

**SDS PODCAST**  
**EPISODE 442**  
**FIVE MINUTE**  
**FRIDAY:**  
**DATA SCIENCE AS**  
**AN ATOMIC HABIT**



(00:05):

This is Five-Minute Friday on Data Science as an Atomic Habit.

(00:19):

In 2013, I was sitting on a coach bus travelling through Switzerland. The coach was packed and so one of the few remaining empty seats left me squeezed between a burly and bald young man, about the same age as me and exactly as bald, though admittedly he was a fair bit burlier.

(00:37):

During the journey we got chatting and the man -- who identified himself as an entrepreneur who created a travel-tips website -- described to me the “process-oriented” approach he’d adopted in order to fulfill long-term life goals. For example, he aspired to be a writer and so he committed to the process of writing a blog post twice a week, every single week, come hell or high water.

(01:01):

In particular, he blogged every single Monday and every single Thursday and in his posts he blogged about data-backed, evidence-based approaches to living a better life. This process-oriented approach that he’d infused into many aspects of his life was indeed an example of the kind of scientifically-backed technique that he would blog about in some of his many posts.

(01:23):

The experimental evidence behind a process-oriented approach suggests that quantity leads automatically to quality as well as to enduring results. If you want to be an outstanding photographer, instead of fretting about how to take the perfect photo, commit to taking at least one photo every single day and experiments suggest that, not only will you reliably improve at



photography over time, but the quality will paradoxically tend to be better than if you were to explicitly focus on quality itself.

(01:57):

I could reel through examples of a process-oriented approach being superior to a goal-oriented approach all day long. If you want to be fitter, committing to the process of showing up at the gym a specific number of days per week is more effective than chasing a particular weight goal. If you want to be a great writer, commit to blogging on a specific schedule instead of chasing the goal of being a bestselling author.

(02:21):

Which brings me back to the guy I was sitting next to on the bus in 2013. I checked out his blog, I liked it, and I subscribed to it. He wasn't kidding: He blogged every single Monday and Thursday without fail. Sometimes the articles were long, sometimes they were very short -- indeed, on rare occasions the post was as simple as a couple sentences to explain that due to an exceptional circumstance x he can't blog properly today but will have a longer one for us next time. Critically, he didn't let the habit slip once for years and years.

(02:52):

And, boy, did this process-oriented approach ever pay off for him. Since 2013, that guy on the bus, James Clear, has amassed over a million subscribers to his blog. And his writing ability sure did become world-class. In October 2018, he published his first book, called *Atomic Habits*, and his commitment to regular blogging helped him compose such a well-written book that it became a #1 New York Times bestseller that has sold several million copies and been translated into over 40 languages.



(03:27):

Atomic Habits provides an outstanding review of a comprehensive range of sound, evidence-based tools and techniques for molding yourself into whatever sort of person you may wish to be. I've purchased many copies of the book for family members and friends, and so I of course do recommend reading it in full to make the most of James' clear guidance (note that this is a genuinely heartfelt recommendation; I am in no way compensated for stating these views).

(03:54):

I could talk about the book for hours, but in the interests of providing you with a FiveMinuteFriday that really is only in the ballpark of five minutes long, here are my three primary takeaways.

(04:04):

Forst, shift from a goal-oriented mindset to a process-oriented one. So, following along with the examples that I've had already in this podcast but now relevant to data science, if you're a data scientist who yearns to excel at writing software, then you could, say, commit to committing one line of code or more to GitHub every single day. Over time, such a process nearly guarantees gradual accumulation of the results you desire.

(04:34):

Second takeaway is: focus on small, easy behavioral shifts that compound. This is the essence of what James coined as an "atomic" habit. Committing to committing one line of code every day is so small and so easy that it's hard to make an excuse not to do it. Consistency is the key to making a habit stick initially. As the habit gradually becomes routine, it'll feel easier and easier to write more code on some days and the benefits of your coding experience will compound into a massive change in your software-writing capability.



(05:10):

Third and final takeaway is that there are countless specific, concrete techniques suggested in the book. I've taken on many of them in my own life, including maintaining a habit journal, stacking habits together, arranging environmental cues to effortlessly nudge myself toward good habits, and various approaches for minimizing distractions to stay focused on the most fulfilling tasks. Perhaps I'll devote future FiveMinuteFridays to some of these individually. For now, I'd like to make special mention of "not breaking the chain," a technique where we use a visual cue of habit continuity to keep us motivated. Continuing our software-commit example with an idea I recently read from a blog post by Malcolm Barrett called "Data science as an atomic habit" (which directly inspired this podcast topic) GitHub automatically provides a calendar-based heatmap of your commit history. For any given day, it's colored green if you committed code and gray if you didn't -- so you could endeavor to never break the continuous chain of green days.

(06:16):

Invisibly and slowly at first, but eventually conspicuously and rapidly, my three atomic-habit takeaways (especially paired with the rest of James' book) have the capacity to dramatically transform your self-perception, your very identity. So, if you'd like to be a data analyst or a data scientist or a software developer or a machine learning engineer or a great presenter or an A.I. entrepreneur -- whatever it is you'd like to deeply identify as, it won't happen overnight, but the Atomic Habits approach is a sure way to make your way to whomever you'd like to be.