

# Tom Herman: ‘CAI helps us make the tough calls’

CAI Game Book, consulting give coaches the strategic tools to win more games

It's not often that a delayed flight in a Buffalo blizzard leads to a game-changing innovation, but that's exactly what happened when Michael McRoberts found himself stuck in an airport with too much time to kill.

Watching a full day's worth of football games on multiple screens in an airport restaurant, McRoberts was struck by just how often coaches were making poor strategic decisions that cost them points — and wins. Game after game, team after team, smart, seasoned coaches were making the same misguided choices, over and over again.

McRoberts, a statistician working in the financial sector, searched the Internet for a database of play-by-play information, and immediately the picture became clear: The coaches didn't have the data they needed to make the right calls. They understood the game, but they didn't understand the numbers behind common scenarios such as fourth-down decisions, timeout calls and clock management.

*If only they had better information.*

Thus, the idea for Championship Analytics, Inc., was born.

Now, six years later, McRoberts' patented in-game football strategy system is in use by more than 60 teams, including one NFL franchise and 35 FBS college programs. Of those FBS teams, six finished the 2017 season ranked in the Top 25, three won conference championships, 14 won bowl games, and one team is playing for the national title.

“Coaches have so many things to manage every day, there's no way they can spend hours crunching numbers and analyzing statistics from thousands of football plays over decades of games. That's where CAI comes in,” McRoberts says. “We take the guesswork out of real-time decision-making.”

That starts with the CAI Game Book, a first-of-its-kind playbook that delivers the proper decision for any scenario from the opening kick to the end of the game, customized for each week's matchup. Using the CAI Game Book, coaches will never have to burn a timeout while deciding whether to punt, kick a field goal or go for it on fourth down. In fact, coaches and coordinators can plan ahead during each drive and series of downs, knowing on first or second down what the decision will be for every game scenario.

In addition to the CAI Game Book, CAI provides pregame notes and consultation with a weekly breakdown of each opponent; postgame notes and review of the previous week's strategic performance, including recommendations; and national analysis that keeps coaches educated and aware of unusual situations that might come up during a game.

“CAI has become a crucial part of our in-game communication, especially when it comes to making tough calls in tight situations,” says Texas head coach Tom Herman, who has work with CAI during the 2017 and 2018 seasons. “Our staff also better understands strategy thanks to CAI, which in turn makes us better teachers of the game to our players.”



## CAI by the Numbers

- CAI serviced 52 FBS teams during the 2018 season
- 39 of these teams played in a bowl, 12 finished in the playoff top 25, 9 participated in conference title games, 7 played in a BCS bowl and 2 were in the FBS playoffs
- CAI clients in 2018 won on average an extra game from the year prior to joining CAI
- The average CAI team went for it on fourth down 24 times in 2018, whereas opponents attempted an average of 20 fourth-down plays.
- CAI had 6 of the top 9 and 14 of the top 25 teams nationally in fourth-down conversions.
- While being far more aggressive on fourth down, CAI teams maintained nearly an identical fourth-down conversion rate (53.2%) as non-CAI teams (53.6%).

In fact, CAI clients in 2018 posted a winning percentage 11% higher than that of their last season without CAI, which equated to 1.3 additional wins than they had before working with CAI. In college football, more than any other sport, one more win per season can mean the difference between a successful postseason or staying home for the holidays.

Coaches have found that diving deeply into details such as when to take a delayed knee, when to hold intentionally and how to make third-down play calls that set up successful fourth downs has been instrumental in improving their strategy, their confidence and their outcomes.

“No coach can contemplate all the possible scenarios that can occur from game to game — but CAI can,” says Iowa head coach Kirk Ferentz. “The analysis of unique circumstances and play calls is something I look forward to every week, because it helps me think about things a bit differently and consider what I would do in unpredictable, game-changing spots.”

NC State head coach Dave Doeren, who has worked with CAI since the 2015 football season adds, “CAI is a critical part of our preparation for each game. CAI's analysis helps us prepare for all sorts of unusual situations we might not have considered otherwise. CAI is the best in the business!”

For CAI's McRoberts, that kind of validation makes a long day in a snowed-in airport well worth the inconvenience.

“I have so much respect for the amount of work football coaching staffs put in,” McRoberts says. “CAI is here to empower them to make the best strategic decisions, based on real numbers and probabilities, to get the most wins.”