

Article from:

Actuary of the Future

November 2013 – Issue 35

Predictive Analytics: 'You've got to dig it, to dig it.'

What Theolonious Monk can teach us about getting into predictive analytics.

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Editor's Note: This article is a reprint from the same article in June 2013 issue of Future Fellows and is republished with permission.

he quote in the title of this article was a piece of advice found scribbled in the notebook of one of Theolonious Monk's protégés. Monk, an eccentric jazz pianist, was famous for disseminating wisdom about jazz, art, and life through oddly-phrased mantras. Nonsensical at first blush, these words have become increasingly relevant to me as I navigate the actuarial exams and venture into the world of predictive analytics.

Regular readers of actuarial publications have surely taken note of the recent prominence of articles about predictive analytics. Two key takeaways from these articles have been clear: predictive analytics is hot and you better learn more about it if you want to stay ahead of the curve. So how do lowly young actuarial students build their chops as predictive modellers before they actually work in that space? To answer that question, we look to Monk. One way to learn to *dig it* is to find the people who are doing the most relevant and interesting work in that field, study the way they think and write, and then try to emulate their work.

In the case of Monk's protégé, he was instructed to explore Parker, Ellington, Armstrong, and others. For our purposes, we should look to professionals who design innovative predictive models and, more importantly, find effective ways to communicate their findings to a large audience. A great example of someone who fits the bill is *New York Times* blogger and nerd extraordinaire Nate Silver.

First making his mark in the world of baseball analytics, Silver has now become most famous for his statistical analysis and predictive models of presidential and congressional races. The popularity of his blog, *FiveThirtyEight*, skyrocketed during the 2012 election season, resulting in the release of his bestselling book, "The Signal and the Noise," and countless TV interviews and appearances.

Silver's success could just be chalked up to him being a good modeller. He intuitively understands the situation he is trying to model. He is an avid baseball fan, which might be one reason why PECOTA (the system he developed to forecast player performance) is still used today in organizations across the Major League.

But perhaps Silver's biggest strength is his ability to effectively communicate his analyses to a broad audience. While he accurately predicted the electoral outcome of every state in the 2012 presidential race (and 49 out of 50 in 2008), he was able to do so in an understandable way, presenting his complex models both graphically and verbally without watering down their content, such that *FiveThirtyEight* became one of the most visited pages on the *New York Times* site. That, I think, is the more impressive feat. Nate Silver is to predictive analytics what Malcolm Gladwell is to social sciences; two analytical minds writing about complex problems and making them both accessible and interesting to the casual observer.

As you prepare for a career in predictive modelling, you should make a concerted effort to read the work of writers like Nate Silver and emulate their writing styles in your own work. Note that Gladwell and Silver are only two of the many of great writers working in this space who are worth studying. Find their books and articles on predictive modelling, engage in self-study, and then utilize those skills on whatever data is available to you. Ultimately, if you are interested in learning more about predictive analytics, make sure you that you follow Monk's advice: learn from the best people doing what you want to do.