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## **E-LEARNING JAKO NOWA METODA SZKOLENIA PRACOWNIKÓW I PODNOSZENIA KULTURY INNOWACYJNOŚCI RÓŻNYCH ORGANIZACJI**

### **STRESZCZENIE**

Artykuł opisuje możliwości zastosowania e-learningu w szkoleniu pracowników różnych organizacji. W pracy zostało wyjaśnione pojęcie e-learningu oraz jego główne zalety. Ukazano metody wdrażania e-learningu w przedsiębiorstwach jak i potencjalne problemy związane z tą metodą szkolenia pracowników. Możliwości zastosowania e-learningu zostały zobrazowane na przykładzie kilku wybranych firm.

## **E-LEARNING AS A NEW METHOD OF TRAINING EMPLOYEES AND INCREASING INNOVATIONAL CULTURE IN DIFFERENT ORGANIZATIONS**

### **ABSTRACT**

This article describes how e-learning will change the way corporations deliver training in nearly all segments of the business process. Some new methods of increasing innovational culture in different organizations are presented. The paper covers briefly the definition of e-learning, benefits of e-learning, expected difficulties and things to consider when starting e-learning. Some costs issues, analysis and examples of use e-learning are also described.

### **1. INTRODUCTION**

Every time a company needed to train newly hired employees or introduce a major new product, it involved flying people to corporate training centers or to sales meetings, and hefty expenses for flights, meals, and hotels. Today, major enterprises have discovered that they can eliminate a lot of time and cut the costs by building online e-learning systems - what some of these corporations are calling virtual universities.

Best-practice organizations are using e-learning in all topic areas: new product training, management development, leadership, sales, service, manufacturing. Businesses are also developing e-learning applications to teach hard skills such as the proper use of products and equipment, or soft skills such as regulatory policies or customer relationship practices. Increasingly, e-learning is being used to introduce new employees to their companies or to update veteran employees on the latest benefits and human relations policies.

Some companies contend that the interactivity and sophisticated graphics of well-designed e-learning systems can help employees learn faster, retain more knowledge, and make them productive more quickly than weeks of classroom training. These techniques also give employees the opportunity to take more control over their training, enabling them to search and register for courses that are tailored to their particular career paths.

Companies bank on e-learning to speed up the process of launching new products. This is critically important to global corporations, particularly manufacturing and pharmaceutical companies that need to coordinate the launch of new products at distant points around the world.

## **2. DEFINITION OF E-LEARNING**

When talking about e-learning it is important to understand the meaning of this term. Shortly e-learning means technology based learning. This term covers a wide set of applications and processes, including computer-based learning, Web-based learning, virtual classrooms, and digital collaboration. E-learning may be defined as the delivery of content via all electronic media, including the Internet, intranets, extranets, satellite broadcast, audio/video tape, interactive TV, and CD-ROM. It is more narrow term than distance learning, which would include text-based learning and courses conducted via written correspondence.

At its simplest, e-learning is the delivery of training sessions and learning materials using technology but typically it refers to internet or intranet delivery. The key is "anytime, any how and anywhere". E-Learning is used today to support a wide range of topics and competencies, from highly technical content to business and personal skills.

As one participating organization notes, e-learning is not about using the latest technology to replace the classroom. Nor is it about posting content on the Web to be downloaded or read. E-learning provides a new set of tools that can add value to all of the traditional learning modes - from classroom experiences to learning from books.

E-Learning is generally seen as better than physical classroom instruction for knowledge transfer. However, most organizations that are adopting e-learning are "blending" e-learning with classroom learning, using each to its best advantage.

Although some products sold as e-learning courses are little more than "page-turners," most e-learning course designers aim for learner interactivity with the course material, instructor and fellow learners. Even the ability to link pages together in a non-linear way makes e-learning more interactive than a book. At its best, e-learning is extremely engaging, rich and instructionally powerful.

Originally, internet delivery of learning was lamentable: lots of text, very long courses to plough through and at most a multiple choice test at the end. Recent technological innovations makes it possible to change static lecture notes and course materials into a comprehensive online educational program through: logical navigation tools, external resource links, video and audio clips, interactive testing, clear, consistent interfaces, effective formatting/layout, animations, cross platform design, automated grading systems or on-line discussion areas.

## **3. BENEFITS OF E-LEARNING**

E-learning is much more powerful than traditional learning. The answer on the question what makes it so good is simple when we consider benefits of e-learning. Here are some main advantages of e-learning.

### **3.1 Cost and time savings**

E-learning makes it possible to avoid facility costs, classroom costs, and travel costs, and loss of productivity by providing employees access to information from virtually anywhere there is an available computer. The time required for online learning is, on average, about 50% of the time required by an equivalent classroom training session, lowering costs further. When an e-learning project is based on a sound business case, up-front development costs can be quickly recovered through training delivery savings.

According to Training Magazine, corporations save between 50-70% when replacing instructor-led training with electronic content delivery. Opting for e-learning also means that courses can be pared into shorter sessions and spread out over several days or weeks so that the business would not lose an employee for entire days at a time.

### **3.2 Flexibility and convenience**

Businesses can distribute training and critical information to multiple locations easily and conveniently. Employees can then access training when it is convenient for them, at home or in the office. There is no need to stay connected to the Internet while taking the coursework. Participants can work in any environment and location. Internet connection is needed only when submitting post-test scores to the database.

### **3.3 Standardization and customization**

Since different teachers and trainers have different styles of instruction, all personnel may not be receiving the same training. E-learning assures standardization of training and content presented. This is also true for any testing or certification the students may receive. Although same content may be delivered to every learner, material can also be customized for different groups or for specific learning needs.

### **3.4 Higher retention of content**

The Research Institute of America found that 33 minutes after a lecture is completed, students usually retain only 58% of the material covered in the class. By the second day, 33% is retained, and three weeks after the course is completed, only 15% of knowledge is retained.

The delivery of content in smaller units, contributes further to a more lasting learning effect. Whereas the average content retention rate for an instructor-led class is only 58%, the more intensive e-learning experience enhances the retention rate by 25 - 60%. Higher retention of the material puts a higher value on every dollar spent on training.

### **3.5 Administration Reports**

Corporate administrators can generate and print powerful, standardized reports from a secure web-based report menu. Accurate and precise information on participants, modules completed, courses taken, and scores received can be recalled on demand from the secure Internet database. Corporate administrators can be confident that the reports reflect up to the minute employee participation. This information can help to reduce insurance fees, limit legal liabilities, and decrease administrative costs.

### **3.7 Universal access**

Thanks to universal Internet protocols and widely available Web browsers, the same training program can be delivered to virtually any computer anywhere in the world.

### **3.8 Learning on demand**

Internet delivery allows the fee earner to access the amount of training (a whole module or just part) and the subject that they want when they demand it. It is possible to pull down all the material that is needed.

### **3.9 Ease of update and reuse**

Changes can easily be made in the content and everyone worldwide can instantly access the update. The use of templates and "learning objects" allows reuse of content in various courses.

## **4. EXPECTED DIFFICULTIES AND THINGS TO CONSIDER**

Many failures of e-learning projects were made by using inadequate technical solutions to the real needs of organization. Also standard implementations do not fit everywhere. Many companies made mistake because they saw only reduction of costs in e-learning. Before starting e-learning it is important to change organizational culture. Explanation of reasons and benefits to the employees is also essential.

In order to achieve effective e-learning, it is necessary to bring together three elements: the platform (system infrastructure), contents, and a system for operation and learning support. Having all these elements it is essential to construct a good system to tie these elements together organically.

Even if an excellent system is put in place and there is a problem with the contents or the system operation, then the desired results will not be achieved. No matter how sophisticated the technology is or how flashy the graphics and images are, it is the quality and relevance of the content to the business issue and learner objectives that win the day. Great content matters. In the traditional instructor-led world, one of the ways training and development programs differentiate is in the skill of the instructor. Weak material in the hands of a gifted trainer still resulted in valuable knowledge transfer and skill acquisition. In the world of e-learning weak content has no ally. It is just weak.

Problem of the content is not the only one. Some other things to consider are listed below.

### **4.1 Need a computer and ability to use it**

Employees must have access to computers, at home, at work, or at some training location in order to use e-learning. Sometimes computer access isn't possible. To use e-learning, it is assumed that the personnel being trained are somewhat computer literate. They certainly must know how to use a keyboard and a mouse.

## **4.2 Internet access**

Sometimes workers also need to have access to the Internet. This can be a problem for training field personnel who may have computers but can't readily access the Internet for the just-in-time training or guidance.

## **4.3 Bandwidth limitations**

Sound, video and other rich media components require high-speed connections and can put a strain on limited-capacity organizational networks.

## **4.4 People like traditional training**

Some people have phobias concerning using computers, while others balk at any type of computer interaction. They may feel it is too impersonal or that the computer is out to get them. Some people may simply freeze up when confronted with learning on a computer.

## **4.5 Must be well-done**

The e-learning must be designed and written in a quality manner to keep interest and learn. A poorly designed course can result in boredom or even confuse the person supposed to learn the material. People like traditional training.

## **4.6 Technology intensive**

E-learning relies on a sometimes complex system of software, hardware, protocols and network infrastructure. While reliability is steadily improving, technical problems remain. Good technical support is essential.

## **4.7 Less face-to-face contact**

E-learning makes some learning activities solitary, and takes away much of the informal interactions common to face-to-face training. This can be an issue in organizations where training is seen as a perk.

# **5. GETTING A HANDLE ON E-LEARNING COSTS**

E-learning is considerably more expensive to develop than conventional training. Moreover, first e-learning projects are almost always more costly than expected, as with any complex endeavor.

As you plan your global e-learning strategy, a necessary step is to compare costs from different vendors. You need to know the questions to ask, but like buying a home, you also need to go in with some expectations.

There is not an easily discernible average price for an e-learning packaged course because there is no definitive paradigm. This is due to emerging technologies and the rapid creation and evolution of learning features, which make it difficult to pin down a definition and set boundaries for e-learning.

Even though the cost of a product depends on many factors, you will find price ranges within specific course-delivery models. In addition, understanding the actual price points of specific products will make you a better informed consumer when working with e-learning vendors.

Achieving the lowest prices usually requires a large student population, a great number of courses and a long contract. In general, an average price point along the pricing spectrum corresponds to the respective point along the product complexity and components range. Usually, the self-directed and shorter courses are on the lower-price end and the complex, expert-facilitated courses are on the higher end.

An understanding of the cost of e-learning includes awareness of pricing models for packaged courses. Prices range from a low of 11 cents to a high of nearly \$1,000 per student, per course. You will want to consider factors such as the instructional quality of the courses, technical support, access to collaborative tools, breadth and depth of titles, course duration and the tracking and reporting system.

Here is a summary of available pricing models: subscription-based library, subscription-based mini-library, per-server, per-course (purchaser-selected), per-unit usage-based, by course, usage-based, by time.

Although e-learning requires significant initial investment, organizations can generate huge cost savings due to reduced travel, trainee and instructor time savings and reduced facilities costs. But there are several other major reasons for implementing e-learning, including reaching more learners, achieving faster knowledge dissemination, global consistency of instruction, and managing organizational learning more systematically.

## **6. EXAMPLES OF USE**

### **6.1 Black & Decker**

*Black & Decker* launched the new system with its most popular course, which trains newly hired employees. Next, the company is going to give its service center network employees access to the online training system so they can learn the basics about Black & Decker as well as learn how to service the company's products. By the end of the year, new online training courses will be ready to train new hires in the company's engineering group. This includes college graduates who have engineering degrees, but don't have experience in power tool design.

The key long-term benefit of the system is speeding up the process of launching new products. In the first quarter of 2003, the company started using the system to distribute sales materials and product specifications to its global sales force, a process that substantially improve the efficiency of its sales training program.

### **6.2 Home Depot**

*Home Depot* is the Atlanta-based building supply giant that opens a new store every 40 hours. This requires training of approximately 200 new employees at each location. Education programs focus heavily on the more than 30,000 products on the shelves. After all, customers want to be able to talk to employees who know what's in stock, where it's located and the differences between the products available.

Home Depot used to do what the company calls "belly-to-belly" training – for example an experienced worker in the paint department bellied up to the new employee and taught him what he knew. But when all the employees in a store are new, that strategy doesn't work. Home Depot also switches its products frequently in response to customer demand, so there's a constant need for product education.

To make training scalable and responsive without sacrificing time spent helping customers, Home Depot now deploys two or three PCs loaded with short training modules in the back of

each store. Employees take 15-minute training segments that explain new products, the questions customers typically ask and the answers to those questions. Trainees finish with a short quiz.

E-learning is driving a significant amount of new revenue at Home Depot because the salespeople now sell more, and it has extracted hundreds of thousands of dollars of expense out of the equation. Through online learning, Home Depot has reportedly saved more than \$750,000 in trainer hours and gained \$16 million in top-line revenue growth through enhanced sales.

### **6.3 Delta Airlines**

*Delta Airlines* started using e-learning as a way to rigorously organize and track its training programs to a level approaching the way it tracks its reservation and flight operations. Another key objective includes training its employees over time to perform multiple roles across the organization, so they can be rapidly deployed to perform different functions as company needs change. To this end, Delta deployed online learning management system so it could schedule, track, and report on corporate training in a precise way.

The system allows the training group to report how many classes were presented, how many were canceled, how many people registered, and how many failed to attend. This provides the same level of detail that the airline expects when it reports flight schedules, passenger loads, and on-time performance.

## **7. CONCLUSION**

Today, corporations (including the Fortune 1000) use e-learning for everything from new product introductions, customer service, employee training (sales, technical training) and recruitment. Corporations use video networks (satellite and compressed video) and the Internet/Intranet to deliver internal/external training and customer service solutions.

Although e-learning total spending is hard to pin down, the Federal Department of Labor in USA estimates that companies spend more than \$50 billion annually on employee education and training, with expenditures rising about 5 percent annually. Distance training solutions have moved from the instructional frill category to the mainstream as organizations search for competitive advantages in a global, information-communication economy. Corporate distance learning needs are being met through an organization's expansion of an existing program, outsourcing to vendors or by an alliance with an academic institution.

E-learning will change the way corporations deliver training in nearly all segments of the business process. Increasing global competition, rapid technological advances, demographic changes, and the emergence of a service- and knowledge based economy force organizations to train and re-train their workforce in new ways. Companies that deploy and effectively utilize e-learning will have a distinct competitive advantage. The Internet presents companies with numerous possibilities for leveraging knowledge and education resources. It redefines e-learning not only in terms of better delivery, but also more current, dynamic educational content, more personalized, relevant learning experiences, and more collaboration with experts and peers. The main obstacles to e-learning, such as bandwidth, content availability, technology standards, and service integration, are currently being addressed and should not be significant issues two years from now. Market dynamics over the next several years can be expected to be dramatic, as the shape of the e-learning market develops.

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