Institute for Interactive Technologies

White Paper:

Performance-Based ROI

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Introduction

Internal and external business clients for e-learning initiatives are demanding Return On Investment (ROI) analysis. They want the vendor or internal business unit to provide a "business case" that they can then turn around and show to management. Clients want you to provide an ROI analysis based on cost and savings information.

The e-learning industry has responded with various ROI calculation methods that focus on delivery cost savings of e-learning vs. traditional instructor led training. While this approach is adequate for a quick and dirty ROI, it ignores what clients are most interested in… the benefits of improving employee performance.

Popular measures like reduced travel costs and participant time spent on training do demonstrate that e-learning is a cost effective method for delivery when compared to Instructor Led Training. But does the e-learning event result in increased employee performance? When writing a business case, you want to focus on performance related ROI and the methods for calculating the results if you can get the numbers from the client. Focusing on performance rather than cost avoidance creates a powerful business case for your e-learning solution as opposed to one centered totally on cost savings or cost avoidance.

Why ROI Discussions are Needed

When selling e-learning to a client (internal or external), one effective method is to develop an ROI business case. Show the client how much money they would make with your solution in place. Traditionally, e-learning is sold as a method of cost avoidance or cost savings. Clients are told that if they buy e-learning, they will save thousands or millions in travel expenses. While that method is effective for showing costs savings, it is not really a return on an investment. To show a return, you need to show how e-learning can bring money to the bottom line of the client's organization.

If you can get good numbers from your potential client (internal or external), you can make a strong case for e-learning and show impact on the bottom line. For external clients, even though an ROI section is not a requirement of most e-learning proposals, it is always a good idea to include an ROI section to bolster your case for e-learning and to help sell your solution. Positive numbers encourage clients to invest in an e-learning solution.

ROI Defined

A review of common terms and calculations is needed prior to discussing ROI measurement for e-learning. ROI is defined as evaluating an initiative's benefit compared to the cost. Table 1 provides common formulas for calculating ROI:

ROI Formula	Calculation
Net Benefit Demonstrates the benefit after considering the cost.	Net Benefit = Benefit – Cost
Benefit Cost Ratio (BCR) Demonstrates the return for every dollar invested.	BCR = Benefits / Costs
ROI % Demonstrates the percentage of return for every dollar invested when considering cost.	ROI % = (Net Benefits / Cost) x 100

Table 1: Various ROI Formulas

For example, assume that project 'X' costs $10 and yields a benefit of $100. The formulas above can be used to provide ROI measurements for this scenario:

- Net Benefit of $90. The project yielded $90 in benefits after considering cost.
- Benefit Cost Ratio of $10. The project yielded $10 for every dollar invested.
- 900% ROI. The project yielded $9 for every dollar invested when considering cost.

Unfortunately measuring ROI for e-learning initiatives will not be as simple. Below is a list of considerations when calculating ROI for an e-learning initiative:

- **Understand the client's ROI methodology.** Ask the client how ROI has been measured for other projects of similar size and scope. Discuss how the client organization tracks costs and employee productivity relative to other types of project (if they do). Ensure that the ROI calculation is based on the client's needs and uses the client's terminology.
- **Be practical.** Limited time and resources will require a practical approach to measuring ROI. Make assumptions and validate your assumptions with the client. In most cases, you will not have the time or extra resources to form control groups and isolate variables. Clients are looking for possible performance data based on your estimated impact of the e-learning initiative.
- **Be honest**. Will the e-learning initiative solve the client's need and will it be cost effective? If not, winning the contract and not delivering on the promise does more harm for the client and your firm.

To demonstrate value to potential clients, you need to determine ROI for e-learning initiatives by determining costs, benefits based and improved employee performance and then calculating ROI. You also need to determine how best to structure the ROI information for presentation to the internal or external clients.

What Should Be in an ROI Business Case

Measuring costs for any learning project is done by adding all of the direct and indirect costs associated with the project from the assessment through implementation. There is not a single formula to estimate costs for e-learning initiatives. Each organization and project is unique and the cost drivers will vary based on complexity and scope of the initiative.

Table 2 outlines common costs associated with e-learning initiatives. All items may not be applicable and additional items may be required for a specific client or e-learning project. The specific cost for each item is dependent on the proposed e-learning.

Vendor Resources: People resources provided by the vendor.	• Account / Project Manager • Instructional Designer(s) • Programmer(s) / Developer(s) • Graphic Artist(s) • Quality Assurance Analyst(s) • Flat Rate (Average hourly rate per resource) • LMS Implementation Resources
Client Resources: People resources to implement the project.	• Project Manager and Content Expert(s) • Developer • Instructional Designers • Graphic Artist • IT representative(s)
Infrastructure: Tools and technology to deliver e-learning.	• Personal Computers • Software • Servers
Pricing Model: Pricing methodology on learner usage.	• Unlimited number of learners and usage. • Per seat. Unlimited usage by learner. • Per course. Pay as you go.
Miscellaneous	• Travel for team member meetings. • Technical / Services Support

Table 2: Common E-Learning Costs

Calculating the Benefits of e-Learning Initiatives

The industry has over emphasized delivery benefits associated with e-learning and has almost completely ignored the primary goal of e-learning which is to increase employee performance. Measuring benefits associated with e-learning efforts should focus on increased employee productivity.

The following scenario demonstrates how measuring e-learning ROI based on delivery cost saving does not address the primary needs of a client. Assume that a Sales organization has sent a Request For Proposal (RFP) to implement an e-learning initiative to improve the performance of Sales representatives. Through a quick needs assessment you determined that lack of skill / knowledge is the cause of the poor performance and that a technology based learning solution is appropriate. You recommend an e-learning solution and use cost saving in delivery as the criteria for demonstrating a Return On Investment. By leveraging technology you can reduce travel costs, the need for trainers and the amount of time the customer service representatives spend away from the job. Does this approach focus on the client's primary concern? No, reduced training delivery costs does not represent improved Sales performance (improved account retention, new sales etc.).

So how do you measure the impact of e-learning on employee performance? Performance metrics established by the client provide a tangible method for evaluating if the e-learning initiative impacted actual performance. Performance metrics are measurements that quantify employee performance. It is vital to establish a core set of performance metrics that are objective and reported on regularly. By comparing the performance metrics before and after e-learning, you can calculate the impact learning had on actual performance.

Of course there are variables outside of the e-learning initiative that can impact the change in performance. In this case you will need to either make assumptions or conduct further research using a control group. The recommendation is to be practical and outline these assumptions with your client. Again detailed research will require additional time and resources that are most likely not available. Table 3 outlines questions you can ask your clients to determine various the types of benefits they may receive from your e-learning solution.

Benefit Type	Questions to establish Performance Metrics
Improved Employee Productivity	• How is employee performance measured? • What are the current performance levels for these measurements? • What are the performance measurement goals after the e-learning initiative? • How can the performance improvements be quantified into bottom line savings?
Improved Quality	• How is quality defined and measured? • What are the current quality levels and projected quality levels after the e-learning initiative? • How does improved quality relate to business results?
Improved Customer Satisfaction	• How is customer satisfaction defined and measured? • What are the current customer satisfaction ratings and projected ratings after the e-learning initiative? • How does improved customer satisfaction relate to business results?

Table 3: Benefits of E-Learning

By asking your client these questions, you can determine the potential benefits of the project. You can then quantify those benefits and use them calculate the Return-On-Investment.

Example of Determining ROI for Client

A major call center sends an RFP for an e-learning solution to improve the performance of 8,000 customer service representatives by consistently training the entire population on how to use the company's call tracking system.

A high level needs assessment indicates that lack of skill / knowledge is the cause of poor performance and that a technology based solution is appropriate. You estimate that the project will cost $1,400,000. The challenge is to perform an ROI analysis based on productivity improvements measured through performance metrics.

How would you work with the client to establish performance metrics to measure productivity? The measurements may already exist or you may have to work with the client to generate new performance metrics to adequately measure the desired performance. You must work with your sponsor to establish a core set of performance metrics that are objective and reported on regularly.

The client indicates that call center representatives are evaluated on the following metrics:

- **Average Time Spent Per Call**: The average time it takes to answer a single call.
- **Average Hold Time Per Caller**. Average time a caller spends on hold.
- **First Call Resolution**. Frequency of caller issues being resolved during the first call.
- **Customer Satisfaction Scores**. Caller satisfaction with service received.

After selecting the appropriate performance metrics, you need to determine how the e-learning effort will improve performance by outlining goals. Then you must calculate how the increased performance will have a direct impact on the business. This will require access to hard data and well educated assumptions.

Displaying the Results

Here are the results of calculating ROI based on increased employee productivity measured through performance metrics. Tables 4, 5 and 6 outline the project cost, benefits associated with productivity improvements measured using performance metrics, and ROI calculations using the definitions discussed earlier. Table 4 shows the costs associated with the customer service e-learning initiative.

E-Learning Cost		
Intervention	**Calculation Description**	**Total**
E-Learning: Call Tracking System	Course Development	700,000
	Hosting Fees	75,000
	Per Seat Fees	400,000
	Implementation Support	50,000
	PC Hardware Upgrade	100,000
	Client Resources	75,000
		TOTAL COST = $1,400,000

Table 4: E-Learning Costs

It is important to let the client know what types of metrics were used to determine the ROI and what the expected goals are after the e-learning. Table 15.5 provides and example of an effective layout for displaying that type of information. It is also important to note that some results are simply not quantifiable or the information is proprietary and not provided by the client in the RFP phase. However, it is a good idea to show the client how you developed the ROI so they can "plug-in" there own numbers to do their own calculations if they desire.

Calculating Benefit Associated with Productivity Improvements Measured Using Performance Metrics			
Metric	**Current Performance**	**Performance Goals after e-learning**	**Benefit Calculations with Assumptions**
Average Time Spent Per Call	300 seconds	240 seconds	20% increased productivity. Results in a minimal reduction in staff by 5% or 400 employees. Each employee earns an avg. of $25,000 per year. 400 * 25,000 = **$10,000,000**
Average Hold Time Per Call	20 seconds	15 seconds	Reduction in Phone Costs. Approximate phone fee of $1,500,000 reduced by 25%. $1,500,000 * 0.25 = **$375,000**
First Call Resolution	85%	90%	Reduce the number of repeat calls resulting in improved customer satisfaction. **Non-quantifiable**
Customer Satisfaction Scores	75% Satisfied	90% Satisfied	Improved customer satisfaction while reducing staffing levels. **Non-quantifiable**
			Total Benefits from Increased Performance = $10,375,000

Table 5: Benefits of Increased Performance

Table 6 displays a good method of showing the client the various ways of determining their ROI and the different formulas used. Clients may be unfamiliar with ROI calculations for e-learning programs and may require some education. Showing calculations and formulas helps to educate the client on the ROI formulas used to arrive at your ROI figures.

ROI Calculations		
Method	**Description and Calculation**	**Return On Investment**
Net Benefit (NB)	Compares benefits to cost of the initiative. NB = Benefit – Cost	10,375,000 – 1,400,000 = **$8,975,000 Net Benefit**
Benefit Cost Ratio (BCR)	Ratio for benefit returned for each dollar invested. BCR = Benefits / Costs	10,375,000 / 1,400,000 = **7.41 Benefit Cost Ratio**
ROI %	Percent in net benefits for every dollar invested. ROI% = (NB / Cost) x 100	(8,975,000 / 1,400,000) * 100 = **641% ROI**

Table 6: ROI Calculations

Presentation of ROI in the Document

Customize the ROI section of the business case based on client needs. Be sure to include each item outlined the RFP and performance based analysis. Also leverage additional insight learned through client discussions if possible.

If a client is asking for ROI measurements solely based e-learning delivery savings (i.e. reduced travel, material duplication etc.), be sure to include this information. Also include performance based ROI measurements which can be leveraged to help “sell” e-learning both internally and externally.

Use the tables presented in this whitepaper as a starting point and customize the formatting and verbiage based on client requirements outlined in the RFP or indicated by upper management.

The Bottom Line

This whitepaper discusses how to calculate Return On Investment for e-learning initiatives based on increased employee productivity measured using performance metrics established by the client. This methodology addresses the client’s primary goal of delivering learning solutions that improve business results.

Performance focused ROI provides a tangible method to demonstrate significant returns. When estimating ROI remember to understand the client’s ROI methodology, be practical and agree to the ROI methods before starting, and finally, be honest. When designed and implemented appropriately, e-learning is a powerful tool that improves employee productivity. Effective ROI measurements can demonstrate the results.

**This white paper is exerted from the book "Winning E-Learning Proposals: The Art of Development and Delivery" written by Karl M. Kapp, Ed.D, Associate Professor of Instructional Technology at Bloomsburg University's Institute for Interactive Technologies. The book contains contributions from various e-learning professionals. This chapter was contributed by Nancy Vasta, who is responsible for performance consulting and learning strategy at CIGNA Corporation. "Winning E-Learning Proposals: The Art of Development and Delivery" is published by J. Ross Publishing Press and is available from http://www.jrosspub.com and http://www.amazon.com. You can visit Karl at his web site http://www.karlkapp.com.*