing the competition -- in market share, deals won, buzz -- notably Yahoo (Charts) and Microsoft (Charts). It's also cozying up to a growing list of heavyweights you'd think would be warier, including News Corp (Charts)., Viacom (Charts), and ad-agency giant WPP (Charts).

If Google's engine is running fast, then naturally it's also running hot. That sheds light on all kinds of blunders -- many of them dwarfing Sandberg's -- which Google likes to explain away as its Googley approach to business. (Googley being a cloying description these people actually say out loud. Frequently.) The company is figuring things out as it goes, and not quite as effectively as you'd expect from its stellar financial results. Its new products haven't made nearly the splash that its original search engine did. Critics have mocked its self-righteous "Don't be evil" motto when, for example, Google decided to scan copyrighted books for its book search index. Even Google's rocket-ship stock price has been grounded. After a run from $85 in August 2004 to $475 last January, it has puttered around $400 for most of the year. Says Benjamin Schachter, an analyst with UBS: "Investors are saying, 'Enough of what you're going to do. What does it do to the numbers?' "

What concerns investors is whether Google can come up with a second act. There's nothing to suggest that its growth engine -- ad-supported search -- is in trouble. But it's clear from Google's tentative lurches into new forms of advertising and its spaghetti method of product development (toss against wall, see if sticks) that the company is searching for ways to grow beyond that well-run core. It's the reason, for example, that Google requires all engineers to spend 20% of their time pursuing their own ideas. Successful second acts are exceedingly rare in the technology business -- or in any business, for that matter. Microsoft followed Windows with Office. Intel jettisoned its memory-chip line to rule microprocessors. Even Apple, which executed one of the most remarkable rebirths ever with the iPod, had to go through a painful decade to get there.

What emerges from months of interviews with employees ranging from fresh-out-of-college hires to the CEO is that Google firmly believes it has a framework for figuring out the future. It should come as no surprise that the plan is as irreverent, self-confident, and presumptuous as the company itself. Google's executives don't articulate it this way, but the framework can be found in the title of Shona Brown's book: structured chaos. Indeed, along with Googleyness, chaos is among the most important aspects of Google's self-image. Understanding how Google thinks about chaos -- like Page's teachable moment after Sandberg's million-dollar mistake -- is critical to divining where the company goes next. "Are lots of questions hanging out there in the market?" asks Sandberg. "Sure. Because we don't always have an answer. We're willing to tolerate that ambiguity and chaos because that's where the room is for innovation." Good strategy -- if it actually works.

In "Competing on the Edge", Brown describes a sizzling Silicon Valley software company from the 1990s that was confronting the joys and hardships of hypergrowth. She identifies it only with a pseudonym, Galaxy, and it bears a striking resemblance to Brown's current employer, which didn't exist yet. "Galaxy was populated by smart, hip twenty- and thirtysomethings who were chosen for their brains and their attitude," she wrote. "Tour Galaxy and you'll be struck by the college-like atmosphere. Landing a job at Galaxy is hard. The screening process is intense. Once hired, the Galaxy philosophy is to let people 'do their own thing.' " But Galaxy had one glaring weakness: "The firm was living off one set of unusually successful products, whereas the rest of the businesses were much more modest performers."

Finding a follow-up act

What vexed Galaxy is precisely Google's challenge today. For all its new products -- depending on how you count, Google has released at least 83 full-fledged and test-stage products -- none has altered the Web landscape the way Google.com did. Additions like the photo site Picasa, Google Finance, and Google Blog Search belie Google's ardent claim that it doesn't do me-too products. Often new services lack a stunningly obvious feature. Users of Google's new online spreadsheet program, for instance, initially couldn't print their documents. The calendar product doesn't allow for synchronization with Microsoft Outlook, a necessity for corporate users.

Other major initiatives like Gmail, instant-messaging, and online mapping, while nifty, haven't come close to dislodging the market leaders. Much-hyped projects like the comparison-shopping site Froogle (nearly four years in beta and counting) and Google's video-sharing site have been far less popular than the competition. One of Google's biggest misses is its social-networking site, Orkut, which is a hit only in Brazil and -- as Marissa Mayer, Google's 31-year-old vice president of search products and user experience, says with an impressively straight face -- is "very strong in Iran." Sometimes promising new products are buried so deep within Google's sites that users can't find them. "You can only keep so many things in your head," acknowledges CEO Schmidt. "Even if you're the No. 1 Google supporter, you cannot remember all the products we have."

This presents a conundrum: Impose order, and Google becomes just like everybody else; let chaos rule, and run the risk that Google's flailing about hurts its pristine brand and reputation for brilliance. Clarifying its intentions would be a start. "We need to do a better job of communicating which products we expect to be killer apps and which are experiments," Brin told a gathering of journalists in May. There's been progress. In June, Google released its online payment tool, Checkout, as a full-fledged product. Mayer, who has the final word (except for Page) on what appears on Google's home page, has established a war room to piece together a plan for better integrating Google's many products.

It's going to be a battle, though, simply because Googlers are adding features by the bushel -- and more are coming. Niniane Wang, a young engineer who worked on Gmail, is now assigned to a confidential project believed to involve social networking. Louis Monier, a Digital Equipment veteran who launched its AltaVista search engine, recently left eBay to join Google in a top-secret capacity. Katie Jacobs Stanton runs Google Finance, Google Blog Search, and two other projects. This summer she temporarily moved with her husband and three children to Bangalore to get closer to the engineers who built the finance site. Since Google Finance doesn't run ads or any other revenue-generating features, I ask Stanton how long the site can ignore making money. Her response: "Theoretically, forever."

In fact, Google is making money slyly, if slowly, on some of the very products that seem like mere whiz-bang. Consider Google Earth, the ubiquitous cable-news prop and workplace time waster that lets users view incredibly detailed geographic photos from around the world. It started as a satellite-imaging software company called Keyhole. "Sergey [Brin] was playing around with it and got enamored with Keyhole," says John Hanke, Keyhole's original CEO (and now a Google employee) before Google bought it in 2004. "At a staff meeting, he put Keyhole up on one of the projectors and started showing people their houses and flying around." The startup, whose images were confined to the U.S., had been bringing in modest revenue from real estate companies, but that's not what interested Brin. "When we got to Google, one of the first questions Sergey asked was, 'Why can't you look at the whole world at once?' " says Hanke. Two years later the company is integrating ads into Google Earth. Search for "pizza" while hovering above your neighborhood, and you'll get the idea.

Neat toys are about more than creating Web pages on which Google can slap ads. Google Earth has been downloaded more than 100 million times, and embedded in each download is a request from Google to place a toolbar, a Web gadget that includes a search box, permanently on a user's Web browser. That seemingly innocuous query is a gold mine for Google, because the ever present box increases the likelihood users will search on Google. The more people search on Google, the greater the chances someone will click on an advertiser's ads. "We know the lifetime value of a toolbar user," says Mayer, who offers the example to counter the notion that Google isn't trying to profit from its fancy doodads. "So we know how much value we're getting back out of somebody who downloads Google Earth and then subsequently downloads the toolbar."

Strategic Partnering

This virtuous cycle of more users conducting more searches benefiting more advertisers is precisely what makes Google so irresistible to business partners -- even those who feel threatened by it. Martin Sorrell, the chief executive of ad agency holding company WPP, has been outspoken in his fear that Google could obviate companies like his. (Automated ad auctions entail less overhead than armies of schmoozing ad executives, goes the argument.) He titled a section of his latest annual report "Google: Friend or Foe?" In an interview, he suggests the short answer: "The bigger and more successful you get, the more people want to bring you down." But it's not that simple. WPP, Sorrell notes, is Google's third-largest customer, measured by the amount of advertising it purchases on Google for its clients. Sorrell says Google wants to improve its access to WPP's clients, and he's inclined to allow that -- provided there's something in it for WPP. "We represent 20% of media revenue worldwide, and we're definitely not 20% of Google's revenue," he says. "We'll see how we can work together."

Working with Google and grumbling about it is quite in fashion. Viacom's MTV recently signed a deal for Google to distribute its videos to the Web publishers in Google's AdSense network, which lets the publishers run ads supplied by Google's advertisers. Comcast, which has been Google's ideological opponent in an acrimonious legislative battle over government regulation of Net access, is particularly pleased with the revenue it gets from having Google power the search results on its Comcast.net home page for broadband users. In both cases, the older companies profit from Google's superior Internet advertising network. Indeed, after initially scaring "old" media, Google has become the go-to partner for juicing Internet revenues.

Chumminess with the establishment is in the air in mid-August when I meet with Schmidt, two days after Google's announcement of a landmark deal to provide search over numerous News Corp. properties, notably MySpace. (Google guarantees News Corp. $900 million over 3½ years in exchange for an unspecified share of ad revenue.) In our 90-minute interview, I remind Schmidt that at a lunch for journalists in March, he repeatedly mentioned MySpace almost wistfully, seeing how Google had been a bust in social networking.

"We didn't know what to do about it," he says. "Now we know." He explains that Google's new social-networking effort has at least two prongs. The well-known part is the MySpace deal; the other is Google's technology to improve search on social-networking sites, which so far only MySpace has agreed to use. Schmidt's explanation is a bald attempt to declare victory after an obvious defeat, since MySpace trounced Google's Orkut (not including, of course, those triumphs in Brazil and Iran).

The MySpace deal reveals the Google leadership triumvirate's visceral style. The transaction might never have happened, says Schmidt, if Brin hadn't flown to meet with News Corp. executives in Pebble Beach, Calif., where Rupert Murdoch was hosting an A-list bull session on global issues. (Schmidt was vacationing in Europe; Page was in India.) "We sent Sergey because he's very intuitive," says Schmidt. "He goes down there and sort of hangs with them for a while and comes back and says, 'You know, I'm really sure we should do this.' And it's not a numbers argument. It's a feeling of commitment."

Winning MySpace kept the Web's gem of the moment out of the hands of Microsoft and Yahoo, which both privately claim that Google overpaid by several hundred million dollars. Whether that's true won't be known for years. Tim Armstrong, Google's New York-based head of North American sales and the company's point man in the MySpace negotiations, pooh-poohs the notion that Google got taken.

"What people aren't seeing is our ability to model deals," he says. "I would guess that Google was not offering to write the biggest check for this partnership." In any event, the deal created a fan in News Corp., which has steadfastly refused to place any of its Fox shows on Google's video site and yet is positively giddy about its budding advertising relationship. "I actually don't view them as overwhelmingly competitive with us," says Peter Chernin, News Corp.'s president and chief operating officer. "They are trying to sell advertising, and so are we. But at their core I view them as a technology company, and we are an entertainment company. It's a happy and convenient marriage."

Mapping the future

It's great for Google that Murdoch & Co. love it so, but that doesn't change the impression that Google is winging it -- after all, the deal only came together after Brin descended from the clouds to peer into News Corp.'s soul. When I ask Schmidt whether his company actually has a plan, he does what engineers tend to do in situations like this: He gets up and starts drawing on a whiteboard.

A billionaire at 51, Schmidt cuts the typical Silicon Valley figure of somebody's successful, but otherwise average, dad. His khakis-and-oxford uniform is standard, as are his wire-frame glasses and Supercuts-inspired hairdo. Schmidt's doodling, which he's also done recently for the Google board of directors, tells the story of where he sees Google's money coming from for years to come. He draws a series of connected clouds representing the history of the computing industry, from mainframes to minicomputers to PCs to today's mobile devices. The gist of the illustration is that there's practically no money left to be made in computers, not in hardware or software. The money, instead, is all in Web applications, a trend Schmidt had been predicting since his days as chief technology officer at Sun a decade ago. Users won't always be traveling to the Web on the PC, which is why he scribbles lines for cellphones, cable set-top boxes, Treos, BlackBerrys, and so on. Schmidt's most compelling point -- and the most visible glimmer of a method to Google's madness -- is the power behind the not-so-secret data centers Google is building, particularly a 30-acre facility in Oregon whose existence he references without provocation. "That massive investment should translate into the ability to build applications that are impossible for our competitors to offer, just because we can handle the scale," says Schmidt. (Microsoft, Yahoo, and IBM, each of which is spending heavily on similar big iron, would beg to differ.) He's talking about processing-power-sucking Google applications like Gmail and Google Earth -- and unannounced products on the drawing board.

Google has also begun to show how it plans to use that power for advertising services that go beyond search. Brokering video ads for MTV is new terrain, as are the graphical display ads Google plans to sell for MySpace. The company is engaged in an 18-month-old experiment to auction text and graphical ads for newspapers and magazines. It's also in the process of integrating its biggest acquisition to date, a radio-advertising company called dMarc Broadcasting, which Google bought in January for $102 million in cash plus a potential performance-based payout of more than $1 billion. dMarc automates the process for delivering radio ads to about 10% of the country's 10,000 stations. By merging dMarc into Google's AdWords, Google's online system for auctioning search terms, it will offer its advertisers -- who so far hawk their wares in 75 words or less of written text -- the ability to deploy radio ads as well.

It's a bold push. "We see very clear ways to improve advertising for all users," says Armstrong, the sales chief. It's the "all" in his aspirations that frightens anyone in Google's path. Or used to, anyway, before people started noticing that not everything Google does rocks the world. Nick Grouf, CEO of Spot Runner, a well-funded Los Angeles startup that does even more for television advertisers than dMarc does for radio, sees an Achilles' heel. "It's their incredible focus that got them this far," says Grouf. "But all these new initiatives suggest a dilution of that focus."

With so many moving parts, it's natural to wonder if Google is truly a company for the ages -- or whether it's the next Galaxy, that fast-moving, arrogant, one-hit wonder in Shona Brown's book. To believe that Google will find its second act, you have to accept the hubris and the chaos, and that the brainiacs who got lucky once will do so again. Google desperately wants to believe its nonlinear approach is all part of the plan. But as the company's big thinkers are the first to admit, most of the questions about Google aren't answerable. Try as they may, no one can truly control chaos. ■

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