John W. Henry, the 54-year-old principal owner of the Boston Red Sox, was born with a genius for numbers. A college dropout, he made billions of dollars for himself and clients over the course of two decades as one of the premier players in the global futures markets.

Eminently rational, he is not someone who believes, as do so many in Boston, in the Curse of the Bambino: that the team's soul-crushing, 85-year dry spell without a World Series championship is punishment for what was certainly the worst baseball deal ever, the decision to sell Babe Ruth to the New York Yankees just before the 1920 season. Henry may have filled his Fenway Park office with reminders of the team's unlucky past, including a photo of a retired Babe Ruth in Yankee pinstripes shaking hands with Ted Williams. But no, Henry is not the kind of man who believes that the team he and his partners bought for a record $690 million in February, 2002, is jinxed.

Stoic as he is, even Henry couldn't bear what happened last Oct. 16, when, from his seat beside the Red Sox dugout in Yankee Stadium, he watched Boston lose the deciding seventh game of the American League Championship. "I was very angry," he says with typical understatement, recalling how Sox Manager Grady Little had chosen to leave in his obviously tiring ace pitcher, Pedro Martinez, deep into the eighth inning. The Sox held a three-run lead and were just five outs from the World Series. But Little kept Martinez on the mound until the Yankees tied the score, setting the stage for a game-winning homer by Aaron Boone in the bottom of the 11th. To some fans, it was the Sox' most painful loss in a long history of painful losses.
Henry gave himself a day to wallow in his team's misfortune. Then, before the World Series had even begun, he huddled with his key executives to discuss Little (who was soon fired), the pitching staff, and the team's other weaknesses. "We were focused on 2004 and beyond," recalls Henry. What's beyond is the hope of breaking the Curse once and for all. Making the playoffs every single season is part of the plan but certainly wouldn't be enough to banish the ghosts in Boston. Even a single World Series title might not do the trick. "We want to win multiple World Series," says Red Sox Chairman Thomas C. Werner. It is an audacious -- some would say outlandish -- goal for a team whose drought extends back to 1918. "Most new owners of sports teams say they just want to win one [World Series] ring," says David F. D'Alessandro, CEO of John Hancock Financial Services Inc. and one of the team's limited partners. "These guys are trying to build a dynasty."

But first the Sox must find a way to vanquish the Yankees, their rivals in the American League East and a team that is far richer and far more successful. Henry and his partners often cast their quest in mythic terms. "We are like the Jedi Knights taking on the Evil Empire in Star Wars," says Sox CEO Larry Lucchino.

If that's the case, then their light saber is sabermetrics, a system of detailed statistical analysis that's supposed to gauge ballplayers' abilities with scientific precision. Baseball has always been a game of statistics, but sabermetrics posits that traditional measures like batting average and runs batted in are of limited use in predicting whether a player can actually help win ball games. By looking at more refined measures -- the ability to get on base or to strike hitters out with the fewest possible pitches -- managers are supposed to be able to suss out overlooked talent among the hundreds of players in the league and hire them on the cheap. It's the value investor's approach to baseball.

Although the system has been around for decades, until recently it was ignored by just about everyone other than Rotisserie league players who use such data to draft their fantasy teams. But now sabermetricians have become almost as sought after as power-hitting shortstops. They won respect after General Manager Billy Beane used the approach to take his small-market Oakland Athletics to the playoffs four seasons in a row. His ability to build a first-rate club with a third-rate budget was captured in last year's best-selling MoneyBall by Michael Lewis.

Plenty of other teams are trying to mine the reams of data generated by the game, but Henry, more than almost anyone else around, is perfectly suited to this bloodless, brainy approach. He is also the first owner to combine a commitment to this new discipline with a willingness to spend big, very big, on stars. "The Red Sox are a more dangerous team," says Steve Moyer, president of Baseball Info Solutions, a sabermetrics company that Henry has hired. "They're like the A's with money."

The A-Rod Factor

During the off-season, Boston shelled out big bucks in bidding wars for Keith Foulke, an All-Star closer, as well as Curt Schilling, the ace who was named co-MVP of the 2001 World Series for shutting down the Yankees. But the team also signed Pokey Reese, who hit just .215 last year. Why? Because his glove is golden -- and a detailed analysis showed the high-scoring Sox
needed fielding more than they needed the big bat of Todd Walker, whom Reese replaced. "This may be the best Red Sox team ever assembled," brags Henry.

To help pay for all that high-priced talent, Henry and his partners have shrewdly cashed in on the entertainment value of the Red Sox. "They deserve an A-plus in marketing and promoting the team," says Andrew Zimbalist, an economics professor at Smith College who is an authority on baseball finance. He estimates the Sox have boosted revenues 30%, to $230 million, in two years, making them baseball's second most lucrative franchise. The new owners also control 80% of a highly profitable regional sports network that broadcasts Sox games and brings in revenues of more than $90 million a year.

But as the fiercest rivalry in professional sports resumes on Apr. 16 -- in a nationally televised game at Fenway -- the Sox are still the underdogs by almost every measure. "The off-season ended just like the ALCS, with a Yankee home run," concedes Sox Executive Vice-President Charles Steinberg. In mid-February the Yankees signed Alex Rodriguez, one of baseball's biggest talents, whom the Sox had wooed but then abandoned after the players' union rejected the team's plan to save money by restructuring his contract. The Yankees put together a clever deal -- in which Texas Rangers will pick up $67 million of the $179 million remaining on A-Rod's contract -- that the union could accept. Most sportswriters predict that, with A-Rod, the Yankees will once again finish first in the AL East.

That deal only underscores the economic chasm between the two clubs. The Red Sox' opening-day payroll this year was $127 million, the second highest in the majors. Grand as that is, however, it's dwarfed by the $184 million the Yankees spent. "Baseball still doesn't have an answer to the Yankees," says Henry.

And it's not just that the Yankees are still by far baseball's richest club -- with revenues that Zimbalist estimates range from $320 million to $340 million. They also have far more financial flexibility. While Yankees owner George Steinbrenner snapped up his team from CBS Inc. for a mere $10 million in 1973, Henry and his partners had to take on heavy debt -- estimated to be as high as $300 million -- to finance their purchase. And soon they must either renovate or replace 34,000-seat Fenway, the smallest ballpark in the majors, which could cost hundreds of millions more.

On first impression, Henry doesn't seem like much of a match for The Boss. He was initially so bashful about seeking new clients for his futures firm that in 1985 a manager at E.F. Hutton & Co. told him: "You're the best adviser I have, but I'm going to take you off our approved list if you don't hire a marketing person." Even today, "for all his money, he isn't pretentious," says Leo Melamed, chairman emeritus of the Chicago Mercantile Exchange. "But if I was George Steinbrenner, I'd sure be peeking over my shoulder," adds John M. Damgard, president of the Futures Industry Assn. "John Henry is one of the smartest guys in the world."

And although he is just as competitive as Steinbrenner, Henry realizes "that doesn't mean you have to be a dictator," says D'Alessandro. Instead, Henry runs the team collegially, with his two key partners: Werner, whose company produced The Cosby Show and who once owned the San Diego Padres, and Lucchino, a baseball veteran who previously was president of both the Padres
and the Baltimore Orioles. "The three of us talk every day," says Henry, "and I don't think I could exaggerate what good friends we are." Adds Leo Hindery Jr., the former chief executive of Yankees Entertainment & Sports Network (YES), which broadcasts Yankee games: "It's one of the best partnerships in baseball today."

The hired help is pretty impressive, too. When the Sox were looking for a new general manager in 2002, they eventually promoted one of their own: Theo Epstein, the assistant general manager, who was just 28 -- making him the youngest GM in the game's history. His appointment stunned the baseball world. On the day it was announced, Lucchino went to the White House for a baseball reception hosted by President George W. Bush, former owner of the Texas Rangers. When the President entered the room, he said: "Hey, Lucchino, I hear you hired a 28-year-old GM. He'd better be good," Lucchino recalls. "Mr. President, he went to Yale," the Sox CEO quickly retorted. "Strike two," Bush responded. Henry says Epstein is off to a good start. "I could not be happier with him as GM," says the team owner.

Riding the Trend

Henry first became fascinated with baseball statistics growing up on his family's corn and soybean farms in Arkansas and Illinois. "My room would come alive," he recalls, as he listened to the late Harry Caray broadcast the St. Louis Cardinals, kept meticulous score, and updated batting averages in his head. Henry showed far less promise as a player. "When I went to baseball camp, I set their record for strikeouts," he admits. "But that didn't dent my enthusiasm. My dream was a job where I could afford season tickets to the Cardinals."

After finishing high school in California, where his family had moved, Henry drifted in and out of several colleges, studying philosophy but never earning a degree. "Those were the flower power days," he explains. Henry's innate abilities blossomed after his father died and he took over responsibility for the family farms. In an effort to learn more about the markets, Henry opened a managed futures account with a man trading frozen chickens. The trader soon doubled Henry's $5,000 stake by selling a contract when the price rose a penny and buying when it fell a penny. "His strategy worked pretty well, but I looked at the long-term trend and saw that if the market went one way long enough, you'd be wiped out," says Henry. The experience helped inspire a trading philosophy that has guided him ever since: that the best way to make money is to figure out the underlying trends that drive markets -- and to get out quickly when they reverse. He has no use for visionaries. "Market participants generally don't understand how little they know about the future," he says.

Henry set up shop in 1981 in California with just his own money to invest. It was tough going at first, and on more than one night Henry worked so late he just slept at the office. But by the mid-'90s, he was managing $2.5 billion and, like other successful hedge funds, charging steep fees: 4% of assets and 15% of profits. In effect, that guaranteed his small firm at least $100 million a year. Today at the offices of John W. Henry & Co. in Boca Raton, Fla., the company's headquarters, "we have computers looking for trends in 74 markets around the world," says Mark Rzepczynski, who runs the firm on a day-to-day basis. Once a trend is identified, they ride it -- sometimes for months or years -- until they're convinced it has peaked. Says Henry, who as chairman oversees the business (often from Boston during baseball season): "It's not for me to
ask why the price is going up or down but rather to pay attention to what is actually happening. And over time, that gives us a big advantage."

Henry's philosophy -- known as "trend-following" -- is hardly unique. But by sticking to his formula, he gets exceptional results. The annualized returns of 10 portfolios that have been open at least five years range from 9.5% to a dazzling 29.6% at the Financial & Metals Portfolio, which has been trading since 1984. Rzepczynski figures that since 1982, "we've generated about $2.4 billion of profits for our clients."

20,000 Games of Catch

Like most big leaguers, Henry's baseball career began in the minors. In 1989 he bought a Triple-A team and a Senior League team, where he met his second wife, who was programming the team's computers. Shortly afterward he acquired a small stake in the Yankees and avidly attended the partners' meetings. "It was George's show," Henry recalls. "We [the partners] had a great relationship, but [the meetings were] sort of like a father dealing with his children." Back then, Henry praised Steinbrenner's big-spending ways, even writing him a thank-you note at the beginning of every season.

In 1999, Henry bought the Florida Marlins from H. Wayne Huizenga for $150 million. The Marlins were a mess: Huizenga had gutted the payroll, and the Fish desperately needed a new stadium. Henry believed he could be the savior. But after three years, he told Commissioner Bud Selig he had had enough. The Florida legislature was balking at putting up tax dollars for the stadium, and Henry had run up a loss of some $50 million on the team. Selig was sympathetic, though many fans weren't. "You've been a great owner, and we still want you in this game," he told Henry.

In early November, Henry called Lucchino, who had joined forces with Werner to bid for the Red Sox from the Jean R. Yawkey Trust. "How's it going in Boston?" he asked. "We're dialing for dollars," Lucchino responded, "and you're just what we need." So Henry flew out to Los Angeles to meet Werner. After they hit it off, Henry signed on, promising: "Whatever money you don't have, I'll provide." At the time, Henry expected a price of about $330 million for the 53% of the Sox owned by the Yawkey Trust. But then the Sox' limited partners decided to sell as well, pushing the cost close to $700 million. Henry eventually put in the $158 million he got from selling the Marlins. After a protracted bidding war and a final nine-hour meeting of the trustees, Henry and his partners' bid was accepted. "It was one of the most shocking moments of my life," he says.

The new owners were not exactly welcomed in Boston. Many fans were deeply suspicious of the outsiders who had wrested control of New England's crown jewel. To mend fences, the partners quickly called on the city's corporate leaders. Henry, Werner, and Lucchino all bought homes in Boston. And when the season began, they abandoned the aloof approach of the previous owners. On Father's Day, for example, 20,000 dads and their kids played catch at Fenway. The players saw a change as well. "You see them around the clubhouse a lot more than other owners," says pitcher Tim Wakefield, who is now in his tenth season with the team.
Numbers Game

With all that debt on the books, finding new ways to make money was also a priority. "They took a franchise that had been moribund and started to apply modern baseball marketing techniques," says D'Alessandro. For starters, they squeezed 1,417 more fans into Fenway. They added 274 seats atop the fabled Green Monster in left field and 200 more on the right field roof. That helped the Sox set an attendance record last year. The new owners also signed corporate sponsors. FleetBoston Financial (FBF), now part of Bank of America (BAC), paid for hitters' and pitchers' boards in center field; Anheuser-Busch (BUD) is underwriting the new right field roof; and last September, Bruce Springsteen played the first-ever rock concert held at Fenway.

Now the partners are launching a new company -- New England Sports Enterprises -- to further exploit the Sox brand. NESE will pursue deals from sports marketing to team consulting services; the company may even buy another sports franchise. And unlike the baseball team -- which must share 34% of adjusted revenues with other clubs -- "we don't have to share NESE's revenues with anyone," says Red Sox COO Michael Dee, who heads the unit.

The real moneymaker, though, is the partners' 80% stake in New England Sports Network (NESN), the cable network with 3.7 million subscribers that broadcasts Sox games. "NESN is why the Sox sold for close to $700 million," says former MLB Commissioner Fay Vincent. "You can afford to pay almost any price if you own the programming." Especially in Red Sox Nation. "NESN regularly wins prime time during the season," says its president, Sean McGrail. And Werner, one of the most successful TV producers in history, is pushing new initiatives, including wiring Fenway so the Sox can broadcast their home games in high definition. NESN is a gold mine, with revenues around $90 million and a cash-flow margin in excess of 30%, says John M. Mansell Jr., senior analyst at Kagan Research.

The Yankees haven't been doing too poorly, either. Thanks to a big victory regarding the fees Cablevision Systems Corp. (CVC) must pay YES Network -- which broadcasts Yankees games and is 33%-owned by the Yankees -- YES revenues could soar to $230 million this year, figures Zimbalist. Most industry experts believe both the Sox and the Yankees are lowballing the rights fees they receive from their cable affiliates, since that income must be shared with other teams. But Zimbalist estimates the Yankees' total revenues could be some $100 million above those of the Sox this year. In other words, the gap between the two teams may have actually widened since 2001.

And for all that Henry and his executives have done to squeeze more people into Fenway, the team is in a painful and expensive bind at the park. Public financing for a new stadium seems unlikely -- and it may even be unwise, considering the Boston fans' reverence for their historic ballpark. "Fenway is such a strong part of the chemistry of the Sox, there is a lot of risk in moving out," says Werner. That's why Henry's group is hoping the 1912 park where Babe Ruth broke into the Bigs can somehow be renovated to serve fans for another 50 years or so.

The truth of the matter is that the Sox are hitting a wall. "We're maxing out on everything," Henry admits. Every game is already sold out. Ticket prices are the highest in the majors. That means the Sox payroll has gone about as high as it can, which could have a severe impact on the
team as early as next year. Four of the Sox' biggest stars -- Martinez, pitcher Derek Lowe, shortstop Nomar Garciaparra, and catcher Jason Varitek -- could become free agents at the end of the season. All are demanding huge new contracts, but "we can't afford to re-sign all of them," warns Lucchino.

That's why sabermetrics has become such an important part of the Boston strategy. Henry is not a guy who goes in for half-measures. After buying the Red Sox, he first tried to sign Billy Beane. When that fell through, he did the next best thing: He hired Bill James, the writer and baseball thinker who invented sabermetrics, as senior baseball operations adviser.

James became convinced back in the 1970s that much of what passed for traditional baseball wisdom was in fact deeply flawed. Take time-honored statistics like runs batted in and batting average. RBI, which can have as much to do with batting order as ability, turns out to be a crude gauge of talent. Nor is a player's batting average the best measure of how adept he is in creating runs, since it ignores walks -- a perfectly effective means of getting to first base that also helps tire out the pitcher. Similarly, while the sacrifice bunt has long been an acclaimed strategy, "a large data analysis suggests that's almost always the wrong thing to do" because it reduces your chances of scoring runs, says Neal Traven, co-chairman of the Society for American Baseball Research's (SABR) statistical analysis committee.

No Panacea

The Sox are now using sabermetrics to get more for their money. "There are immense inefficiencies in the market for players," says James. Some of them were right in Boston, at least before the arrival of Henry. The team was lavishing more than $6 million a year on both Jose Offerman and John Valentin, two mediocre infielders. Using sabermetrics, the Sox have cut the overpaid and hired the underemployed: Last year they picked up slugger David Ortiz for just $1.25 million and Kevin Millar for $2 million. Both became stars. "They actually cut the payroll by $9 million, yet improved the team," says Doug Pappas, chair of SABR's business of baseball committee. New manager Terry Francona will also use sabermetrics in game-day decisions. "Sometimes your eyes can be deceived in this game," he says.

Still, sabermetrics is hardly a panacea. Last season, the Red Sox made a highly controversial decision to forgo a closer in favor of a "closer by committee" system, in which different relievers took on the job. On paper, it looked great. But in practice, the bullpen blew up. So the Sox reverted to tradition by snagging Foulke.

Foulke, of course, cost the Sox plenty. But the Sox have been far more prudent than the Yankees, who make less use of sabermetrics and whose payroll is bloated with more than $500 million in guaranteed contracts through 2010. "No sabermetrically oriented team would ever have signed Jason Giambi to the backloaded deal the Yankees did," says Pappas. "He's already 33 and has injury issues." The Yankees have promised him more than $20 million a year from 2006 to 2008.

Even after all he has done, though, Henry is not about to join in the traditional new-season cry in Boston: "This is the year!" That would violate his statistical principles. If the Red Sox make the playoffs, he figures the chances of winning are only 12.5% -- maybe as high as 15%. "Everyone
in baseball is well aware that anything can happen in a short series. That's why we need to take a long-term perspective and make the playoffs every year," he says.

But if the Red Sox finally do win the Series, "this town would explode," says Johnny Pesky, the former shortstop who was the goat in the 1946 World Series, the first of four the Sox lost in the seventh game. And John Henry -- who says he doesn't believe in such things -- would be immortalized as the man who finally broke the Curse. By William C. Symonds

With Tom Lowry and David Polek in New York and Joseph Weber in Chicago