

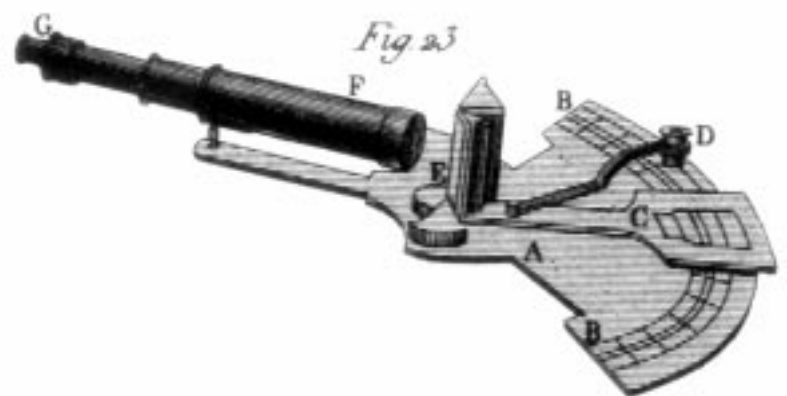
S M A R T F O R C E

W H I T E P A P E R

A FRESH LOOK AT RETURN ON INVESTMENT

by Jay Cross

The traditional conception of ROI is obsolete. The Internet has changed everything. Astute training managers employ business metrics, not Kirkpatrick's famous four levels. Managers of business units value time more than ROI. Major decisions are based on descriptive business cases, not pro forma budgets. Senior executives are more interested in the top line (dramatic growth from new markets and innovation) than the bottom line (the accounting fiction of "profits").



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UNUSUAL BUSINESS

If we voted on the most obsolete cliché around, “business as usual” would top the list.

Everything is in flux. These are not normal times—but we’ve been here before. Consider the dawn of the Industrial Revolution.

Adam Smith painted a vivid picture of the transformation from guilds and crafts to mass manufacturing. A factory worker was 5,000 times more productive than a solo craftsman! Over a period of years, this changed everything. Talk about discontinuous innovation.

Once again we find ourselves at a tipping point, but this time the Internet has dissolved the obstacles that slowed down the Industrial Revolution. Capital flows freely, communication is instantaneous, and systems speak a universal language. Distance is dead. A progressive mindset predominates.

We may be entering a period when we measure 5,000-fold gains in performance in minutes rather than years. Once again, everything is changing.

For example, return on Investment (“ROI”) is not what it used to be. This financial measure, developed by DuPont¹ and once credited with making General Motors manageable, traditional ROI has not kept pace with the times. The “R” is no longer the famous bottom line and the “I” is more likely a subscription fee than a one-time payment.²

Join me for a fresh look at ROI in the information age. If our rant ruffles your feathers, make yourself heard in our on-going conversation about ROI on the Web at www.internet-time.com/roi.

e-Learning Changes the Equation

Until recently, most training decisions were incremental. Training sponsors had most of the infrastructure required: an empty room, staff, flipcharts, markers, and perhaps some personal computers.

Business unit managers could evaluate the cost-effectiveness of one-shot training courses just by assessing cost and effect within their own business units.

e-Learning changes this. e-Learning is a continuous process, not a one-shot deal. Second generation e-Learning (see sidebar) does away with the concept of “courses.” e-Learning is most often an enterprisewide initiative, beyond the bounds of any individual business

¹ Robert S. Kaplan, The Evolution of Management Accounting, The Accounting Review Vol LIX, No 3, July 1998, notes, “The DuPont Company devised an accounting measure, Return on Investment (ROI), to serve both as an indicator of the efficiency of its diverse operating departments and as a measure of financial performance of the company as a whole. Pierre du Pont rejected the (then) widely-used measure of profits or earnings as a percentage of sales or costs, because it failed to indicate the rate of return on capital invested.”

² See Kaplan, The Evolution of Management Accounting, who says, “The cost accounting and management control procedures developed more than 60 years ago for the mass production of standard products with high direct labor content may no longer be appropriate for the planning and control decisions of contemporary organizations. Also, problems with using profits as the prime criterion for motivating and evaluating short-term performance are becoming apparent.” Despite the fact that the Internet changes everything, “Virtually all of the practices employed by firms today and explicated in leading cost accounting textbooks had been developed by 1925.”

unit. And investing in e-Learning is often a strategic imperative-- the ticket to entry into an e-Business environment.

Different Strokes for Different Folks

Where you stand on ROI depends on where you sit. Different levels of management make different sorts of decisions, so it's appropriate that they use different measures of ROI.

FUNCTION	GOAL	MEASUREMENT	SCOPE
Training manager	Close skills gap	Individual performance	Business Unit, specific training
Line manager	Achieve business goal	Project goals, business metrics	Business Unit, specific training
Corporate staff	Choose the best alternative	Financial metrics, business case	Enterprise, e-Learning infrastructure
Enterprise	Transformation, competitive advantage	Business case, shareholder value	Enterprise, e-Learning infrastructure

All these goals and measures are valid – in fact, they complement one another. The more each managerial group understands the others, the better the odds they'll make sound decisions.

The entire domain of business decision-making is at a crossroads. The old yardsticks no longer apply. Why measure incremental improvements when you're seeking the Holy Grail? Rational decision-makers look beyond an ROI that reduces everything to the lowest common denominator. Traditional financial analysis works in stable times but falls apart when things go discontinuous and off-scale

Bearing that in mind, let's take a fresh look at ROI from the training, line, staff, and executive perspectives.

Caveat: We're talking in generalities here. Maybe your "training manager" is a chief learning officer who has the ear of top management. Or perhaps a wave of re-engineering swept your corporate staff out the door. When these mismatches pop up, substitute the person in your organization who has these interests, positions, and ways of doing things.

THE TRAINING MANAGER'S PERSPECTIVE

Don't Step in the ROI

Five or six years ago I witnessed a multimedia course demonstration designed to help Southern bank officers spruce up their table manners. When a banker clicked on sushi, a voice intoned “sooo-she.” Then a Japanese flag appeared, followed by words explaining that sushi is a popular Japanese dish made of fish and rice. I chuckled and thought to myself: In real life, that’s going to be one surprised banker when the raw fish arrives.

The sushi story came to mind last fall during a series of breakout sessions at the TechLearn and Online Learning conferences. This time, the topic was ROI.

Consultants relentlessly drove home the message to dozens of groups: If you want to sell a big project internally, you’ve got to talk ROI. It’s the language senior managers understand – it’s how they separate worthy projects from losers. Being fluent in ROI talk enables you to position a learning project as an investment rather than a cost. It’s the secret handshake that gets you into the inner circle of those who control budget dollars.

Well, I hate to spoil the party but it’s time for a reality check. If you really think that talking the ROI talk will enable you to pass yourself off as a businessperson, you’re due for a wakeup call. You have as much chance of succeeding as you would of passing for French in Paris with only a beret and a Berlitz phrasebook.

A little knowledge can be dangerous. Making a significant business decision entails a wide range of factors and involves intricate tradeoffs.

- Risks must be weighed against rewards.
- Short-term aims need to be sorted out from long.
- Undertakings must align with strategic initiatives.
- Scarce resources call for shrewd horse-trading.

Unless your training unit sells training for a fee, generating its own revenue, the returns on training investment come from satisfying the needs of business unit managers. Tying training results to business results is more useful than coming up with pseudo-ROI figures. The only valid training ROI is business ROI.

Mental Images Trump Numbers

International Data Corporation studied the buying behavior of corporate and IT training managers and concluded that, “ROI will no longer be measured in ‘savings’ or ‘reduced cost of training.’” Instead, attention will be directed to “measurable changes to business metrics resulting from training investments. Those benefits will only emerge if vendors

increase their focus on high-quality instructional design and engaging learning environments.”

Often ROI exercises are necessary to show you’ve done your homework; the numbers are your ticket to admission at the adults’ table.

A decision-maker’s final choices, however, are mostly visceral – based on how the likely outcome of each alternative makes him or her feel. Feelings win out because the assumptions used to create the numbers can always be challenged. Projects that evoke the best feelings make the cut.

To sell a project upward, you’ve got to make the upside come alive – paint a picture, tell a story. And make no mistake about it, upselling is what you need to do.

THE BUSINESS UNIT MANAGER’S PERSPECTIVE

Business unit managers own the problems training solves. They are pragmatic; their overriding interest is getting the job done. Soon. Until you know what individuals are trying to accomplish, you can’t talk with them about potential results.

The business unit manager is usually training’s primary sponsor. The “right client” is the decision-maker who understands the end goal and controls the environment in which the problem occurs.

When you’re working with the right client, measuring results can be simple. Start with business problems and work backwards. The most important step in measuring performance is pinning down the business manager’s answer to the classic question: “What’s in it for me?”

Don’t skip this step – without it, meaningful tracking is impossible. First gain agreement on the business problem to be solved and the value of solving it. Then go on to outline how you propose to solve it. Establish a baseline measure of current performance, and clearly indicate how performance will be tracked and reported on.

“Proof” is a Figment

Otherwise brilliant people assure me that it’s impossible to isolate the impact of training. You can never tell whether some concurrent event has contaminated the results and negated their value as scientific evidence of training’s impact.

To which I reply, “Baloney!” (Not an exact quote.) Quests for certainty in our uncertain world are futile. Business decisions are made with less-than-perfect information; it comes with the territory. Management is not conducting a science class – it’s looking for results.

So the question is not: “How do we prove beyond a shadow of a doubt that a given training program produced a given result?” The question is “What will our sponsor accept as persuasive evidence that the program produced the result?” Working with strong probabilities, we make our case logically – linking learning to business results. Establish a causal link between a particular skill deficiency and a particular business outcome.

If the owner of the problem buys into this logic and the way you will measure it after training that will be all the proof you need.

How to Track Business Unit Results

The process of tracking learning results starts before any learning takes place. It begins with partnering between the training manager and the line manager who owns the business problem to be solved. Be sure the two of you articulate agreement on the value of solving the problem.

In most cases, you gather needed information through a series of interviews. These should focus on the work process itself – not training. And they should always come back to the mother of all business questions: “What difference would this make?”

Your joint examination of the problem will pinpoint the gap between the results the manager wants and the results the manager will actually get. Then determine what major skill gaps and learning deficiencies might hold people back.

Next estimate the expected dollar value gained by eliminating the deficiency – and make tangible projections from those outcomes. Make sure you get signoff on the expected outcomes, how they will be measured, and what constitutes good performance. This keeps discussions focused and agreements documented.

Meanwhile, throughout the process, you’re helping managers answer questions about why skills matter and what good performance looks like. You’re focusing sustained attention on solving business problems and adding value. You’re identifying tangible values for each skill to be taught.

As a result, you’re forging a partnership with the line client based on his or her core concern: performance.

When the learning has been completed, assess the results according to the measurement you set up with the business unit manager. Extrapolate behavior changes into measurable business. There is no room for vagueness – and no backing away from visible quantitative evidence. Further interviewing and a review of business results may be useful.

Finally, present your findings and a simple cost/benefit analysis to the business manager or training sponsor.

CORPORATE STAFF'S PERSPECTIVE

No organization has the resources to do all the good things it might. Senior executives must choose where to place the company's bets. What are the top priorities? What comes first? Do we do something in-house or outsource it? What will yield the greatest return?

A major role of corporate staff is helping senior execs make sound choices. Thorough analysis reduces the risk of choosing the wrong alternative. The bigger the project, the more analysis is justified.

To make their analysis clear, an effective staff distills a complex business alternative into a three- or four-page "Business Case." Marty Schmidt³, whose firm develops business cases for corporations, puts it this way:

"A business case is a tool that supports planning and decision-making, including decisions about whether to buy, which vendor to choose, and when to implement. Business cases are generally designed to answer the question: What are the likely financial and other business consequences if we take this or that action (or decision)?"

A good business case shows expected cash flow consequences of the action over time, and—most importantly—also includes the methods and rationale used for quantifying benefits and costs.

The Solution Matrix website explains how to put together an effective business case in great detail. A few words of advice:

- Explain where the data comes from to maintain credibility. Describe any assumptions the reader wouldn't make automatically.
- Break out "hard" benefits from "soft," because some readers will value them differently. The difference? It's easy to put a dollar-figure on a "hard" benefit (e.g., Reduce travel expense by \$180,000) but difficult for a "soft" benefit (e.g., Free up professional time.)

³ Marty J. Schmidt, MBA, PhD, President, Solution Matrix. Go to the Solution Matrix web site for a full explanation of making the Business Case. www.solutionmatrix.com.

- Develop a statement of the project's Net Cash Flow.
- Quantify every benefit and cost you can.
- If an item simply can't be quantified (e.g., Morale will improve), include it in the non-financial analysis, and rank it among the financial impacts to show its relative importance.
- Include a sensitivity analysis to show what happens when assumptions change and a risk analysis to show their likelihood.
- Assume that the numbers don't tell the whole story. This is a business case. Make the case that the project boosts sales, improves service, speeds things up, whatever, and relate those benefits to business objectives.

Because a business case uses financial metrics (ROI, Internal Rate of Return, Discounted Cash Flow, etc.) and because numbers are so precise and seem so scientific, it's tempting to imbue financial metrics with too much importance. Numbers are another perspective, not another reality. Actually, accounting conventions play a major role in ruining numbers' reputation

Beware of Bad Numbers

Present-day accounting is an anachronism. Invented in Venice half a millennium ago to maintain accurate shipping records, double-entry bookkeeping helped Venice dominate its part of the world. Formal accounting worked well when you could go out to the warehouse and count your assets. In the information age, it's an inappropriate yardstick for measuring anything. Most of the assets drive home every night.

In a nutshell, accounting recognizes nothing but physical entities. Intangibles are valued at zero. Vast areas of human productivity – ideas, abilities, experience, insight, esprit de corps, motivation – lie outside the auditor's field of vision.

Rather than developing an estimate of the returns on intangibles, accountants ignore intellectual capital and customer capital. The company may proclaim that "People are our most important asset," but accountants value the desk more highly than the person sitting at it.

Basically, accounting takes a short-term view of the world. It does not recognize that people become more valuable over time.

Accounting claims to match expenses with returns, but it doesn't work out that way. The accountant recognizes the costs of recruiting, mentoring, training, management development, and the like, in the year they are incurred – the unavoidable implication being that they have little, if any, long-term value.

Your gut may tell you that you'll be repaid in the future for investing heavily in people today. But where training is concerned, the only metric taken into consideration is cost. Accounting has no measuring stick to distinguish a good idea from a bad one. Excellent training hits the books at the same value as bad.

What alternative is there? Weigh subjective factors as well as objective ones. Keep two sets of books, one for investors and regulators, the other to track what's really important.

The Balanced Scorecard⁴ is a means of evaluation developed to make up for the insufficiencies of financial accounting. In addition to finances, it looks at changes in customers, processes, and employees. The Balanced Scorecard was designed to look backward – to evaluate in hindsight – but there's no reason not to use it to project into the future as a decision-making tool.⁵

The Saratoga Institute studied 500 companies over a period of years to isolate the factors that separate high-performing companies from also-rans.⁶ "Balanced values," a mix of human and financial goals topped the list. "Commitment," organizational stick-to-it-iveness, was next important, followed by "Culture," defined as the ability to attract, retain, and motivate talent.

THE EXECUTIVE PERSPECTIVE

Top management is committed to implementing the strategic changes to transform the enterprise and increase shareholder value.

"The bottom line" – the profits left over after subtracting costs from revenues – is no longer the be-all and end-all of business results. Numerous companies have created billions of dollars of value for their owners without generating a cent of profit. For them, the bottom line is no longer the bottom line. The top line has taken its place.

What's on the top line? Sales. Revenues. Out-surviving the competition. Increasing market share. Building brand. Staying in the game and holding on long enough to score. Reinventing the business.

Executives focus on two things: strategy and outfoxing the competition. They realize that competing successfully in e-Business requires teams of inspired employees – mentally

⁴ Kaplan and Norton, *The Balanced Scorecard*, 1996

⁵ Kaplan, *op cit.* Critics of "soft" measurement are reminded that "hard" numbers aren't always hard. Per Kaplan, "While ROI control and the profit center organization have contributed greatly to the success of large corporations during the past 60 years, problems have begun to emerge with the excessive focus on short-term financial performance. These problems arise because managers, being clever, resourceful people, have learned that there are a variety of ways to meet profit and ROI goals. Initially, and perhaps for many years after profit centers and ROI centers were introduced, managers attempted to achieve good performance by making operating and investment decisions to develop new and better products, to increase sales, and to reduce operating costs. Over time, however, it probably occurred to some managers that during difficult times, when sales were decreasing and operating costs were increasing, profits could be "earned" not just by selling more or producing for less, but by engaging in a variety of nonproductive and typically nonvalue-creating activities. We will briefly summarize three types of short-run behavior: exploiting accounting conventions, engaging in financial entrepreneurship, and reducing discretionary expenditures."

⁶ Jac Fitz-Enz, *The ROI of Human Capital*, 2000.

equipped to make sound decisions on the fly; able to execute good ideas in a snap; and proactive when it comes to taking initiatives and bringing innovation.

Being on the front line dealing with customers, these employees don't have time to run every idea up the management flagpole. They want to field a team who's in the game and ahead of the crowd. They want to pile on innovation that meshes smoothly with what people already know. They want organizations that make bold moves and respond to change as if by instinct. The overall goal: an environment where people learn faster and better than the competition.

Getting there takes more than a lavish investment in training. Time is frequently more important than money.” We are moving from a world in which the big eat the small to a world in which the fast eat the slow.”

Get Out The Cigars

Let's look at how senior decisions are really made. The staff has shopped various projects around, gathered the figures, done due diligence on suppliers, run the numbers, assessed the impact of changes in the marketplace, and prepared terse summaries for each scenario. Six Business Cases for new investments, Velobound with a clear sheet up front, rest in a pile on the coffee table at the executive vice president's weekend cabin. (This is going on simultaneously at the CEO's place by the lake, the COO's condo at Hilton Head, and a few other spots.)

A couple of projects are no-brainers; these are so integral to the organization's mission, giving a go-ahead is a mere formality.

Projects that enter new territory, e-Learning for example, warrant more detailed consideration. If you were to eavesdrop on the executive's internal thought process, you'd hear something like this:

“Good Heavens, this effort is going to cost us \$8 million and change. But our people are our hope for the future. The analysis shows that we're already spending nearly that much on training. I wonder what Mikey thinks. The ROI is better than building another fab plant but some of the underlying numbers are soft. Of course there's no guarantee that the fab plant wouldn't be another white elephant when it came on stream in three years. The breeze is picking up outside. I bet it rains tonight. Without e-Learning, we'll never become an e-business. Some of our systems are pretty creaky right now and would benefit from streamlining. We need to shrink cycle times throughout our organization. This e-Learning infrastructure would give Charlie a platform for broadcasting and reinforcing his

message about transforming our organization. The Net Discounted Cash Flow is \$2 million better than if we took this on ourselves. And the real problem there is that our IT staff would be swamped. And this would wait in line behind the other mission-critical projects they're working on. More important, at least according to Geoff Moore's latest book Living on the Fault Line, is that keeping up with e-Learning is not a core activity for us; we should outsource as much of it as we can. I wonder what Charlie thinks. The ballgame comes on in about ten minutes. Where do I come out on this one? I'm optimistic about the potential. It feels right. I'll back it at the Executive Committee Meeting on Monday."

Don't believe it? Most senior executives have more faith in gut feel than in numbers. The numbers are input. The decision is broader than that. An Information Week survey revealed that "more companies are justifying their e-Business ventures not in terms of ROI but in terms of strategic goals, Creating or maintaining a competitive edge was cited most often as the reason for deploying an e-Business application."

APPENDIX

Bibliography

David van Adelsberg & Edward Al Trolley, *Running Training Like a Business*. San Francisco: Berrett-Koehler Publishers, 1999. The how-to book on managing enterprise training.

Rex Allen, *The ROI of CBT*, CD-ROM Professional magazine. The best article ever written on measuring ROI.

Larry Downes and Chunka Mui, *Unleashing the Killer App*, digital strategies for market dominance. Boston: Harvard Business School Press, 1998.

Jack Gordon, *Measuring the "Goodness" of Training*, Training magazine. A good summary of measuring training results. With proper needs analysis up front, evaluating results will take care of itself.

Erich Helfert, *Techniques of Financial Analysis*. Homewood, Illinois: Irwin, 1987. A classic of financial decision-making in the old economy.

Dana and James Robinson. *Training for Impact*. San Francisco: JosseyBass, 1989. The authors describe a methodology of "training for impact" as opposed to "training for activity." Training-for-impact requires measurement of results. Business needs are its driving force.

Jac Fitz-Enz, *Yes, You Can Weigh Training's Value*, Training magazine, July 1994. A cogent and practical summary of measuring training ROI. (We are really in tune with this author.)

Jac Fitz-Enz, *The ROI of Human Capital, Measuring the Economic Value of Employee Performance*. New York: Amacom, 2000. Yes, you can measure the bottom-line impact of human capital. Refreshing.

Robert Mager, *What Every Manager Should Know About Training*. Belmont, California: Lake Publishing, 1992. A concise summary of the former "Mager Six-Pack." A superb book on performance-based instruction.

Geoffrey Moore, *Living on the Fault Line*. New York: HarperBusiness, 2000. An outrageously logical explanation of what creates shareholder value in the new economy.

Jack J. Phillips, *Return on Investment in training and performance improvement programs*. Jack is the reigning guru of training ROI. Houston: Gulf Publishing, 1997.

Resources on the Web

SmartForce is a pioneer in measuring Return on Investment. Go to the Events Center at www.mySmartForce.com to view any of these classic presentations in the SmartSeminar series. Click into the Event Center; then go to the Vault.

1. RETURN ON INVESTMENT ROUNDTABLE

A round table conversation on the state of ROI calculations today, the application of the findings, and the ability to apply the models to an e-Learning approach. Our experts discuss ROI as it applies to e-Learning and the demands of the new economy.

Jay Cross—Internet Time Group

Jay has been passionate about harnessing technology to improve adult learning since the 1960s. He has managed several software startups and is the former president of MegaMedia WorldWide. Jay founded Internet Time Group to help organizations learn. The group provides hands-on advice on launching new products, building reputation, and accelerating sales.

Jack J. Phillips, Ph.D—The Jack Phillips Center for Research

A world-renowned expert on measurement and evaluation, Jack provides consulting services for Fortune 500 companies and is the author or editor of more than 30 books including *The Consultant's Scorecard* and *HRD Trends Worldwide: Shared Solutions to Compete in a Global Economy*. His 27 years of corporate experience in five industries led him to develop the ROI Process™—a revolutionary process that provides bottom-line figures and accountability for all types of training programs.

Edward A. Trolley—The Forum Corporation

Ed, Senior Vice President of The Forum Corporation, spent 26 years with DuPont, where he held line leadership positions in three different business units before being named Manager of Training and Education for the multinational corporation. While with DuPont, Trolley conceived the insourcing alliance concept “Running Training Like a Business.” Since joining Forum in 1996, Trolley has carried the insourcing concept to leading global companies, working closely with the human resources leaders and line managers alike to significantly increase training's effectiveness and efficiency.

2. ROI AND BUSINESS IMPACT:

A CASE STUDY WITH PRICEWATERHOUSECOOPERS

This seminar helps organizations understand ROI – as well as other learning-evaluation best practices – within the context of measuring an e-Learning solution. It is built around strategies used by the Learning and Professional Development department of PricewaterhouseCoopers to gather information on the effectiveness of e-Learning in their organization. It is useful to organizations in both the planning and implementation stages of an e-Learning solution.

3. MARKETING E-LEARNING INTERNALLY - A STRATEGIC APPROACH

Aimed at training managers ready to assume a strategic role in their organization, this seminar focuses on best practices for promoting an e-Learning solution within the organization. There are four main areas:

- the impetus for new business and learning paradigms, with linkage to the value proposition for e-Learning
- the e-Learning marketing mix model as it relates to the three phases of deployment
- how to overcome obstacles and other forms of resistance in the course of meeting challenges
- becoming familiar with the Marketing Process toolset

4. ALIGNING TRAINING INITIATIVES WITH BUSINESS OBJECTIVES

This seminar focuses on developing training projects with high return and high visibility. It outlines a proactive methodology that will enable organizations to: identify key contacts, research business needs, draft learning solutions, gain concurrence on expected results, validate success. Based on real world experiences, it takes into account a heavy workload and limited available time. It spells out how to ask for, prepare for and conduct a meeting with senior management, and offers guidelines on how and when to communicate the results of the project

This seminar also features a special experience-sharing session with Kathy Kost, Technical Training Consultant at Bank Of America. Kathy explains how her team made their department mission critical by working as performance consultants with internal clients and how they overcame challenges.

ROI_{net}

ROI_{net} was created for HRD professionals interested in evaluating the business impact of training and development efforts and interventions, measuring return on investment (ROI) in HR development, Organization Development, WBT, Knowledge Management.

ROI_{net} has been a great resource for many practitioners since its inception. We encourage you share your questions or ideas in any of the area regarding ROI. We foster creative thinking in ROI measurement. We firmly believe that if HRD is to be a solid field in both academia and business practice, there should be a well established system for the measurement and evaluation.

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About the Author

Jay Cross is CEO of Internet Time Group, a think tank and consultancy that helps organizations learn. Fast.

A graduate of Princeton University and Harvard Business School, Jay has pioneered new approaches to learning since Medieval times. (At least it feels like it. “Since the early seventies” is closer to reality.) He lives in the hills of Berkeley, California, with his tennis-playing wife, 17-year-old geek son, and two miniature longhaired dachshunds. See www.internetttime.com.

SMART FORCE (SMART `FÔRS) N.

1. A smart force is a corporate knowledge-force that delivers a sustainable competitive advantage through its ability to keep up with today's Web-speed pace of change. It is built and maintained through e-Learning, a Web-based, fundamentally faster and better way for people to learn the career skills they need to be successful in the Internet Age.
2. A smart force is the ultimate corporate asset: intellectual capital that is perpetually valuable, flexible, effective and successful as the enterprise moves into the new millennium.
3. It is the human infrastructure upon which market-dominating enterprises will be built.

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