People Analytics and Monday Morning Quarterbacking
What you can learn about hiring and talent recruitment from the National Football League

In 1999, pro football fans eagerly anticipated the NFL’s annual player draft with more excitement than usual. Most experts were raving about the quality of the quarterbacks graduating college that spring — including Donovan McNabb from Syracuse and Kentucky’s Tim Couch — as well as the top running back, Heisman Trophy winner Ricky Williams from Texas. That apparent wealth of talent posed a real dilemma for teams with the highest draft picks in deciding whom to select.

For Cade Massey — now a practice professor in the Operations, Information and Decisions Department at the University of Pennsylvania’s Wharton School, and a West Texas native with football in his veins — watching that year’s draft was more than just a fun weekend diversion. It would be a life-altering experience.

Then a graduate student in economics at the University of Chicago, Massey was in a group studying decision-making — particularly interested in psychology and how overconfidence affected the choices made by business leaders. It struck him that the NFL draft, and the data surrounding the performance of players that were ultimately picked, offered a remarkable window into how high-stakes personnel decisions are made.

“I thought, ‘Let’s take this as an opportunity to test psychology in a real-world environment,’” says Massey. His research over the next decade — which showed that teams that accumulate multiple draft choices are better off than teams that trade up for one high pick in search of a superstar — led him to become a leader in the rising field of “people analytics” — using hard data to make human resource decisions once made by pure instinct.

Professors at the Wharton School have become thought leaders in the arena of helping business executives and corporations make smarter decisions. And the $10 billion-a-year National Football League — where attracting and retaining the best talent takes place under a national spotlight — is proving to be an almost ideal learning lab for everything from how managers should evaluate skilled talent to how
communication styles can motivate the workforce, whether that’s a pro football team or a team of software developers.

Massey says the tools of sports analytics — for example, drilling deep into player statistics to come up with an ideal baseball lineup, as dramatized in the film “Moneyball” — are now flowing to major American corporations and their HR decisions. “It’s a short hop,” he says, “from talking about the NFL draft to talking to the School of Management at Yale about their admissions policy, or to Google about their recruiting processes.”

Massey’s work focuses on a specific problem — how NFL teams handle their key recruiting tool, the annual April draft of college players, in which teams select in reverse order of where they finished in the previous season. After the 1999 draft and its seeming bevy of blue-chip quarterback candidates, Massey followed the performance of the players who were selected — how long each stayed in the NFL, how many games each started, and whether they made the annual Pro Bowl for the top players. He found there was only a slight, and not particularly significant, chance that a player chosen one slot higher at a position — like quarterback — would have a better career.

“It’s a coin flip,” Massey says. Indeed, most of the highly touted quarterbacks in that 1999 draft that Massey researched turned out to be flops, including Couch, who was taken with the No. 1 overall pick by the Cleveland Browns. Only one top-round selection — McNabb, with the Philadelphia Eagles — took his team to a Super Bowl. Massey’s later research also showed that, over time, no team and its general manager is particularly better skilled at making player selections than any other.

But Massey notes there’s still a valuable lesson in that research — for NFL general managers, but also for corporate recruiting managers. Given the unpredictability of how draft choices perform, a team holding two second-round choices would, on average, be better off than a team with a No. 1 pick.

“If no one team is better at identifying talent — if they’re not better at identifying what offensive tackle to pick — then they should give up trying to do that and reallocate their resources in getting more picks,” Massey says. For corporate decision-makers, that advice translates to taking more chances — crowdsourcing to get more ideas on projects, for example — and trying to lose the fear of getting something wrong.

Massey says the lessons he’s learned from studying pro football have strong implications for companies off the playing field. He notes that the earlier adapters of people analytics have tended to be businesses that generate data from things such as sales figures or the number of investment banking deals, but firms that numerically rate employee performance are also generating useful data over a number of years.

In recent years, Massey has worked in multiple ways with the non-profit Teach for America, which recruits thousands of new teachers annually and is creating reams of data, useful in predicting who to hire or where to allocate its newer recruits. Such work doesn’t take place in the glorified spotlight of the NFL draft, but pioneers in people analytics such as Massey say the same data tools can recruit a winning team of teachers for schools for poverty-stricken communities.

For Massey, there’s no better example of smart people analytics than the NFL. “These guys run $120 to $130 million payrolls,” he says, “and everything they do is observed and critiqued by millions of people, and this is where they have evolved — toward highly analytical evaluations of players in an effort to get it right. I think we can learn a lot from these organizations.”
4 Ways to Leverage the People Analytics in Your Organization

Wharton Professor Cade Massey has studied how data can lead to better decisions about talent in pro football — but what does that mean for executives who work in more conventional talent development and human resources? Here are some tips for people management based on his studies of the NFL:

1. Collect the Data
You can never collect enough data about your workforce. It’s true that your office might not be like the NFL, with its reams of statistics about passing or rushing yardage, games started, or selections to the annual Pro Bowl. But you’ll be surprised at the amount of concrete measurements — from sales figures to in-house evaluations — that can be collected and analyzed in your line of work. “Most firms do, ultimately, translate performance into quantitative scores,” Massey notes, “and as soon as you’ve done that you can start more rigorous analysis.”

2. Analyze — With Patience
Be patient in collecting that information. The NFL has been gathering stats on its top performers since the league formed back in 1920. Massey stresses that while firms often want instant results, it takes time — multiple years, typically — to gather a large database to yield useful analysis. Massey cites the non-profit Teach for America, with years of information about recruiting and retention, as a leader: “They say things like, ‘We’re never going to be done.’”

3. Stay Humble
Business leaders should avoid overconfidence. Massey’s NFL research found teams who accumulated more draft choices were better off than those that gambled on their smarts in using one high pick to draft a future superstar. At conventional firms, better data can help HR managers rethink some past, faulty assumptions.

4. Take a Gamble
Take more chances and consider more options. The most highly regarded general managers in pro football still recruit dozens of players who don’t stick in the NFL — and business executives shouldn’t fear mistakes either. Pro football is actually typical of a world in which four out of five product development ideas fail; top leaders learn how to manage failure as well as success.

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