

The link between an enterprise's investment in training and the performance of its stock has huge implications for the training industry.

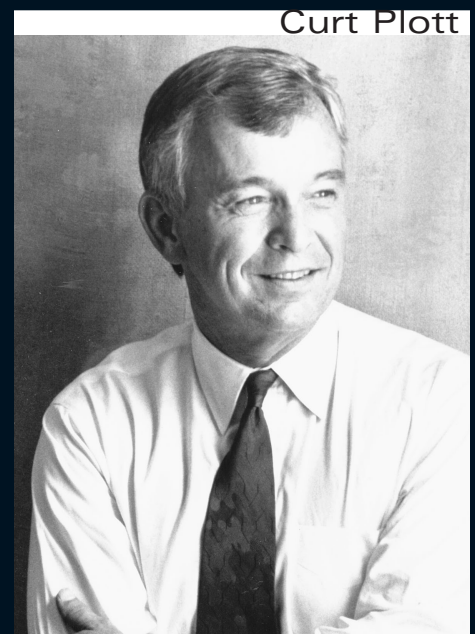
Guessing doesn't get you far in the stock market. But add experience, insight, and a lot of research and you could be onto something. Such is the premise of one fledgling investment management company, Knowledge Asset Management www.knowledgeam.com.

Launched on December 3, 2001, KAM aims to prove what many trainers and knowledge executives have known in their guts all along: Employee education and training not only increase employee performance, but also make for a better performing company. The proof? KAM, among others, thinks investing in a company's human capital is linked to its performance in the stock market. As for the specifics, we'll let KAM explain.

T+D talked with KAM chairman Laurie Bassi and principal Curt Plott about the implications of that link and its effect on the bottom line and the training industry as a whole. Or what can happen when, as Bassi puts it, you "use the power of the financial market as a catalyst for change."



Laurie Bassi



Curt Plott

Above the Bottom Line

Interview by William Powell



Once an individual leaves the school system, the workplace is the source of his or her primary learning, or at least the learning that has the greatest economic consequence. Unfortunately, we all know that tremendous pressures in the workplace cause underinvestment in education and training.

Laurie Bassi

Bottom Line

T+D: Curt, you were president and CEO of ASTD for 18 years. Who else is on your team at Knowledge Asset Management?

Plott: We currently have seven people: CEO Stan Sorrell, who is the retired CEO of Calvert Group; CIO Craig Van Hulzen; and chief research officer Dan McMurrer. Herb Rubenstein is our strategic officer, and Scott Ciganko is working with us on sales.

T+D: Tell us about the creation of Knowledge Asset Management and the germination of the idea that training investment improves the bottom line. When did it hit you that there's a definite link between training and a company's stock value?

Plott: The idea to create KAM had its genesis five or six years ago when Laurie was VP of research at ASTD, which was trying to connect investments in learning to the bottom line.

Bassi: ASTD published its first findings making that linkage in May 1998, but it had been a glimmer in my eye since 1996. It was 1998 when we started to get the first research results that said, yes, there *is* a link and that possibly we could do something like KAM. But it's a long way from getting research results to starting a business to put those results to work. But we feel we've assembled an exceptional group of people who are also quite passionate about the ideas.

T+D: What's your company's mission?

Bassi: Social responsibility is a large part of what has propelled us forward. We hope our research will have positive effects on employees and the quality of workforce training. This isn't just about making money. There aren't many ideas or businesses in which you can do well and do good at the same time, and that has certainly been a part of what compelled us to do what we've done. It's a very large part of what makes KAM tick.

Stan Sorrell was involved in the early

days of what some people refer to as the social responsibility investment movement and can tell long stories about where it made mistakes. He thinks the primary mistake, which he sees us not making, is that it led with the attitude that it was the right thing to do and, by the way, you could make money doing it. We lead with the idea that it's a very solid way to make money, and you can do good while you're doing well.

Plott: Put a different way, a former chief executive of a supplier company I talked with said, "Oh, you're asking us to put our money where our mouth is; you want us to invest in what we really believe in."

I think our philosophy will motivate many people in the field to do the right thing—along with making money. Certainly, the first requirement is that our fund performs well.

Bassi: What got me interested in education and training is the notion that once an individual leaves the school system, the workplace is the source of his or her primary learning, or at least the learning that has the greatest economic consequence. Unfortunately, we all know that tremendous pressures in the workplace cause underinvestment in education and training. KAM is something we can do to offset underinvestment incentives, so that our investors can channel funds and thereby help grow firms that are investing in people. That's also a good thing for employees. Training increases their wage potential and reduces their prospects for unemployment. It's a real win-win-win.

T+D: Does that define your investment strategy fully, or are there other aspects?

Bassi: We look at other variables. First, we look for firms that are making extraordinary investments in employee education and training, so if a firm isn't making a significant investment, measured by how much it spends, we don't look at it a second time. If a company passes that first screen, then we look at more traditional

financial variables that other analysts look at. Spending a lot of money on education and training isn't enough to get a company into KAM's portfolio. It's a necessary but not sufficient condition.

We use a sophisticated mathematical model that factors in a firm's investments in education and training, as well as a set of other financial variables. That mathematical model calculates an expected total stockholder return, and we rank firms based on those calculations. Obviously, we're looking for firms with the highest expected return for our investment. That's how we make our decisions.

T+D: Could you talk about the importance of making the connection between investments in human capital and the bottom line?

Plott: I've spent a major part of my career trying to convince people of the link between the investment in learning and the outcome in terms of bottom-line financial performance. In the beginning, the measures were sparse and the volume of research wasn't large. But in time—particularly with Laurie's work at ASTD—we began to develop a quantitative basis for connecting training investments with financial performance, which is absolutely critical.

People in the training profession have always argued for a seat at the boardroom table, but we've lacked the standards, rigor, and connections to convince CFOs and other executives that training makes a difference. I don't think that's the only thing we need to do, but it's a major one.

Bassi: Right now, the way financial markets work, companies must make investments in their employees' education and training despite the pressures of the financial market rather than because of those pressures. That's because training is treated as a cost. Even worse, it's sort of a hidden cost. So, between two comparable firms—one that's making large investments in people and one that isn't—the

firm that isn't may be viewed more favorably by a financial analyst in the short run, but not in the long run. It will win in the short run because its costs are lower, and there's no offsetting information about the commensurate benefits that will accrue to the other firm in the future. That's because it's not that the other firm's costs are lower, but its investments are higher. KAM is getting the message out that financial markets should be paying attention to that variable. It's as important as a firm's research and development or other strategic imperatives. Analysts should also be paying attention and getting to the point where financial markets are rewarding, instead of penalizing, firms that invest in their people. That's the larger significance of what we're trying to do.

Plott: This is a critical piece to the success of our fund. If analysts begin to push the people in the investor relations departments of major corporations for information on training expenditures, that will drive companies to build articulate systems for capturing training data and will drive standards in the industry to a level where training is seen in the boardroom as a critical ingredient of success. It's not going to solve all of the problems that training people have had historically, but it's a move in the right direction.

T+D: If training investments don't appear immediately on the profit line, and, as you say, reduce a company's profits in the short run, how do you account for the better-than-average stock market returns shown by a company with extraordinary training expenditures? Investors aren't making their decisions with the training factor in mind, so how do you know it's not a host of other factors?

Bassi: First of all, stock market performance follows after the fact. So, if you make your investment in training in 1999, the benefits show up in 2000. But in 1999, it's a hidden cost. Ultimately, the benefits do show up—we believe we know the

causal pathway through which they do—but the problem is that because they show up in the future, not at the moment, companies (and possibly their investors) are penalized initially.

T+D: You've said previously that once a certain factor or variable becomes widely reported, it loses its usefulness as a predictor of future stock performance. Once training expenditures become a regularly reported variable, could they lose their effectiveness?

Bassi: Yes. In that case, KAM's competitive advantage would erode fairly quickly. The theory is that stock prices behave in what economists call, "a random walk." That's to say it's impossible to predict the future systematically. If you could, you'd make a lot of money. Obviously, that's what we intend to do. And, by the way, our models behave exactly like a random walk, with the exception of the education and training influence.

There are a lot of analysts whose job is to watch all available information for a firm. As soon as some relevant information becomes available, these analysts react quickly, and because the market is very efficient, the new information influences the current stock price and ceases to predict the future. In order to make the walk less random, two things must be true: You must have information that is material—that is to say it actually impacts future productivity and profitability—and the information must not be available publicly.

Plott: The good news is that by the time training investments become less than useful for KAM's investment purposes, we'll have made major changes in terms of the factors we track, and, hopefully, by that time the standards will be in place and we'll have been successful and financially happy about our results.

Bassi: We're already working on next-generation measurements. If we're successful, we'll be ready to move onto the next gen-

Bottom Line

eration of measurements and expand our capabilities.

Plott: Options to create portfolios based on other human performance research might create a similar advantage.

T+D: Could you describe the research that you use as your foundation?

Bassi: As Curt said, we began the research many years ago at ASTD. I created the ASTD Benchmarking Service, which was the initial source of the data we used. That data formed the foundation of KAM's research strategy. Building on what we learned, we gathered our own information on the human capital investments of firms to be included in our portfolio." I should also acknowledge the assistance of Dan McMurrer, who worked with us at ASTD at that time and now works with us at KAM.

We've taken the fundamental insights about the relationship between what firms spend on education and training in a year and their stock performance in the following year and pushed beyond that to get to a mathematical optimization rule. That enables us to select a portfolio based on those findings and optimize the portfolio's performance. It has taken some pretty sophisticated mathematical techniques to translate that simple research into a portfolio optimization rule.

What we've published isn't actually what we use in the mathematical optimization. We don't write that one down; that's really where our proprietary knowledge exists. But we publish freely because we want people to know that relationship exists. If you were to invest solely on the principle outlined in our published work, you could do pretty well. However, we've discovered that you can be smarter about it and move beyond that to more sophisticated optimization rules, which is what we do in our research at KAM.

Plott: I think that there are two important points. One, investment funds often

talk about models and research, but the level that Laurie has taken that to, in terms of the mathematical and research understanding, is probably far deeper and richer than you'd typically find in many investment firms. Given her expertise, as well as the rigor that has been applied, I think that people can be confident we've done this research the best way it can be done.

Two is the connection to training expenditures. Laurie has used a statistical technique called "multivariate regression analysis," which essentially compares all factors to each other. But of all of the factors that were considered, the only one that had predictability was the causal relationship between training and education and total stockholder return.

Bassi: Of all of the other variables that analysts consider, which we also consider, just a small subset turns out to be significant statistically. That's because everybody is paying attention to that subset. So in order to find an edge, you have to find an important factor that others aren't paying attention to. That's why I say our model works exactly like the random walk predicts: Virtually nothing is important except the differentiating factor of training. That's not to say that we don't use other variables in our portfolio optimization; we use a small set of other financial variables that we consistently find to be significant, in addition to education and training.

T+D: Are there any lingering doubts or questions about the strength of the link between training investment and an improved bottom line?

Bassi: Yes. There are questions, and we continue to work on them. We intend to get smarter and smarter about this. We'd like to figure out how to be more precise in the future. We continue to explore a variety of research questions. For example, some of the firms in our portfolio ap-



If the Fair Accounting Standards Board were to begin requiring companies to treat training as an investment rather than an expense, it would be a move forward in changing how firms look at investing in people.

Curt Plott

pear to perform better in bull markets than in bear markets. Why is that, and what does that suggest? How can we do even better on optimizing the portfolio? Does performance have something to do with, for example, dividend payments that are affecting stock prices? Those are some of the questions we don't have answers to yet.

As new data becomes available, we'll continue to study it and revise our strategies accordingly.

Plott: Laurie and Dan have formed Human Capital Dynamics, which is a consulting firm that works with companies to develop measurement systems. I think their work will provide new knowledge and practical understanding in terms of beginning to install measurement systems that make sense inside corporations.

T+D: Over the past year or two, have you had to adjust your models in view of the stock market's performance?

Bassi: We've extended the analysis beyond the early 1990s into the bear markets of 2000, 2001, and now 2002, and our strategy performs well in a bear market.

As a technical aside, a statistical sin called "overprediction" looks backward to figure out what you should have done. Of course, that doesn't necessarily tell you what to do moving forward. So to make sure that we were doing this right and hadn't "overpredicted" the data, we started picking portfolios in 2000 and 2001 blindly, based on the previous analysis. So, based on the analysis up to 1999, we picked the 2000 portfolio. Then based on the analysis up through 2000, we picked the 2001 portfolio. Despite the fact that the previous records were bull markets, the strategy still worked well in a bear market.

That's one of the things we wanted to explore further. For example, our strategy didn't work as well in 1999 as it did in the other four years of our back testing. We think that at least a part of that was because we behaved like researchers and accepted passively whatever data came to

us. So it could be that in 1999, we just didn't get the right firms reporting to us, and we had to "create" a portfolio out of the firms that just happened to choose to report their data. We think that's part of what was going on in 1999. The strategies worked well in 2000 and 2001. That's what we'd call a "complete out of sample test": We took what the model said, and went and did it even though the market had changed enormously. Yet, it worked—admittedly, all in back testing. We did that in the cleanest way possible. That's why we feel confident this is a robust strategy.

T+D: What are some of the criteria you use to select the companies that you invest in?

Bassi: Number 1: We look at a company's per-employee education and training expenditures. Then we look at a variety of other financial variables, more traditional variables, particularly measures of risk. I hesitate to go too far into that because it gets into proprietary information. We do especially focus on measures of risk.

A variety of measures of risk are reported on firms, basically having to do with the volatility of their stock prices—volatility being a way to measure risk. That's the second step. Then we combine those variables to calculate expected return (it obviously needs to be positive), and we rank firms by their expected return based on training, plus the other variables. That gives us a list of firms from which to make up a portfolio. The final step in selection is to balance the portfolio across sectors of the economy so that we don't come up too heavy in any one sector.

T+D: How do you see this investment strategy appealing to people in workplace training?

Plott: My experience with people who are in the training and education industry is that many tend to be true believers in the

value of learning. Even without connecting learning to the bottom line, they believe learning is intrinsically good, and they love the work that they do. I think that over the past 10 to 15 years, funds that focused on people's values have been attractive to investors.

T+D: What would you say is the corporate world's prevailing attitude toward employee training?

Bassi: I think it's all over the map—from those who are still entrenched in the industrial-era mindset and view training as a cost to be minimized, to the other end of the continuum: CEOs who truly and fundamentally believe that investing in their people is the only source of enduring competitive advantage and that it's good for the firm, stockholders, and employees. The attitudes are also everywhere in-between, and we're obviously looking for firms at the latter end of the continuum rather than the other.

Plott: I think the division is probably a third, a third, and a third. A third are leading-edge CEOs who understand how such investments make a difference in competitive strategy and, even without the research, make substantial investments in training because it makes sense for their industry, their product, and the bottom line in their business. Another group, in the middle perhaps, aren't as strongly committed but, depending on the time and nature of their business, do invest in training. And a good portion probably won't ever invest much in training because they don't believe in it. They may be in an industry in which training's not necessary, though I find it hard to believe there are any such industries.

T+D: How do you foresee KAM's success affecting a change in the corporate responsibility to train and educate employees?

Bassi: Certainly, one way this could play out is rather like the Green Fund move-

ment, which has pressured companies to disclose more of what they're doing with regard to the environment. We would see it as a very good outcome if firms started to feel compelled to report more openly what they're doing regarding training and use that as a way to attract business and investors.

T+D: Are you talking across the board or specific to training?

Bassi: I meant that specifically with regard to training. We'd like to be part of causing that to happen on the human-capital or investment-in-people front.

Plott: If the Fair Accounting Standards Board were to begin requiring companies to treat training as an investment rather than an expense, it would be a move forward in changing how firms look at investing in people.

T+D: It's a long way from hatching the idea of a new investment fund to the maturation of an investment firm. What have you learned, and what do you look forward to?

Bassi: I guess one of the things I've learned is that it *is* a long way from the original idea to a business, and I think I understand better now why no one else has done what we've done. It's difficult. But it's a worthy thing to do, and I think even possibly a noble thing.

I used to write white papers and op-ed pieces about this that didn't get published, and it used to anger me. I kept thinking, why doesn't someone take this good idea and make it into a business? I

How to Gain Inclusion in KAM's Portfolio

Firms seeking inclusion in the KAM portfolio should contact Laurie Bassi or Curt Plott at info@knowledgeam.com.

finally realized that I had to do it.

It has taken an enormous investment of time and resources to get us to this point. It has been a lot of hard work, but we hope to pave the way for others.

Plott: I think we're on the threshold of really moving what has always been a major idea, in my view, forward. And what's exciting to me is that we've come this far and have the chance to make a major contribution not only to our investors individually, but also to them collectively as an industry.

T+D: How will you know when you've succeeded?

Bassi: I guess there are several ways. One is to continue to accrue a strong performance record for our investors so that we're making money for the people who trust their funds to us. Another is the level of funds under management. As we accrue a longer record and if our performance continues to be as good as we expect, we anticipate that funds will come to us. So, the amount of money that we're making for any given investor, as well as the number of investors that we can serve, is certainly a measure of our success. The funds under our management will be an important measure as our business matures. That's consistent with our original

motivation: In order to be a presence and send a message, we have to be big.

T+D: What is your current size in terms of funds under management?

Bassi: We're still in the early stages, mostly friends and family. At this point, we have a few million dollars under management.

Plott: What we really need, in terms of continued investment from individuals and institutions, is a strong record with the investment fund. It takes a while to achieve that so people can see the results. And even though the research is rigorous, the proof is in the pudding—in getting the results that people expect when they invest.

T+D: What kind of timeframe are you comfortable with for proving the success or reliability of the fund?

Bassi: We expect it will take a few years. It isn't until after two to three years of performance that you can begin to attract institutional funds, and that's where the big money is. To accrue funds one individual at a time is laborious. But if pension funds start coming under our management, if a mutual fund takes an interest in us, if the Ford Foundation decides to put part of its endowment with us, we can grow quickly. That won't happen until we have several years of a good track record. In these crucial first few years, we'll depend upon kindred spirits. **TD**

William Powell is an associate editor of T+D; wpowell@astd.org.

Reprinted with Permission from Training & Development, April 2002, by The Reprint Dept., 800 259-0470

Copyright 2002 by The American Society for Training & Development
1640 King St., P.O. Box 1443, Alexandria, VA 22313-2043, 703 683-8100.
All rights reserved.



IMPORTANT DISCLOSURE INFORMATION: For more complete information about Knowledge Asset Management, including costs associated with engaging in an investment strategy, please contact Knowledge Asset Management, Inc., 7316 Wisconsin Avenue, Suite 450, Bethesda, MD 20814. Phone 866.526.5261. Email info@knowledgeam.com. Web www.knowledgeam.com.

Investment decisions are made for clients depending on their individual financial circumstances. Strategies discussed in the article are for illustrative purposes only.