

Making the case for data-based decisions



**RICK
BRIMEYER**

**Brimeyer
LLC**

He is president
of the Ames, Iowa,
consulting firm

Spring is in full bloom and with it comes the return of baseball. As a lifelong baseball fan and numbers geek, I've watched with particular interest during the past decade as this tradition-laden game has evolved thanks to improved, data-driven decision making.

"Moneyball: The Art of Winning an Unfair Game," by Michael Lewis tells the story of how the low budget Oakland Athletics first used analytics to temporarily gain an advantage on their deeper pocketed rivals.

Decades of collected data and the accessibility of computing power provided an untapped resource that the Athletics leveraged.

The book provides insights into some of baseball's strategic myths and sacred statistics that were debunked, as well as the struggles to overcome the deeply inbred traditions that protected them. As a former player with limited natural ability, I earned what little playing time I received through my knowledge of the game and ability to do the little things.

So it was fascinating to read, contemplate and conclude that a significant portion of the baseball dogma that I had embraced as a player and later as a fan was invalid. The new rules were not grounded in the opinions of a new or louder boss or coach, but rather in statistically proven facts.

The Athletics' advantage was real but short-lived as today every Major League team employs a small staff of geeks. Ironically, some of the richest teams now have the deepest analytical staffs.

Watch any game today and you will see seemingly crazy defensive shifts and strategies that must have Casey Stengel rolling over in his grave, all driven by verifiable data. "Moneyball" is baseball's story of overcoming the seven deadly words, "But we've always done it that way!"

There are perhaps three levels of competency when using data within your organization. The beginner level is to start using data to make objective, quantifiable observations. Stating that our customer support team "usually" answers the phone by the third ring means different things to different people.

To prove the point, independently survey team members on what percent various qualitative terms (never, rarely, occasionally, sometimes, typically, usually, often, quite often, almost always, always, etc.) mean to them. On the other hand, stating that our customer support team answers the phone by the third ring 73 percent of the time means the same thing to everyone.

The intermediate level is using data to make decisions. Encouraging team members to put together a simple business case, even for a relatively small outlay of a few hundred dollars, can encourage employees to think like an owner:

- What is the proposed outlay?
- What is the estimated annual value of the expected improvement?
- What is the expected payback period or return?

The expert level is effectively using statistics with your data to really understand your business. Just because a sample taken from Process A has a defect rate of 1.8 percent and a sample from process B has a defect rate of 1.6 percent doesn't mean that Process A is truly better (although someone who prefers Process A from an intermediate level organization almost will certainly use the data to argue accordingly).

A skilled statistician can explain (in plain English) what the chances are that Process A is better versus the difference in the samples resulting merely from random variation. Six Sigma is the common toolbox used for effectively applying statistics to workplace problems.

Like a Major League Baseball team, only a small number of people need to possess the skills to perform the statistics. What's critical is that they can effectively communicate their conclusions and that the rest of the organization can identify opportunities for analysis and, most importantly, accept the conclusions when they differ from tradition.

Like any change, there will no doubt be inertia that will require leadership to overcome. Rest assured, if Major League Baseball can overcome its sacred traditions, your organization can as well.

RICK SAYS

Decades of collected data and the accessibility of computing power provided an untapped resource that the Athletics leveraged.