Their mission was to devise something far more important to the future of Google Inc. than its next search algorithm or app.

They wanted to build better bosses.

So, as only a data-mining giant like Google can do, it began analyzing performance reviews, feedback surveys and nominations for top-manager awards. They correlated phrases, words, praise and complaints.

Later that year, the “people analytics” teams at the company produced what might be called the Eight Habits of Highly Effective Google Managers.

Now, brace yourself. Because the directives might seem so forehead-slappingly obvious — so, well, *duh* — it’s hard to believe that it took the mighty [Google](http://topics.nytimes.com/top/news/business/companies/google_inc/index.html?inline=nyt-org) so long to figure them out:

“Have a clear vision and strategy for the team.”

“Help your employees with career development.”

“Don’t be a sissy: Be productive and results-oriented.”

The list goes on, reading like a whiteboard gag from an episode of “The Office.”

“My first reaction was, that’s it?” says Laszlo Bock, Google’s vice president for “people operations,” which is Googlespeak for human resources.

But then, Mr. Bock and his team began ranking those eight directives by importance. And this is where Project Oxygen gets interesting.

For much of its 13-year history, particularly the early years, Google has taken a pretty simple approach to management: Leave people alone. Let the engineers do their stuff. If they become stuck, they’ll ask their bosses, whose deep technical expertise propelled them into management in the first place.

But Mr. Bock’s group found that technical expertise — the ability, say, to write computer code in your sleep — ranked dead last among Google’s big eight. What employees valued most were even-keeled bosses who made time for one-on-one meetings, who helped people puzzle through problems by asking questions, not dictating answers, and who took an interest in employees’ lives and careers.

“In the Google context, we’d always believed that to be a manager, particularly on the engineering side, you need to be as deep or deeper a technical expert than the people who work for you,” Mr. Bock says. “It turns out that that’s absolutely the least important thing. It’s important, but pales in comparison. Much more important is just making that connection and being accessible.”

Project Oxygen doesn’t fit neatly into the usual Google story line of hits (like its search engine) and misses (like the start last year of Buzz, its stab at social networking). Management is much squishier to analyze, after all, and the topic often feels a bit like golf. You can find thousands of tips and rules for how to become a better golfer, and just as many for how to become a better manager. Most of them seem to make perfect sense.

Problems start when you try to keep all those rules in your head at the same time — thus the golf cliché, “paralysis by analysis.” In management, as in golf, the greats make it all look effortless, which only adds to the sense of mystery and frustration for those who struggle to get better.

That caveat aside, Project Oxygen is noteworthy for a few reasons, according to academics and experts in this field.

H.R. has long run on gut instincts more than hard data. But a growing number of companies are trying to apply a data-driven approach to the unpredictable world of human interactions.

“Google is really at the leading edge of that,” says Todd Safferstone, managing director of the [Corporate Leadership Council](https://clc.executiveboard.com/Public/Default.aspx) of the [Corporate Executive Board](http://www.executiveboard.com/), who has a good perch to see what H.R. executives at more than 1,000 big companies are up to.

Project Oxygen is also unusual, Mr. Safferstone says, because it is based on Google’s own data, which means that it will feel more valid to those Google employees who like to scoff at conventional wisdom.

Many companies, he explained, adopt generic management models that tell people the roughly 20 things they should do as managers, without ranking those traits by importance. Those models often suffer “a lot of organ rejection” in companies, he added, because they are not presented with any evidence that they will make a difference, nor do they prioritize what matters.

“Most companies are better at exhorting you to be a great manager, rather than telling you how to be a great manager,” Mr. Safferstone says.

PROJECT OXYGEN started with some basic assumptions.

People typically leave a company for one of three reasons, or a combination of them. The first is that they don’t feel a connection to the mission of the company, or sense that their work matters. The second is that they don’t really like or respect their co-workers. The third is they have a terrible boss — and this was the biggest variable. Google, where performance reviews are done quarterly, rather than annually, saw huge swings in the ratings that employees gave to their bosses.

Managers also had a much greater impact on employees’ performance and how they felt about their job than any other factor, Google found.

“The starting point was that our best managers have teams that perform better, are retained better, are happier — they do everything better,” Mr. Bock says. “So the biggest controllable factor that we could see was the quality of the manager, and how they sort of made things happen. The question we then asked was: What if every manager was that good? And then you start saying: Well, what makes them that good? And how do you do it?”

In Project Oxygen, the statisticians gathered more than 10,000 observations about managers — across more than 100 variables, from various performance reviews, feedback surveys and other reports. Then they spent time coding the comments in order to look for patterns.

Once they had some working theories, they figured out a system for interviewing managers to gather more data, and to look for evidence that supported their notions. The final step was to code and synthesize all those results — more than 400 pages of interview notes — and then they spent much of last year rolling out the results to employees and incorporating them into various training programs.

The process of reading and coding all the information was time-consuming. This was one area where computers couldn’t help, says Michelle Donovan, a manager of people analytics who was involved in the study.

“People say there’s software that can help you do that,” she says. “It’s been our experience that you just have to get in there and read it.”

GIVEN the familiar feel of the list of eight qualities, the project might have seemed like an exercise in reinventing the wheel. But Google generally prefers, for better or worse, to build its own wheels.

“We want to understand what works at Google rather than what worked in any other organization,” says Prasad Setty, Google’s vice president for people analytics and compensation.

Once Google had its list, the company started teaching it in training programs, as well as in coaching and performance review sessions with individual employees. It paid off quickly.

“We were able to have a statistically significant improvement in manager quality for 75 percent of our worst-performing managers,” Mr. Bock says.

He tells the story of one manager whose employees seemed to despise him. He was driving them too hard. They found him bossy, arrogant, political, secretive. They wanted to quit his team.

“He’s brilliant, but he did everything wrong when it came to leading a team,” Mr. Bock recalls.

Because of that heavy hand, this manager was denied a promotion he wanted, and was told that his style was the reason. But Google gave him one-on-one coaching — the company has coaches on staff, rather than hiring from the outside. Six months later, team members were grudgingly acknowledging in surveys that the manager had improved.

“And a year later, it’s actually quite a bit better,” Mr. Bock says. “It’s still not great. He’s nowhere near one of our best managers, but he’s not our worst anymore. And he got promoted.”

Mark Klenk, an engineering manager whom Google made available for an interview, said the Project Oxygen findings, and the subsequent training, helped him understand the importance of giving clear and direct feedback to the people he supervises.

“There are cases with some personalities where they are not necessarily realizing they need a course correction,” Mr. Klenk says. “So it’s just about being really clear about saying, ‘O.K., I understand what you are doing here, but let’s talk about the results, and this is the goal.’ ”

“I’m doing that a lot more,” he says, adding that the people he manages seem to like it. “I’ve gotten direct feedback where they’ve thanked me for being clear.”

GOOGLE executives say they aren’t crunching all this data to develop some algorithm of successful management. The point, they say, is to provide the data and to make people aware of it, so that managers can understand what works and, just as important, what doesn’t.

The traps can show up in areas like hiring. Managers often want to hire people who seem just like them. So Google compiles elaborate dossiers on candidates from the interview process, and hiring decisions are made by a group. “We do everything to minimize the authority and power of the manager in making a hiring decision,” Mr. Bock explains.

A person with an opening on her team, for instance, may have short-term needs that aren’t aligned with the company’s long-term interests. “The metaphor is, if you need an administrative assistant, you’re going to be really picky the first week, and at six months, you’re going to take anyone you can get,” Mr. Bock says.

Google also tries to point out predictable traps in performance reviews, which are often done with input from a group. The company has compiled a list of “cognitive biases” for employees to keep handy during these discussions. For example, somebody may have just had a bad experience with the person being reviewed, and that one experience inevitably trumps recollections of all the good work that person has done in recent months. There’s also the “halo/horns” effect, in which a single personality trait skews someone’s perception of a colleague’s performance.

Google even points out these kinds of biases in its cafeteria line. The company stacks smaller plates next to bigger ones at the front of the line, and it tells people that research shows that diners generally eat everything on their plate, even if they are full halfway through the meal. By using the smaller plate, Google says, they could drop 10 to 15 pounds in a year.

“The thing that moves or nudges Googlers is facts; they like information,” says Ms. Donovan, who was involved in the management effectiveness study and the effort to encourage healthier eating. “They don’t like being told what to do. They’re just, ‘Give me the facts and I’m smart, I’ll decide.’ ”

The true test of Google’s new management model, of course, is whether it will help its business performance of the long haul. Just a few hours after Mr. Bock was interviewed for this article in mid-January, [Google surprised the world by announcing](http://query.nytimes.com/gst/fullpage.html?res=9E01E2DD113EF932A15752C0A9679D8B63&ref=ericeschmidt) that Larry Page, one of its co-founders, was taking over as C.E.O. from Eric E. Schmidt.

Though Mr. Schmidt explained the move on Twitter [by writing](http://twitter.com/ericschmidt/status/28196946376130560), “Day-to-day adult supervision is no longer needed,” the company made clear that the point was to speed up decision-making and to simplify management.

Google clearly hopes to recapture some of the nimbleness and innovative spirit of its early years. But will Project Oxygen help a grown-up Google get its start-up mojo back?

[D. Scott DeRue](http://www.bus.umich.edu/facultybios/FacultyBio.asp?id=000624962), a management professor at the Ross School of Business at the University of Michigan, applauds Google for its data-driven method for management. That said, he noted that while Google’s approach might be unusual, its findings nevertheless echoed what other research had shown to be effective at other companies. And that, in itself, is a useful exercise.

“Although people are always looking for the next new thing in leadership,” he said, “Google’s data suggest that not much has changed in terms of what makes for an effective leader.” Whether Google’s eight rules will still apply as the company evolves is anyone’s guess. They certainly aren’t chiseled in stone. Mr. Bock’s group is continuing to test them for effectiveness, watching for results from all the training the company is doing to reinforce the behaviors.

For now, Mr. Bock says he is particularly struck by the simplicity of the rules, and the fact that applying them doesn’t require a personality transplant for a manager.

“You don’t actually need to change who the person is,” he says. “What it means is, if I’m a manager and I want to get better, and I want more out of my people and I want them to be happier, two of the most important things I can do is just make sure I have some time for them and to be consistent. And that’s more important than doing the rest of the stuff.”

My notes – Sept. 12, 2019

the Eight Habits of Highly Effective Google Managers

What employees valued most?

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Golfer -> manager

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