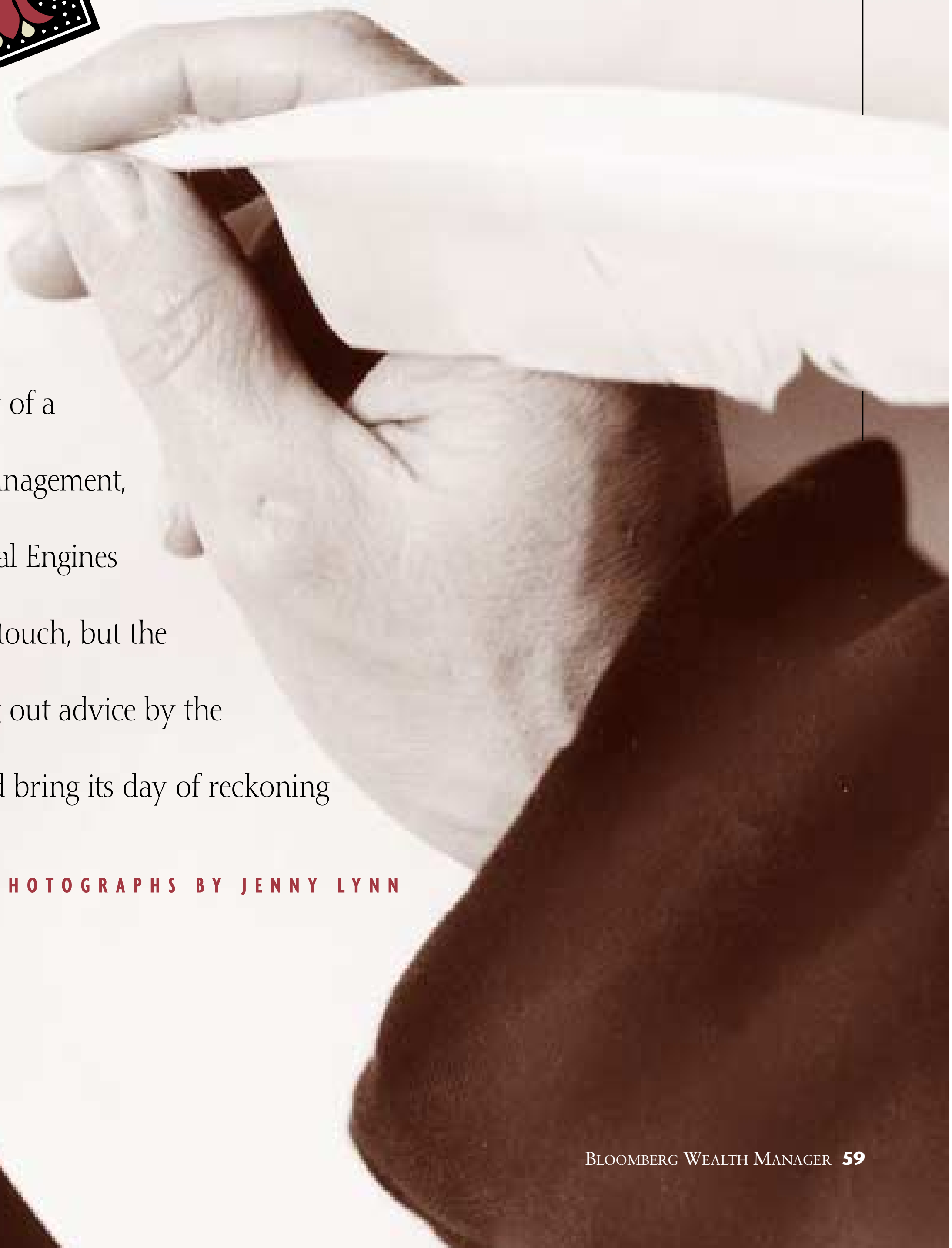
Apocalypse Now?

Yeah, right



BY MARY ROWLAND

Poised for the coming of a new age in wealth management, providers like Financial Engines may lack the human touch, but the science of churning out advice by the megabyte could bring its day of reckoning

PHOTOGRAPHS BY JENNY LYNN

A group of 200 senior planners have gathered for the Institute of Certified Financial Planners' Master's Retreat at Squaw Creek, a resort nestled in the valley near Lake Tahoe. It's a flawless October Sunday, a bit frosty still, with the sun just peeking over the top of the Sierra Nevada, the aspens turning golden yellow. God, it appears, is in his heaven, and all's right with the world of financial planning.

Up at dawn for a working breakfast, the planners listen to Gail Buckner from the Putnam funds talk about baby-boomer demographics and the growing wealth of America's ethnic minorities. "You are definitely in the right place at the right time," she tells the planners as they sip their coffee and munch on fresh fruit and bagels. "What a wonderful time to be a financial planner!"

The elect are still feeling the glow from Buckner's presentation when Jeff Maggioncalda takes the pulpit to talk about Financial Engines, the company founded by Nobel laureate Bill Sharpe to provide customized advice to consumers on how to pick investments for their 401(k) plans. Maggioncalda, company president, is a smart guy who's no doubt heard that it's best to open with a joke to break the ice and set people at ease. "I accepted this speaking engagement a while ago," he begins, "and since then *Dow Jones Investment Advisor* featured a story about Bill Sharpe. The magazine cover was a caricature of Bill riding a big engine, with people sort of falling off the track. The coverline read 'Blood on the Tracks: Will Bill Sharpe's Financial Engines Derail Professional Financial Planning?' When I saw the story, I thought, 'This is going to make my talk in Squaw Creek really exciting.' " Faint laughter. Very faint.

Maggioncalda doesn't seem to notice the tepid response to his humor; he forges ahead, warning the planners about the scourge that awaits as surely as plagues for the fallen. "Technology will have as profound an effect on your business as demographics," he says as a segue from Buckner's presentation. "But it will happen in two to five years instead of 25 years." Indeed, he adds, "Financial Engines will have a bigger impact on the financial-services industry than Amazon.com did on the book industry."

Buckner's vision of the 21st century as the golden age for financial planning—at least in terms of increased demand—is no secret to the computer engines revving up in Silicon Valley. And they plan to be ready when it dawns. Bob Veres, publisher of *Inside Information,* a newsletter for financial advisers, compares the competition aimed at financial planners to a tsunami. "Everything looks quiet now," Veres told a group of planners gathered in Dallas last fall. "But it's going to hit out of nowhere, and we're going to be swamped." Noting the many advisers who prefer not to see what's coming, he draws parallels to the catastrophe that befell Galveston, Tex., in 1900: It was a sunny, clear day, with

The Box of Revelation

UNDER THE HOOD OF Financial Engines is an economic-forecasting machine to pose future market and inflation scenarios, a returns-based performance-attribution machine to forecast how investments will perform given market and inflation conditions, a portfolio-optimization machine to construct portfolios that will deliver the most return for the acceptable amount of risk, and finally a Monte Carlo–simulation machine to pose various possible outcomes.

Sign on, enter the required information, and the simulator starts to work. It shuffles and reshuffles the deck of possible scenarios thousands and thousands of times. The result is a probability distribution of the investment's possible outcomes.

All this fancy technology results in some simple answers: What is the chance I will reach my goal? It's 88 percent. How much annual income might I have in retirement? Upside, $117,000; median, $69,500; downside, $42,700. How much might I lose over the next year? $28,300 or more. Answers like these are not available from traditional financial-planning programs—or traditional financial planners. They represent a new way of thinking about investment risk. And they offer a new simplicity in presenting it to consumers. The likelihood that investors will accomplish their goal is represented by a weather icon. If the skies are cloudy, they can improve the chances of a sunny retirement by saving more, working longer, or taking on more risk. As they make these changes, the sun peeks out and, eventually, shines full on. But if they improve the weather forecast by taking on more risk, the "value at risk," or the amount they might lose, in the next year goes up, too.

Wayne Folkart, who helped perform due diligence for the model, is a certified public accountant with a master's degree in business administration and manager of executive benefits at Merck. "We've assembled and disassembled the model many times," Folkart says. Each time, he says, he became more impressed with its elegance. The first thing that appealed to him was that the analysis is conducted in terms of mutual funds rather than asset classes. "The largest driver is style analysis, and then there is a small alpha applied in terms of turnover, expense ratio, and whether the fund has consistently beaten its benchmark," he says. What he likes most about the model, though, is that it is forward-looking, it gives a range of probabilities rather than a specific point estimate, and it's stable over time.

Before signing on with Financial Engines and offering it as a service to employees, Merck conducted a series of pilot tests. In the first, Folkart asked a dozen Merck money managers to work with the model for six months to look at the underlying algorithms and become familiar with the way it provided investment advice. "These are people well versed in portfolio theory, and we were looking to see if there were any nonsensical results," Folkart says. The Engines passed with flying colors. Next Merck did a pilot with a small group of employees to see if they understood the model and if they could use it properly. "The answer was a resounding yes, and all the feedback was overwhelmingly positive," Folkart says. Finally came a wide pilot with 500 employees. When employees were asked if they changed some aspect of their plan or got value from the project, more than 90 percent said yes.

Similarly, Hallmark Cards looked at four different vendors before selecting Financial Engines to provide advice to employees, according to Tresia Franklin, director of benefits. The decision was an easy one, though, because "although we have offered general investment education programs," she said, "our people still had the same basic question: 'Which mutual fund should I buy?' " When the product was introduced in November 1999, more than 300 people had signed on before Franklin's package had even arrived at her desk.

"Financial Engines really holds the academic high ground," says Andrew Hunt, an investment consultant in the London office of Watson Wyatt Worldwide who completed a lengthy due diligence on Financial Engines for a Silicon Valley client. "They don't cut corners anywhere. They have the brains to back up the theories." —*MR* temperatures in the 80s, when a hurricane warning was issued for Galveston. A few Texans left for high ground, but most ignored the warning. The next day, the hurricane wiped out more than 8,000 people. "They couldn't bury them all," Veres told the group. "They just had to pile the bodies up on shore and burn them."

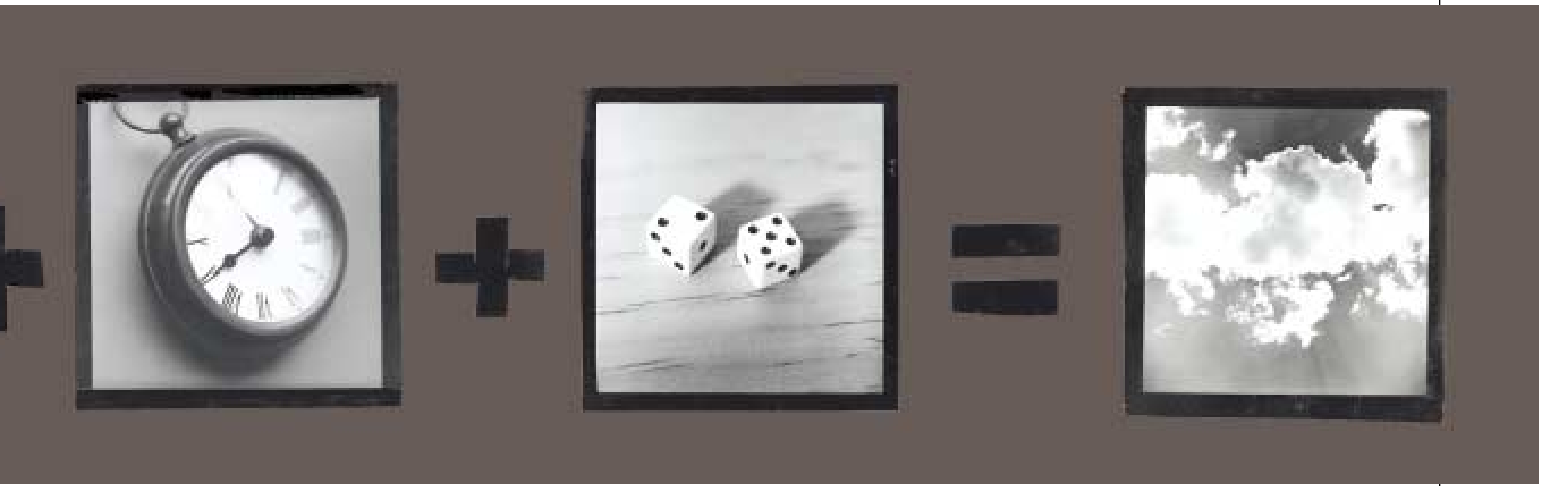
Although as yet it's more like an ill wind than a plague, coming up from the south is the Web site technology designed by Financial Engines to help middle Americans make decisions about every aspect of their financial lives, beginning with their 401(k) plans. "Our focus is to bring financial planning to people who cannot afford any of the traditional ways of getting it," Sharpe says. "Financial planning is a big domain, and it's going to be a while before we're close to doing all of it. But we will be doing 95 percent of the important stuff soon." And although the advice is geared to the middle class, it will be quality stuff.

"We will provide the best advice you can get anywhere, no matter what you can pay. Period," says Christopher Jones, vice president of financial research and strategy for Financial Engines. "It will be some time before a really good full-service financial planner will be out of business. But it would be naive to think financial planning will not be affected in a significant way."

Approaching from the north is the Web site designed by myCFO, an on-line service ramping up to provide the truly wealthy with a personal chief financial officer. Like Financial Engines, myCFO has no dearth of brainpower. Started by Jim Clark, founder of Netscape and Silicon Graphics, the company includes on its board John Chambers of Cisco Systems and Tom Jermoluk of Excite@Home. Art Shaw, former senior vice president of electronic brokerage for Charles Schwab, is the company's chief executive. "There are over seven million high-net-worth American households spending more than $195 billion a year on financial services, and their numbers are growing at least 8 percent a year," read a company news release that announced the new management team, which includes Frank Tirelli, a former regional managing partner of Deloitte & Touche.

Still, like the Texans who ignored the warnings, some planners are pooh-poohing the quality of the fuel in Sharpe's engines, picking at the returns-based style analysis he uses to select mutual funds and at his forecasting technology. Naysayers who gathered after Maggioncalda's presentation at Lake Tahoe dismissed the threat without much fanfare: The Financial Engines model pretends a precision that is impossible given the uncertainty of its assumptions, it does not use a Monte Carlo simulation for life expectancy, it does not attempt to determine the investor's risk tolerance, it lacks the human touch, it pretends to be science when investing is art, it's a flash in the pan, it's the ultimate in academic arrogance. Perhaps. But this plague is likely to claim its share of victims.

After his presentation at Lake Tahoe, Maggioncalda took time over lunch at an outdoor restaurant overlooking the High Sierra to talk about the clash between financial advisers and Financial Engines. The temperature had climbed to 70 degrees on a brilliant autumn day, and he wore a wool checked sport coat and khaki pants, short-cropped hair, and



wire-rimmed glasses. Maggioncalda travels a good deal and makes short work of it so that he can spend more time with his young family. But for now, at least, he looked relaxed. He'd flown into Reno late Saturday night and arrived at Squaw Creek in the early morning hours. In just a short while he'd have to get back to Silicon Valley, where his wife, a Stanford University anthropology professor, and their three children were planning a Sunday afternoon outing.

Not yet 31 years old, Maggioncalda exhibits no lack of either confidence or conviction. "The only thing wrong with Jeff," one of the company founders said when they hired him for the job, "is that he's only 26 years old." Maggioncalda is puzzled about the sometimes hostile reception he's gotten from advisers. Planners have been a bit disingenuous, Maggioncalda says, in suggesting that the Financial Engines customer is *their* customer. "If you have $25,000 or $50,000, good luck in finding a financial planner to sit down with you," he says. "So I think it's a little bit hard to fault us for having a solution that appeals to the vast majority of people out there who don't have the wealth or complexity that merits a huge amount of detailed personal interaction."

What surprises him most though—shocks him really—about the reaction from advisers is that they question the methodology behind the Engines. "People are unclear about the amount of intellectual capital in this thing," he says. "Bill has been one of the leading thinkers for decades, and we took our time here. We didn't cut corners. We spent $20 million and two years on this. I can guarantee you we didn't forget about anything." So advisers make their biggest mistake in thinking they can beat Financial Engines on portfolio design, Maggioncalda says, noting that several planners have approached him after his presentations to tell him that their own expertise is in making inflation assumptions or predicting interest rates or forecasting returns. "So these folks are saying, '*I am* the black box. It's sort of a gray-matter box and I am the wizard.' "

Forget being the guru, he suggests. "We have many, many more resources and [greater] expertise than any of these folks do, and you can expect that if it's our core competence, we're going to do a pretty good job of it." The wise adviser, he goes on, will accept the Financial Engines portfolio model as the best thing available, use it for his clients, and look for a way to add value elsewhere. "We're building the equivalent of an Intel chip," Maggioncalda says. "You'll see the emergence of our portfolio as the model. It will be a common retail-brand advisory service available to everybody globally." As for those advisers who resist that model, "Fine. We'll compete with them. Because to do that well requires quite a bit of scale."

One area in which Maggioncalda believes the model works especially well is retirement planning. From the start, two things about retirement-planning software really got under Sharpe's skin. First was the use of a point estimate to show people how much money would be in their retirement pot. The point estimate made the nest egg seem set in stone whereas, in fact, there is a 50 percent chance the investor will have more and a 50 percent chance he will have less. Second was the notion of risk. If the investor didn't have sufficient retirement savings, most software added stocks, boosting the risk level to close the gap without telling the investor that he was taking on more risk. In other words, the investor sees the upside of increasing exposure to equities but not the downside—short-term volatility, or what institutions call value at risk.

Financial Engines' research showed that the three biggest questions consumers had were these: Will I have enough money when I retire? What investments should I be making now? What should I do when the market changes? To answer those questions, Financial Engines built a model with three deliverables: it forecasts a future set of assets and liabilities, makes specific recommendations on products, and tells people what to do when the market changes.

To the consumer who uses it, the answers look deceptively simple. But there is nothing like Financial Engines anywhere. This is the democratization of finance on the Web. Even big pension funds, many of them Sharpe's clients, do not have a product like the Engines, although they pay big bucks for something similar. "It's hard to say a household would be ill-served using the same stuff that Calpers [the California state pension fund] pays $100,000 to use once a quarter," Maggioncalda says.

The wise adviser will accept the Financial Engines portfolio model as the best thing available, use it for his clients, and look for ways to add value elsewhere, says Maggioncalda. "We're building the equivalent of an Intel chip"

Some functions are available elsewhere, such as the value-at-risk analysis used by major banks and Wall Street firms for their own portfolios. But nobody else has put these features all together, let alone delivered them cheaply to individuals on the Web.

Financial Engines is available on-line at www.financialengines.com to individuals who pay $14.95 a quarter. It's also available to employees at a growing number of companies like Merck, Hallmark Cards, and 3Com, at a per-person cost to the company of $30 to $50 a year either out of 401(k) plan assets or out of its own purse, as well as to participants of 401(k) providers like Merrill Lynch. Users receive specific fund recommendations on their 401(k) plans and broad allocation advice on other household accounts.

Meet the Makers

WHATEVER CRITICS might say about the Engines, nobody has a bad word to say about Bill Sharpe, a gracious, charming man with integrity to match his wits, who won the Nobel Prize in 1990 for his work on the capital-asset pricing model, which looks at the relationship between the risk and return of financial securities in an efficient market. A short, slight man with a goatee and oversize eyeglasses, Sharpe, who, when I met him last fall, wore the Silicon Valley uniform—a blue Ralph Lauren shirt with a red polo player, khakis, and sneakers—has been consulting to pension plans of corporate giants like Hewlett-Packard and AT&T for 20 years. But he had long intended to focus his brainpower on helping individual investors understand the trade-off between risk and return, to provide "some simple rules of thumb for the average bloke."

Indeed, when he cleaned out his office after retiring as a professor at Stanford University last year, he came across half of a book, called *Sensible Investing,* that he'd written 30 years ago—like an early version of *Investing for Dummies.* But it wasn't until the coming together of the computer and the Internet that he felt he could deliver to individuals the kinds of tools and services he'd been giving to institutions. And so it was that Sharpe decided a couple of years ago to post investment advice for individuals on his Web site. But his pal Joe Grundfest, a Stanford law professor and former Securities and Exchange commissioner, convinced Sharpe that if he did not make his effort a commercial venture, he wouldn't be able to attract the talent he needed to create a product that would really help people. Along with Craig Johnson, chairman of Venture Law Group, the two founded Financial Engines, hiring Jeff Maggioncalda as its first employee in September 1996.

Once Maggioncalda came aboard, the company began to focus on the 401(k) plan for a number of obvious reasons. About $1 trillion has been placed in these plans, yet many of the participants have never invested before. Fewer than one in five consult with a financial professional about the plan, according to *The Industry Standard,* a technology-industry magazine. *The Industry Standard* also reports that more than 30 percent of 401(k) participants simply split their money evenly among the options offered, a "strategy" that gives financial professionals the willies. Advice to 401(k) plan participants is not only much needed but also simpler to provide than to investors with taxable accounts because investment options are limited and there are no current taxes to consider. "It's a much easier problem to solve," Maggioncalda says. TowerGroup in Needham, Mass., estimates that the number of 401(k) participants with access to on-line advice will grow from 9.6 million in 1999 to 32 million in five years. During the same period, the number who use the services will grow from 1.7 million to 13.7 million, TowerGroup says. —*MR*

Jeff Maggioncalda and Bill Sharpe

On-line Enlightenment

THE MOST NOTABLE on-line competition for Financial Engines is the 401(k) Forum, which had the field to itself for a couple of years. In response to the threat from Financial Engines, the Forum completed a major overhaul in November, adding analysis on 403(b) and 457 plans; changing its name to mPower; hiring Dennis Chookaszian, the CEO from CNA Insurance Cos., to head its efforts; and sidelining Drake Mosier, the company founder. "We're creating a new set of products to directly serve this market, like the Retirement Report Card, which quickly gives you a grade and then tells you what to do to improve it," says Steve Deschenes, company president.

The Forum also added a Monte Carlo simulation for projecting retirement income, although Deschenes brushes this off as unimportant. "We found that most people are comfortable just getting a single answer," he says. The Forum also provides allocation advice on assets outside the 401(k) plan. "Others [meaning Financial Engines] view the outside assets as fixed and give an allocation for the 401(k)," Deschenes says. "We don't think that makes sense. They need as much help on the outside stuff."

One consultant, who did due diligence on both Financial Engines and mPower for a client, compares the advice they provide this way:

1. Discovery Phase Here, for information collecting, the consultant preferred the 401(k) Forum. "Financial Engines does a better job of gathering hard data about the investments you have," he says. "But mPower does a better job of figuring out where you're coming from, especially in regard to risk."

2. Forecasting Long-Term Returns Financial Engines takes an academic approach, looking at history and the correlation between the different asset classes. "They compare that to the current market today, and say if risk and correlation are as they are in history, then this is what the different asset classes are expected to return," the consultant says.

mPower uses a more traditional approach, looking at history in different time periods and at the market today and then adding a layer of judgment. "So mPower says history is a good predictor, but a subjective overlay is necessary here, and we don't expect the next five years to repeat the last five years," the consultant says. "This is a process that a lot of consultants would use because a lot of people don't believe the markets are totally efficient."

3. Mutual Fund Analysis Once the program has developed projections for asset classes, it decides which funds to use in each class. It's here that the consultant finds fault with Financial Engines based on its returns-based style analysis. "Financial Engines is very academic, using almost quantitative analysis exclusively," he says. "They've done a good job and tried to cover some of the cracks. But this is my biggest beef because you can get some whacky results [relying solely on quantitative analysis]."

In contrast, mPower uses style-based analysis and then adds a layer of fundamental analysis. "They have a whole level of manager research," he says. "That's really where they're ahead of Financial Engines. In most other areas, they're playing catch-up."

4. Presenting Results This is where Financial Engines shines, the consultant says. "FInancial Engines provides a range of outcomes and helps a person to understand risk." The Forum's first version provided only a point estimate, he says. "That leads you to take all your money into high-risk investments because you don't see the downside."

This consultant concluded that Financial Engines is a better product for an individual who is "inquisitive and interested in what is going on, because it offers a much deeper level of detail," while mPower works better for "someone who wants simple, clear, quick advice."

The Web site address of 401(k) Forum, with its 401(k) Solution, is www.401kforum.com or www.mpower.com. The phone number is 415-547-1120.

Here are some other Web sites that offer 401(k) advice:

The site for Fidelity Investments' Portfolio Planner is www.fidelity.com or www.401k.com. The phone number is 800-544-9797.

Ibbotson Associates is offering a product by private label to institutions. The Web site is www.ibbotson.com. The phone number is 312-616-1620.

Intuit has a product in development that will be available at www.quicken.com. The phone number is 650-944-6000.

Investment Technologies' product, Expert Portfolio, is at www.invest-tech.com. The fax number is 212-580-9703.

Morningstar's new offering, Clear Future, is still in the testing stages. It will be available at www.morningstar.com.

Standard & Poor's has a product available at www.personalwealth.com.

The Vanguard Group's product, at http://majestic.vanguard.com, is called Online Planner.

"In the near future, we will be expanding to give advice on different types of accounts," Jones says. Advice on other nontaxable accounts became available early this year and advice on taxable accounts will follow later in the year. "Nobody today, not even high-net-worth clients, is getting good tax-efficient advice at the product level, because it's a really complicated problem," Jones says.

In a major coup for Financial Engines, it became a part of the 10 million portfolios tracked on America Online early this year. "This is the second-most-trafficked page on AOL after their home page," says Jones, who negotiated the deal. AOL users will be able to click on a forecast button that will send the portfolio to Financial Engines for a forecast and a detailed risk analysis. "You can also get a detailed analysis of the style of your portfolios," Jones says. On the bottom of the page, the AOL user sees the question, "Can I do better?" If he wants an answer, he's linked to the Financial Engines Web site.

Maggioncalda persuaded the Financial Engines board to provide the portfolio-analysis function free on the company's Web site beginning in June 1999, because he wants the company to be a "first mover," establish its brand name, and reap the benefits. "If you look at the first-mover advantages, at the market cap of the leader in a category on-line compared with the second, third, and fourth, it's five to 10 times higher," he says. "Look at Amazon versus Barnes & Noble or eBay versus Adauction. The first mover becomes a huge leader because in the absence of knowing who to go to, you go to whoever everybody else goes to." And so it is that Maggioncalda is willing to spend the money to make Financial Engines a virtual category killer. "We're in this virtual space and there's a huge transformation, a landscape change that came from the retailers—Circuit City, Wal-Mart, Barnes & Noble—and now that same thing is beginning to happen on-line." In the first 10 weeks after the Web site became available to individuals last June, $20 billion in specific products was entered for analysis. More than 65 percent of the users provide information other than just what's in their 401(k) accounts.

The company also ran full-page ads in *The Wall Street Journal* and *The New York Times* in mid-November to introduce Financial Engines as "your personal on-line investment adviser." Although the ads featured a young professional who is urged not to lose any of the 52,923 hairs on his head worrying about his 401(k) plan, Andrea Vassalla, a company spokeswoman, says they were corporate ads aimed at the Fortune 500 companies Financial Engines wants to sign on to provide the service for their employees. The Fortune 500 market is important to the firm because, like getting noticed by the press, having big companies as clients provides credibility. Consider that favorable articles by Jane Bryant Quinn of *Newsweek* and Walter Mossberg of *The Wall Street Journal* drove 40,000 users each to the Engines Web site. Likewise, the due diligence done by treasury departments of the corporate giants provides something like a Good Housekeeping Seal of Approval.

Sure, other companies provide Web-based advice (see "On-line Enlightenment," left). But Financial Engines has the capital, the brainpower, and the model to become the first mover in on-line investment advice. Financial advisers are going to have to decide what to do about that. Many of them believe it's enough to point out that Financial Engines is not a human being. That's far less important to most consumers than advisers realize. What's critical to consumers is that the advice be unbiased. That's why fee-only planning has grown like a house afire. And that's one of the major strengths of the Engines, which glows in the light reflected from Bill Sharpe and his Nobel Prize.

The model has three deliverables: it forecasts a future set of assets and liabilities, makes recommendations on products, and tells people what to do when the market changes

Paul Koontz, a general partner at Foundation Capital, saw enough strength in Financial Engines to invest $7 million in it. "Advice today is built on human relationships," he told *The Industry Standard*. "In five years, investment decisions will be based on science." Advisers who don't want to get swept away must give that some thought.

Technology is continually "redefining the role of the human in the equation," Maggioncalda says. "Those who will die immediately are those who say, 'Technology cannot replace me.' But in trouble, too, are those who get wedded to the idea of the first response, because this *is* just the first response. The technology landscape will be constantly changing. It makes a lot of work for us, yes. But it's the truth."

Mary Rowland is the author of Best Practices for Financial Advisors *(Bloomberg Press). She speaks regularly to financial advisers on issues of practice management.*

Next month: The methodology behind the Financial Engines