Books

Think Like a Data Scientist — No Coding Required

In his new book, *The Little Book of Data*, ad-tech executive Justin Evans ’93CC shows that anyone can succeed in our information-based economy.

By
David J. Craig
|
Nov. 17, 2025

Mushakesa / Shutterstock

Data analytics are all the rage in US workplaces these days, and unless you’re a computer whiz, it’s easy to feel intimidated when coworkers start casually discussing

SQL queries, Python scripts, and regression models at Monday-morning staff meetings. But how much technical knowledge is really necessary to get involved in data science projects, or even to lead them?

Less than you might think, argues Justin Evans ’93CC, a twenty-year veteran of the data industry — now global head of innovation and insights at Samsung’s advertising division — who has limited technical training himself. We spoke to Evans about the lessons he’s learned over his career and what he hopes readers will take away from his book.

You write that data science isn’t as scary as it can seem, and that anybody who is computer literate can get involved in it.

I’m a perfect example. I was an English major at Columbia College. I loved James Shapiro’s and Edward Taylor’s Shakespeare classes, medieval literature with Kathy Eden, reading *Paradise Lost*. Then I went to business school and was the one guy who didn’t know Excel. But I eventually took a job at Nielsen Company, one of the largest data companies, and discovered that data is a playground for creativity. You can achieve unexpected insights by smashing together different datasets — say, household demographics and grocery shopping, or retail purchase data linked to home addresses. It’s all about “yoking together” unlike things, as Samuel Johnson said of the seventeenth-century metaphysical poets. My brain works that way, searching for novel connections, and it’s turned out to been an asset. I’ve also found that business leaders often need help distilling their priorities into simple questions that data can answer. That too demands creativity, as well as communication skills.

Along the way, you say, you had to build up the courage to ask dumb questions.

I can’t tell you how many meetings I’ve been in where technologists are essentially having their own private conversations, throwing around acronyms and complicated terms that nobody else in the room can understand. And I’ve had to learn to politely say, “We need to slow down and explain all of this. Every acronym, every term, needs to be defined and understood by everybody here.” That was initially hard for me, as it would be for anybody, because you have this inner voice saying, “You should have paid closer attention in statistics class! They’re smarter than you!” But it’s important for everybody to be involved in the conversation if you’re going to accomplish great things together.

To be fair, I've also observed that executives on the business side don't think carefully enough about how data experts can advance their missions, and so they don't always formulate good questions to turn into data products.

Surely some technical knowledge is needed to actively participate in data science. What's the minimum?

You need to have a business person's comfort with computers and math. It's helpful to know how to use spreadsheets. But you don't need to write code, know advanced statistics, or build dashboards. You can now tell an AI platform like ChatGPT to clean up piles of raw information or even locate public data that's relevant to your business questions, and then help you perform the analysis. Small business owners can do this. If you're a plumber trying to decide where to advertise, you can go to government databases and look up average incomes or rates of homeownership in various geographic areas. If you're a museum director hoping to diversify your audience, you can analyze the home addresses of your visitors and then target your outreach efforts to neighborhoods where you're not drawing visitors. For more advanced projects, you'd obviously want to partner with data experts. But the critical thing is to ask smart questions and figure out where to find the data to answer them.

One of the surprising arguments in your book is that most companies are sitting on troves of data whose value they fail to appreciate, whether from sales or foot traffic or subscriptions or web visits.

This is true for companies of nearly every size and across industries. With certain exceptions: BigTech, like Facebook, Amazon, and Google, and the most sophisticated Fortune 500 companies. But many organizations struggle with harvesting and capturing value from their own data. It can still be challenging to clean data and make it usable with consistent quality levels. It can also be hard to make the case that there's going to be a strong return on investment. But for a company to have survived, it must have found a niche, and that distinct position in the marketplace almost always means they are sitting on valuable data they can spin into innovation.

Justin Evans

Tell us more about the kinds of untapped potential you see.

I describe a particularly dramatic example in my book, involving a business-to-business magazine, *Progressive Grocer*, that used to be mailed to almost every grocery store in the US. One of its employees, Scott Taylor, recognized that its subscriber list could be sold to major food manufacturers as a database of every single grocery store in the US. Until then, food companies weren't quite sure where their products were being sold because there was no comprehensive source of information about grocery stores nationwide. The magazine, by selling its mailing list, generated a new source of revenue for itself and enabled food companies to operate more efficiently and profitably.

But the possibilities are endless. I've advised an organization that runs community gardens in and around Denver and was able to help its leaders attract philanthropic support by quantifying the total amounts of food their sites produce, as well as the impact on gardeners' well-being —measured by surveys they completed before and after getting involved. It seems simple, but it was actually a sophisticated data-

analysis project that put hard numbers on a soft phenomenon, and better positioned the organization to raise money.

People are often intimidated by data analytics, you write, because they wrongfully assume that datasets must be huge, comprehensive, and perfect to be useful. But you recount many examples of groundbreaking projects that have worked with messy, incomplete datasets.

John Tukey, an American statistician and a pioneer of data science, famously argued in the 1960s that data analysts must be willing to "err moderately in order that inadequate evidence shall suggest the right answer." Data science isn't about creating mathematical proofs, but solving real-world problems. He knew what he was talking about. He'd helped crack the Nazis' Enigma code during World War II.

Many historic breakthroughs in data analysis have come during times of war or plague. John Graunt is recognized as the first epidemiologist for learning to anticipate the spread of the bubonic plague in seventeenth-century London by analyzing, by neighborhood, where people had succumbed to the disease, using flawed but nevertheless useful public death records.

In business, the same principles of utility apply. I had an older colleague impress this upon me early in my career. I was fretting about the details of a new advertising product I was about to pitch, second-guessing whether our consumer demographics model was good enough. He said, "Is it better than the next best alternative?" If the answer was yes, then that was what mattered. That's the standard to which you should hold a data project. It doesn't need to be perfect to be valuable. It just needs to work.

One section of your book is devoted to ideas about how data science could be used to hold powerful corporations and government agencies to account, which is fascinating.

Consider how difficult it is today to know if health insurance companies are fairly covering claims. The problem is that only the companies know how many claims they're denying and how much they're reimbursing for certain procedures, so insured individuals have little leverage to argue their decisions. But imagine if a nonprofit were to invite citizens to snap screenshots of their claims and the companies' subsequent decisions, and to upload them to a centralized database for analysis. Each insurance company could then be given a score based on its level of

trustworthiness. Are they compensating customers fairly?

I believe there are thousands of possibilities like this, where creative uses of data can make the world a better place.

Of course, innovative uses of customer data raise privacy concerns, particularly in the for-profit sector.

In the book, I spend a lot of time distinguishing good data people from bad data people. Good data people feel they have a duty of faith to their clients and customers. Their job is to find the best answer in the data, preferably in the context of a mission that's good for the world. I profile a young analytics professional I call Priya, to protect her identity, who used analytics to hunt down human traffickers and rescue their victims. I contrast her with some Big Tech bros I met who confided to me, fairly casually, that they were actively seeking to circumvent privacy standards and exploit their users. The Big Tech guys ended up rich. Priya worked for a nonprofit. Integrity pays, I guess; just at a lower rate. The passion that good data people feel for their work is what matters. And I believe every leader today can access that passion and leverage data to accelerate their mission and their careers.

Read more from ***David J. Craig***

Guide to school abbreviations

All categories >
Read more from ***David J. Craig***