Getting into the SWING

Westborough company’s HitTrax aims to help hitters and pitchers improve

By Bob Tremblay

OLLISTON — With helmet on head and bat in hand, the reporter steps up to home plate in the netted batting cage at Anderson Baseball Academy. Matt Anderson, the academy’s owner, stands behind a protective screen and tosses the ball at batting-practice speed.

To the side of the cage is HitTrax, a baseball simulator resembling a large iPhone, about 3 1/2 feet tall and 26 inches wide. Equipped with sensors, it measures how fast the ball is coming to home plate and how fast it leaves. It also measures how far the ball goes and whether it is a hit or not. A screen near HitTrax shows in real time the trajectory of the ball – ground ball or fly ball – and where on the field it is headed. HitTrax can also simulate the stadium where the player is hitting. This being Massachusetts, the reporter is taking his cuts in a virtual version of a well-known park in Boston.

The feedback arrives instantly, and it’s clear the reporter won’t have to worry about writing his Cooperstown acceptance speech. With 42 swings, he puts 36 balls into play but only enough hits to compile a .278 batting average. The farthest he drives the ball is 156 feet, about half the distance needed to even reach a certain emerald-hued left field wall.
The good news for baseball and softball players with actual talent is that they can use this information to become better hitters and better pitchers. And they have, Mike Donfrancesco, HitTrax’s creator and founder of InMotion Systems LLC, the Westborough company that produces the simulator, tells the story of a minor league player in St. Louis who was hitting the ball hard but producing mostly ground balls. Donfrancesco showed the player the HitTrax results. Armed with this information, the player adjusted his swing and the ball not only found its way into the air more consistently, it traveled farther and had more velocity.

“We can tell you what your batting average is for each section of the strike zone,” says Donfrancesco. “We can dissect your strike zone and see where your hot and cold zones are where your strengths and weaknesses are. HitTrax identities the gaps in your swing and shows you where you need improvement.”

Released last year, HitTrax has already scored with the Collegiate Baseball Newspaper. At the American Baseball Coach- es Association Convention in Dallas in February, the Arizona-based publication gave HitTrax its Best of Show award.

“The award reflects the committee’s view of the value HitTrax provides the baseball community and highlights the important role baseball analytics plays in any training regimen,” says Donfrancesco.

For example, in-depth reports generated by the system chart progress over time and identify performance trends. Players have the opportunity to compare their statistics against a national database of players at similar skill levels, from Little Leaguers to the professional ranks.

Count Anderson as a fan. “I love the system,” he says. “I used a radar gun before, but this is much more accurate and gives the players so much more feedback. It tells what areas of the strike zone where you hit well and where you don’t hit well, which is big for us. If you can’t hit the ball hard and throw the ball hard, you can’t play at a high level, and this type of feedback is huge for kids who want to play at the college level or beyond.”

Lake D’Aloia, 13, a student at Hopkin- ton Middle School who has just taken his rips in the cage, calls HitTrax “very awesome. It shows you how you’re doing like you’re on the field.”

Anderson adds the system’s entertainment value also appeals to his young charges. Simply make a few adjustments to the system and a virtual home run der- by can be played as well as simulated games. In fact, while the majority of HitTrax have been sold to baseball academies, they have also found a home at entertainment centers where players can also select the stadium of their choice. So far, systems have been sold throughout the United States and Canada. Without getting into specifics, Donfrancesco says the price is similar to golf simulators on the market.

The owner is no stranger to the baseball diamond either. The Rhode Island native played baseball at Boston University before the sport was discontinued. After col- lege, he played amateur ball. He admits he could have used HitTrax’s guidance to help him adjust his swing to handle inside pitches.

The Westborough resident also has a background ideal for the type of virtual simulation HitTrax provides. Before start- ing the company, Donfrancesco worked as vice president of sales and business de- velopment for Thales Visionix, a Billeri- ca-based company that designs, develops and delivers helmet mounted display and motion tracking technology for de- fense and aerospace applications. “My background over the past 15 years was in tracking with realtime applications where we would track people in computer-gen- erated environments,” he says. “It’s where this whole simulation and visualization idea came from for baseball.”

The product was three years in the mak- ing. “I woke up one Saturday morning with an epiphany of how I could actual- ly make a visible business out this baseball simulator,” says Donfrancesco. “I started with a business plan and I started writing continuously for two weeks. A partner wrote the code, and eventually we came up with a rough but very good prototype. The product was well received so I quit my job and started InMotion.”

HitTrax represents the company’s first product, while more are in development.

The owner points out that HitTrax can also be used simultaneously with a hitter and a pitcher. “You can tell your batting average against pitch type,” he says. “You can see you batting average against a pitcher throwing heat vs. one who isn’t, and make adjustments accordingly. Players can hit off a tee, too.”

While HitTrax is not likely to transform an anemic hitter into Big Papi, it can go a long way to making good players better, where virtual lessons yield on-field results.

For more information, visit hittraxbase- ball.com.