

The ROI of training: Strategies and evaluation methods



As global organizations seek to gain a competitive advantage through employee development, more pressure has been placed on HR and learning professionals to provide evidence of the success of their training initiatives. Training evaluation is often conducted to determine the extent of knowledge shared and acquired. However, for business leaders, the information that really matters is whether or not new knowledge was applied and to what extent the application of knowledge has benefited the business operationally and financially. The true goal of training evaluation is to determine the business impact and return on investment (ROI). With the relevant data, executives can be guided on future business decisions in relation to training investments, cost reduction, and process improvement.

This document will give executives and learning professionals an introduction to the concept of ROI in the training industry. The common evaluation methods will be introduced and an application will be presented in the context of English language training. The document also provides a guide to the different cost-effective training solutions and their potential impact on ROI.

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I. The ROI of Training

Training as an investment

In today's global business environment, the importance of human capital investment is no longer in question. Executives now find themselves in a business atmosphere that is fast-paced, knowledge-driven, and highly competitive, where corporations consistently strive to break into new markets and become leaders in innovation. Training is considered an investment in talent. In addition to the fact that training helps develop talent, training also retains talent as today's workers seek employers who provide long-term training plans and career development opportunities. In a competitive business world, top talent is a critical asset. Many high-performing organizations recognize the value of a competent workforce that is capable of excellent execution resulting in increased productivity, revenue, and customer satisfaction.

Despite this regard for a well-trained workforce as a competitive advantage, it remains a challenge to provide hard facts as evidence for the effectiveness of training. The most accessible facts are often linked to training costs, in which the value of a training program is determined by insufficient data, such as the number of training hours or number of participants. This approach, however, is perhaps the result of a lack in the implementation of standardized, comprehensive evaluation methods. While many acknowledge the growing impact of employee development on business results, very few efforts are made to link the two through an in-depth evaluation of training.

In 2008, the ROI Institute conducted a survey in which CEOs from Fortune 500 and large private companies were asked to respond to questions on learning investments. Of the 96 respondents, only 8 percent claimed to measure the business impact of learning programs, while only 4 percent measured the ROI of training. These two aspects of measurement (business impact and ROI) were also ranked as the two most important metrics for CEOs. Business leaders want a more strategic approach to training; one that contributes to the bottom line and yields measurable results. The challenge for many leaders, however, is how to confirm that the training they provide is as beneficial as they would like it to be.

Methods of measurement: Kirkpatrick and Phillips

Since the 1950s, there have been several attempts to establish a standard method for the evaluation of corporate training. To this day, research reports, debates, and refinements to existing methods continue to circulate among learning and HR professionals in the effort to make the measurement of training more relevant and reliable. Notwithstanding the varying opinions in the field, two models of training evaluation remain foundational and are still being used by organizations today.

Donald Kirkpatrick, a former president of the American Society for Training and Development (ASTD), introduced four levels of evaluation in a series of articles published in an ASTD magazine from November 1959 to February 1960. The process that Kirkpatrick outlined led to a more concrete concept of evaluation in the training industry. Since then, the model has been adopted by organizations and training professionals worldwide.

Figure 1: Kirkpatrick’s Four Levels of Training Evaluation

LEVEL 1 - Reaction	Did the participants like the training program?
LEVEL 2 - Learning	Did the participants acquire new skills and knowledge?
LEVEL 3 - Behavior	Did the participants apply what they learned?
LEVEL 4 - Results	Did the implementation of the program result in the accomplishment of business goals?

Interest in the ROI of training began in the 1970s when Jack Phillips started the study and development of a methodology for training evaluation which included the computation of monetary values. Using Kirkpatrick’s work as basis, Phillips extended the method by adding a fifth level of evaluation: ROI (see Figure 2).

Figure 2: Phillips' ROI Method

LEVEL 1 - Reaction	Did the participants like the training program?
LEVEL 2 - Learning	Did the participants acquire new skills and knowledge?
LEVEL 3 - Behavior	Did the participants apply what they learned?
LEVEL 4 - Results	Did the implementation of the program result in the accomplishment of business goals?
LEVEL 5 - ROI	What is the return on investment? $\text{ROI (\%)} = (\text{net program benefits} / \text{program costs}) \times 100$

Phillips argues that while training programs may be proven to be beneficial to organizations when new knowledge is successfully applied back on the job, it is not a guarantee that the cost of these programs will yield a positive return. If the program is too expensive -- more than what the improvements are worth -- then the value of the program is questionable. To address this concern, the additional step proposed by Phillips requires the assignment of monetary values to different kinds of data relevant to the evaluation.

Why measure ROI?

The concept of ROI in the field of training has been a topic of debate for decades. In fact, some experts reject ROI and prefer the terms ROE (return on expectations) or ROO (return on objectives). The exchange of discussions over the years has produced several methods and tools including standardized questionnaires, forms, flowcharts, and data collection guidelines. Regardless of the method or terminology, training professionals and business executives all strive towards answering the question of whether or not a training solution pays off. Data gathered and interpreted to answer the underlying question can support the following strategic moves:

- ▶ better decision making and financial management
- ▶ cost reduction and streamlining of processes
- ▶ quality improvement of training initiatives
- ▶ reinforcement of the business strategy
- ▶ accountability of training providers

II. Maximizing ROI: cost-effective solutions

Technology is perhaps one of the greatest factors contributing to changes in training and education. With the Internet and other advancements in the telecommunications industry, training now operates in a borderless community. This means that delivery options have increased, and so has the pressure to implement programs that can keep up with the demands of globalization and at the same time ensure a positive ROI.

For organizations seeking to implement employee development programs, the considerations can be numerous. In a fast-paced, high-tech environment, for example, people will demand quick and easy access to information. In a corporation with operations all over the world, a consistent and logistically efficient system would be most beneficial. Current offerings in the field target these different needs, and their benefits vary in terms of cost, efficiency, and impact.

The benefits of the following solutions will be discussed in this section:

1. Distance training vs. face-to-face training
2. Blended learning: an integrated approach
3. Partnership with a global provider

eLearning and mobile learning

eLearning, a component of distance learning, involves the delivery of training via the Internet or computer applications and software. Many organizations favor this delivery system because of its evident advantages such as reduced cost and easy implementation. eLearning packages are also often supported by mobile learning solutions, which allow learners to access learning content on portable devices such as smartphones and tablets. Following are some benefits of eLearning:

Cost and efficiency - eLearning is easy to implement, especially off-the-shelf packages that simply require purchasing of licenses or subscription to online portals. This reduces the cost significantly, cutting budgets needed for administration and in-house labor.

Technology - The use of innovative solutions such as learning management systems (LMS) helps organizations optimize technology. For example, if reporting is automated, monitoring and assessment becomes easier to implement and manage.

Just-in-time training - eLearning allows learners to choose when and where to undergo training. This is especially helpful in workplaces where schedules and deadlines get tight. Having a learning system that can be easily accessed only when needed reduces interruptions in production time and difficulties in scheduling.

Scalability - eLearning solutions can support increasing numbers of participants in multiple locations. This ensures consistency in content and delivery of training programs for global organizations.

Self-paced learning - Unlike in instructor-led training programs, learners under eLearning programs can go through modules or learning content at their own pace. Having individualized learning sessions eliminates the difficulties encountered in traditional training programs caused by differences in learner skill level and preferences.

Distance training vs. face-to-face training

In the field of education, the need for communication between instructors and remote learners has been present since the 19th century. Today, distance learning is fueled by the Internet and digital technology. The different modes of distance learning include telephone, web conferencing, online collaboration spaces, social networking, and eLearning platforms.

Not only has distance training developed into a robust teaching method; it has also become an even more necessary solution in an age where multinational teams continue to grow and cross-border transactions have become inevitable. The current global community requires a learning system that can accommodate the increasing number of remote workers, traveling employees, and unpredictable schedules.

While traditional face-to-face training is still a viable option for organizations, an evaluation of its benefits vis à vis the advantages of distance training shows that the latter has a greater potential of rendering a higher ROI in today's global, digital context.

Figure 3: Features of Face-to-face and Distance Training

	Face-to-face training	Distance training
Pace and duration	▶ The pace and duration of the program is typically dependent on a fixed curriculum.	▶ The pace and duration of the program can be needs-based or learner-specific.
Content source	▶ The primary source of content is the instructor. ▶ Books and multimedia can be recommended or used based on established lesson plans. ▶ Content can be pre-determined and regulated.	▶ Learning content can come from a pool of eLearning resources, exchange of information on virtual communities, digital files, and/or a remote instructor. ▶ Content can be either pre-determined or learner-specific.

Use of technology	▶ Training can be conducted with or without the use of technology such as multimedia and the Internet.	▶ Technology is necessary and optimized for assimilation of learning content, interaction, monitoring, and assessment.
Interaction	▶ Interaction is facilitated through face-to-face sessions with the instructor and/or participants of the same training program and location. ▶ Interaction is often initiated by the instructor.	▶ Interaction happens online or by telephone. Communication is not a problem for operations in multiple locations. ▶ Interaction can be initiated by either the participant or the instructor.
Performance feedback	▶ Feedback and consultation can be minimal in group classes especially when time is limited.	▶ Consistent and individualized feedback is possible.

Considering the different features listed in Figure 3, distance learning can be more beneficial in terms of variety of input (content, interaction, and feedback), learner engagement, and individualization or customization. By optimizing technology, training programs can offer more learning opportunities for participants, and therefore increase the impact of learning.

Figure 4 presents an overview of the basic costs necessary for the implementation of face-to-face training and distance training.

Figure 4: Costs of Face-to-face and Distance Training

Cost	Face-to-face training	Distance training
Training venue and equipment	Needed	Not needed
Transportation	Needed by either the instructor or participants	Not needed
Training administration and support	One contact person is required for each location or office.	The entire program, covering all office locations, can be centralized.
Trainer costs	Local cost	Cost is potentially lower depending on trainer location
Technological requirements	Optional	Needed

The requirements for different training programs may vary, and it is important for organizations to carefully weigh the costs and benefits. Figure 5 demonstrates the calculation of costs, benefits, and ROI of four different training options: (1) face-to-face training with one-to-one sessions, (2) face-to-face training with group sessions, (3) distance training via eLearning, and (4) distance training combining eLearning and live training sessions.

The values presented in the table below are based on the following:

Calculation of benefits – The key indicators calculated are (a) time saved due to the impact of training and (b) increase in quality of work. Several learner surveys were conducted to assess the learners' perceived impact of training in terms of the number of work hours saved as a result of improved performance of different work tasks. The numbers reflected in the table below are based on the average number of hours saved reported for each training option. Quality of work is based on input from managers and supervisors who evaluated the work improvements in terms of reduced corrections and customer complaints.

Calculation of costs – Costs for administration and support, trainer fees, and eLearning licenses are based on standard rates in the market.

Calculation of ROI – With the monetary values determined by the calculation of costs and benefits, the following formula is used:

$$ROI (\%) = \frac{\text{total benefits} - \text{total program cost}}{\text{total program cost}} \times 100$$

Figure 5: Calculation of ROI for Face-to-Face and Distance Training (500 Learners)

Type of training	One-to-one	Group class	eLearning	Blended learning	Comments
BENEFITS					
Estimated work hours saved (per learner per week)	1.8	0.7	0.3	1.9	Based on learner surveys on perceived impact of training in terms of work hours saved (e.g., quicker response time, less time spent on meeting preparations, etc.)
Estimated work hours saved (per learner per year)	90.72	35.28	15.12	95.76	Based on 4.2 weeks per month
Total savings (per learner per year)	\$1,724	\$670	\$287	\$1,819	Based on \$19 hourly wage
Total savings for 500 learners per year (a)	\$861,840	\$335,160	\$335,160	\$909,720	
Total value of increase in quality of work (per learner per year)	\$2,300	\$700	\$500	\$2,300	Based on evaluation results from supervisors and managers
Total value of increase in quality of work for 500 learners per year (b)	\$1,150,000	\$350,000	\$250,000	\$1,150,000	
TOTAL BENEFITS FOR 500 LEARNERS PER YEAR	\$2,011,840	\$685,160	\$393,640	\$2,059,720	

COSTS					
Training administration and support	\$35,000	\$35,000	\$0	\$0	Annual salary for one full-time employee (for coordination of trainers and learners)
Cost of travel time (per learner per year)	\$570	\$570	\$0	\$0	Based on 1 hour round-trip, at \$19/hour (for face-to-face training, learners travel to offsite training venue)
Cost of travel time for 500 learners per year	\$285,000	\$285,000	\$0	\$0	
Trainer cost (per learner per year)	\$2,100	\$390	\$0	\$1,000	For one-to-one face-to-face: \$70/hour; group class: \$65/hour; distance training: \$50/hour. 30 hours for one-to-one and group class; 20 hours for blended learning due to added learning impact of the eLearning environment.
Trainer cost for 500 learners per year	\$1,050,000	\$195,000	\$0	\$500,000	Based on 1 hour round-trip, at \$19/hour (for face-to-face training, learners travel to offsite training venue)
eLearning access (per learner per year)	\$0	\$0	\$300	\$300	
eLearning access for 500 learners per year	\$0	\$0	\$150,000	\$150,000	
TOTAL COST FOR 500 LEARNERS PER YEAR	\$1,370,000	\$515,000	\$150,000	\$650,000	
ROI	47%	33%	162%	217%	

The example above demonstrates one of many ways to calculate the costs and benefits of a training program. Organizations may have different business goals for training, and the calculations must be done in line with those goals. In sales, for example, apart from time saved, it would be necessary to consider the improvement in the organization's sales performance as a result of sales training. Some benefits are more quantifiable than others, but with clear goals and sufficient data, the conversion of benefits to monetary values is possible.

Based on the calculations in the table above, we can conclude that the training option that yields the highest ROI is the blended learning program combining live distance training and eLearning. Implementation of the blended learning program also comes with the benefits of distance training, which include higher learner engagement and more flexibility.

Blended learning: an integrated approach

To ensure a positive ROI in training, organizations need a solution that can minimize cost and increase learning transfer. While eLearning and mobile learning solutions have proven to be cost-efficient, some training objectives require more than standalone self-study programs. To maximize the benefits of distance learning, global business teams must leverage technology by implementing a program that allows flexibility and mobility while maintaining the same instructional support offered by traditional face-to-face learning. This is especially a concern for training programs that target soft skills such as communication, negotiation, or sales. Quick and easy access to knowledge should be coupled with other learning opportunities that encourage the application of that knowledge as well as skills development. It is for this reason that blended learning solutions have emerged in the field of training.

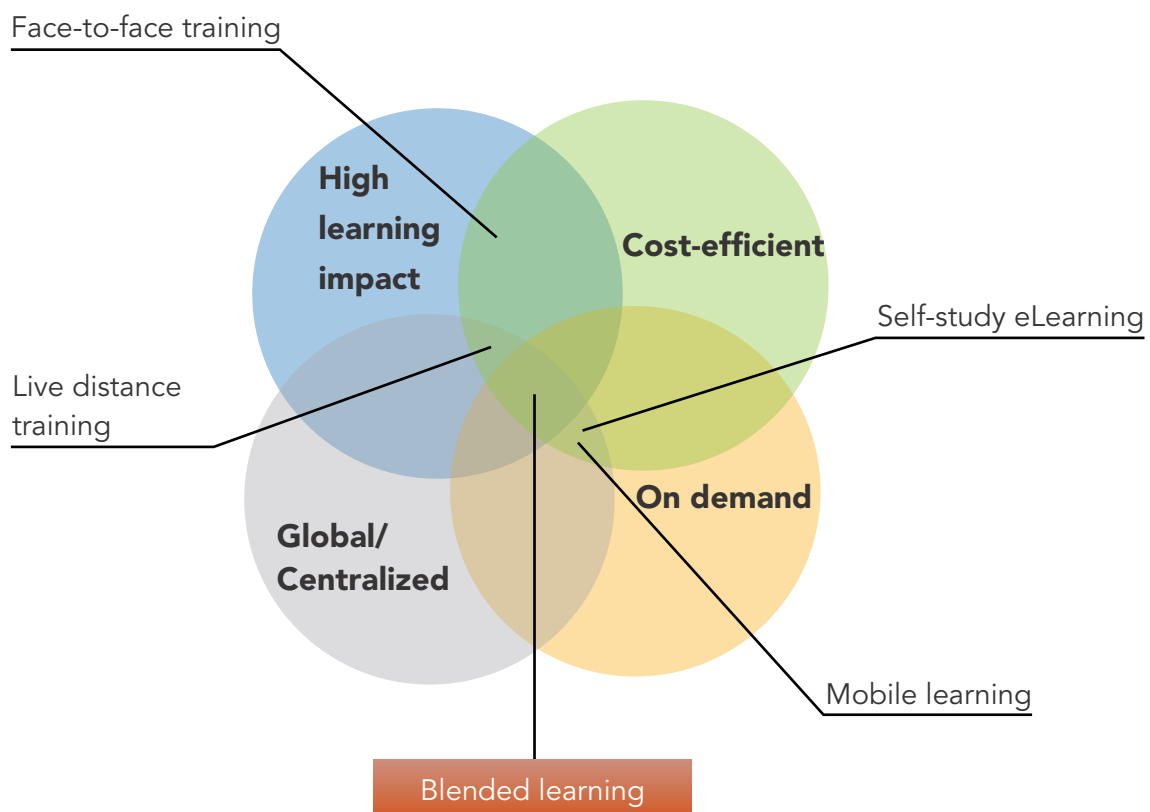
Blended learning refers to the combination of different learning delivery methods. There are various options such as combining instructor-led distance learning (telephone, web conferencing) with online self-study, or conducting face-to-face lessons with eLearning and mobile learning support. In a foreign language training program, for example, eLearning and mobile learning are useful for quick access to content and self-paced study of grammar

A blended learning approach, when implemented efficiently, results in greater learning impact.

rules and new vocabulary. However, instructor-led distance learning is also needed for conversation practice. The integration of different learning methods gives learners both the flexibility of self-paced learning and the instructional guidance and feedback needed in training. A blended learning approach, when implemented efficiently, results in greater learning impact.

The figure below presents the different training delivery methods in relation to four significant needs in today's global business environment:

Figure 6: Training Needs and Delivery Methods



Partnership with a global provider

A 2008 study conducted by Training Industry Inc. showed that most companies allocate about 40% of their training budgets for administration purposes. The high administration costs have recently led organizations to move towards streamlining their training operations through partnerships with providers of content development, training staff, learning administration, technological infrastructure, and technical support.

With the continuous expansion of businesses to different parts of the world, not only is there a need for cost-efficient training operations. There is also a need for corporate training programs to be kept trackable and consistent across different office locations in terms of learning content and reporting. The option that is perhaps most beneficial to corporate teams is the centralization of training programs rather than the selection and implementation of programs per location. A company with operations in multiple locations can also cut a significant amount of costs by reducing the number of requests for proposals and minimizing technology requirements and maintenance needs.

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Centralization is possible through a partnership with a single vendor of training that can provide the necessary technological infrastructure and other training requirements for the entire organization. Partnering with a training provider should go beyond setting up an external unit whose operations are independent of direction from the company. A strategic approach to training calls for the alignment of training initiatives to a company's specific business goals. This means that the implementation of a program through a training provider must be a collaborative effort between the supplier and the organization. Ideally, the company's training provider should be able to set up a centralized, well-developed, and efficient system of training that is also flexible and customizable to accommodate company-specific needs that support the bottom line.

III. Measuring business impact

For a reliable evaluation and measurement of training ROI, organizations must be willing to invest the time and resources necessary for strategic planning and data collection. First, it is important to note that the steps relating to training evaluation should begin even before a training program is implemented. If organizations intend to evaluate their training initiatives at Kirkpatrick's Level 4 or Phillips' Level 5, then the design of the programs must be built for that kind of assessment. The chosen evaluation framework, such as the model proposed by Kirkpatrick or Phillips, should serve as the guideline for developing the training program itself in order to achieve the desired business outcome and level of learning transfer.

The section that follows aims to present an example for the selection and evaluation of training programs. The actual process may require a larger scope of data collection and a more specific analysis. Moreover, organizations may encounter some challenges such as establishing the causal relationship between the training program and specific business results. Organizations must commit to consider and address these concerns according to the company's needs and priorities. The presentation below is an overview of some necessary steps for a strategic approach to developing and evaluating English training programs.

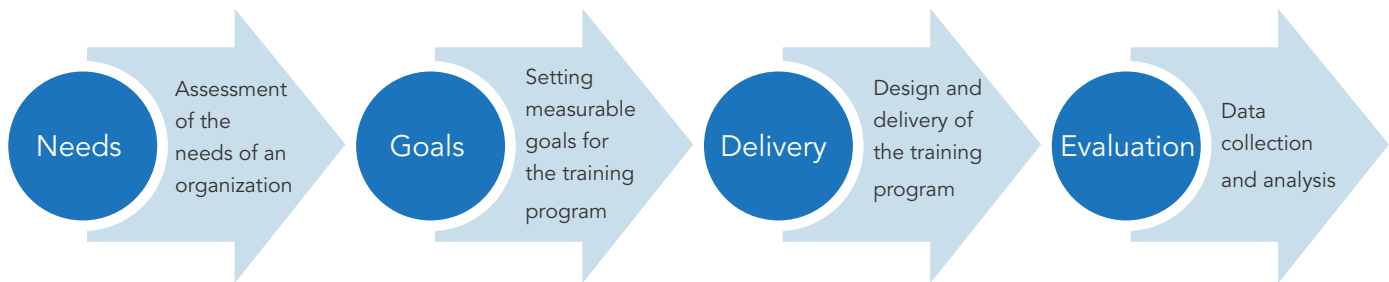
Example: ROI of a blended English training program

A pharmaceutical company needs to improve its employees' English proficiency levels to cope with its ongoing business expansion to other regions. Opportunities have opened for employees to be sent to newly established offices or to be assigned to coordinate with teams from other countries. With its headquarters in a non-English speaking country, the company has many highly talented employees who still struggle with using English for communication. Proficiency in English is a requirement for promotion and the expansion requires better coordination with remote teams.

The organization must ensure that the program's design and objectives are in line with the company's needs and strategy.

The company is looking into the different options for an English training program. Based on standard procedures for the planning of training programs, the organization will use the following road map:

Figure 7: Training Program Road Map



Before a program can be evaluated or implemented, it is necessary to determine what kind of training is needed by the company. To gain a positive ROI, the organization must ensure that the program's design and objectives are in line with the company's needs and strategy. Using the guide above, the following details can be established for this hypothetical company:

Needs:

- ▶ There are about 500 target participants from 5 different countries. The content and quality of the program must be consistent.
- ▶ The English proficiency levels of the 500 target participants vary. The training program must be able to cater to the different learner proficiency levels.
- ▶ Employees often travel to other countries. A distance training program is needed to accommodate learners moving from one location to another.
- ▶ In the past, the administration processes were too difficult and costly. The company needs a cost- efficient technological infrastructure that allows centralized reporting and technical support.
- ▶ Employees were not very motivated in past English training initiatives. The training program must be engaging and motivating for participants who are often busy with daily responsibilities.
- ▶ The training program must cover all language skills: listening, reading, speaking, and writing.
- ▶ The learning content should be relevant to the participants' specific jobs and tasks.

Goals:

The main goal is to develop the Business English skills of key employees to fill in vacant managerial positions and to increase productivity by improving communication.

The performance indicators may include:

- ▶ Fewer incidences of communication failure
- ▶ Quicker response time to internal and external concerns
- ▶ Increase in number of qualified employees for managerial positions
- ▶ Increase in customer satisfaction
- ▶ Decrease in supervision time due to the ability of employees to resolve issues on their own

Design and delivery:

Based on the requirements listed above, the entire organization will implement a blended English training program through partnership with a single vendor. Lessons will be conducted via telephone, web conferencing, and online writing practice with an eLearning subscription to an online platform. Topics during live lessons will focus on speaking practice for conference calls, meetings, and telephoning. Business English writing will be developed through online coaching. The training provider will also incorporate content provided by the company for customized learning resources.

If this company uses the Kirkpatrick/Phillips model of evaluation, the objectives for each level must also be identified. An evaluation plan can be summarized as follows:

Figure 8: Evaluation Plan

Level	Measurement focus	Objectives	Measurement options
1 - Reaction	Learners' satisfaction and perceived value of the program	The program must be engaging, motivating, and perceived as helpful in improving the participants' proficiency level and confidence in using English.	Satisfaction surveys, focus group discussions
2 - Learning	Skills and knowledge acquired from the training program	The program must improve the participants' proficiency level to at least one step higher on the CEF proficiency scale. It must improve the learners' ability to participate in phone calls, meetings, and presentations as well as develop their business writing skills.	Pre-training tests vs. post-training tests, standardized tests, speaking and task-based exercises
3 - Behavior	Application of new knowledge and skills to work tasks and responsibilities	The program must enable participants to coordinate with other employees more efficiently and reduce time spent on coordination efforts, composing emails, and resolving issues due to communication failure.	Feedback from peers and customers, performance evaluations from managers

4 - Results	Accomplishment of business goals as a result of the program	The program must contribute to the goal of business expansion by: enabling participants to increase efficiency and productivity; improving customer satisfaction; and increasing the number of qualified employees for leadership positions.	Output reports, peer reviews, customer satisfaction surveys, manager feedback
5 - ROI	Benefits vs. costs	The ROI must be at least 120%.	ROI formula (This requires the conversion of pertinent data to monetary values).

A strategic approach to training

Many organizations today tend to focus on levels 1 and 2 of the traditional Kirkpatrick and Phillips method. However, the example above illustrates that the most important questions of training evaluation can be answered by data gathered for levels 3, 4, and 5. In this particular case, the questions would be: Were the participants able to communicate

The strategy for ensuring a positive training ROI is planning and preparation.

more efficiently after the training program? Did it improve internal and external business correspondence? Are the employees more capable of handling communicative tasks in the English language? How has this contributed to cost reduction, customer satisfaction, and company strategy?

The most significant facts that business leaders want to know are (1) the extent of learning transfer and (2) the impact on business.

The strategy for ensuring a positive training ROI is planning and preparation. Executives and other key decision-makers should not be excluded from the planning of training initiatives. From the start, there should be a clear picture of what an organization seeks to achieve through a training program. These goals should be aligned to the company's business strategy. Once the goals are established, a training program can be strategically selected or developed.

Conclusion

Training is a necessary investment for global organizations that operate in today's competitive business environment. The success of training is determined by the program's payoff on the business: Did the implementation of the program result in the accomplishment of business goals? Did the investment yield a positive return?

Successful training or a positive ROI is achieved when all phases of the training program (planning, implementation, and evaluation) are driven by specific objectives determined by the organization. In addition to the company's business goals, it is also important for organizations to consider the following needs and opportunities in the training industry:

- ▶ The investment of time and resources needed for data collection and analysis
- ▶ The fast-paced global context where there is a need for on demand training, centralization, and wider geographic reach
- ▶ The optimization of available technology for efficiency and higher impact of learning
- ▶ The benefits of partnership and collaboration with a training provider that can cater to company-specific needs

To maximize ROI, organizations need cost-efficient, on demand, and centralized programs that have high learning impact. As seen in the calculations and examples provided in this document, within the standard range of costs, the integrated approach of blended learning offers increased engagement for workers who move in a fast-paced, global environment. Combining different learning delivery methods enables training to be flexible and self-paced without sacrificing important instructional needs such as support and feedback from an instructor and opportunities for immediate application of acquired skills. With just-in-time learning content, consistent support from an instructor, and interaction with others, the blended training approach proves to be the most cost-effective solution for global organizations.