
ABSTRACT

In the present scenario of digital era almost every organization is moving towards technology and trying to implement every new trend to improve the business progress in this competitive world. To achieve this, the employees of the organization should be enriched with knowledge about the latest trends and changes taking place around the globe to increase their skill level to complete a given task efficiently. E-learning became prominent tool for training the employees and making them familiar to the courses. E-learning is mostly associated with activities involving computers and interactive networks simultaneously. The learning process can be divided into two broad categories synchronous method (Interactive learning) and asynchronous method (off-line learning). Both these methods require expertise preparation of content by the trainers. This paper summarizes the key aspects of e-learning and analyses how the asynchronous learning process should be upgraded to the growing demand of diverse courses in the working environment. This paper will provide an insight for the need to design new techniques for asynchronous method of learning in E-learning.

KEYWORDS: E-learning, synchronous learning, asynchronous learning, course providers, on-line trainers 2-6
Keywords are required.

INTRODUCTION

The most important development in industries is that they moved towards technology for their business process which leads to the increased use of computers and the World Wide Web, especially its interactive and social aspects. E-learning is a computer based educational tool or system that enables one to learn anywhere and at any time. Today e-learning is mostly delivered through the internet, although in the past it was delivered using a blend of computer-based methods like CD-ROM[2]. E-learning offers the ability to share material in all kinds of formats such as videos, audios, slideshows, word documents and PDFs. Conducting webinars (live online classes) and communicating with experts via chat and message forums is also an option available to users,

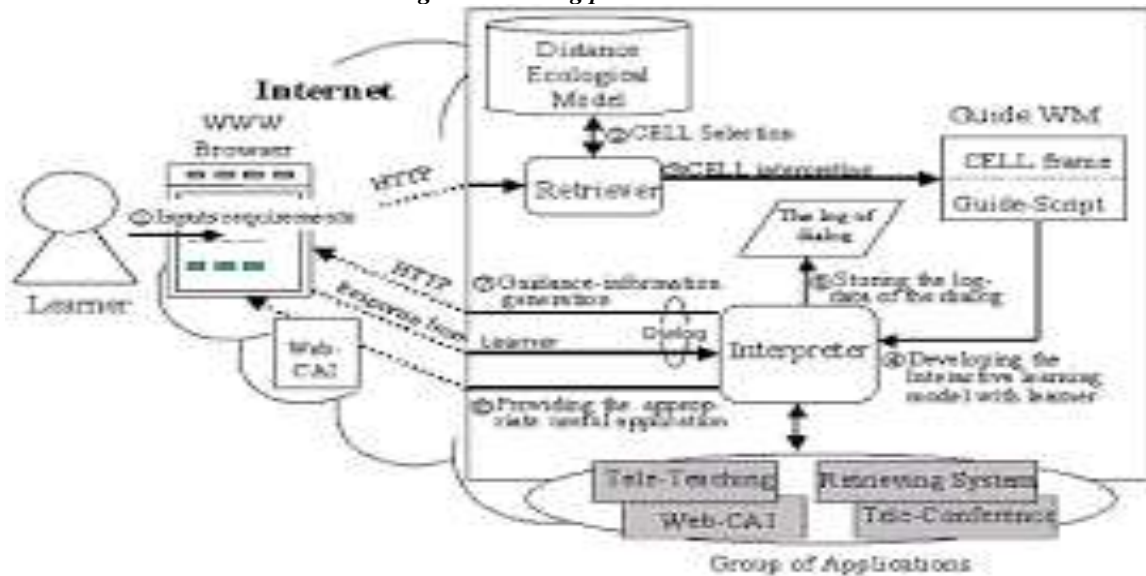
The use of smart phones, gadgets, text messaging and using the internet made participating and learning an online course has become a simple affair. Message boards, social media and various other means of online communication allow learners to keep in touch and discuss course related matters. E-learning provides the learners with the ability to fit learning around their lifestyles, providing support for further career and gain new qualifications[1].

In section 2 the definitions and importance of e-learning with respect to workplace were considered. Section 3 discusses the advantages and disadvantages of asynchronous e-learning. Section 4 emphasizes the need of design of new techniques by asynchronous online trainers to meet the requirements of knowledge-oriented workplaces followed by conclusions in section 5.

DEFINITION(S) AND IMPORTANCE

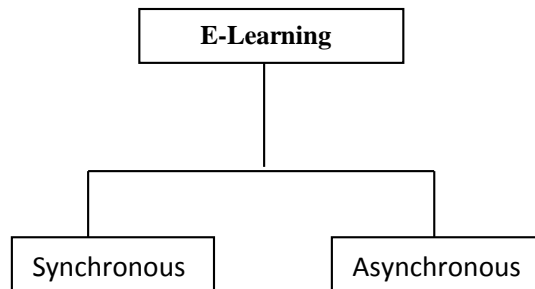
There is no single definition for e-learning. In simpler terms it can be defined as “The use of the Internet and related technologies for the development, distribution and enhancement of learning resources “. The following figure shows the E-learning process [google image].

Fig 1. E-learning process



The definition changes according to the technologies used and can termed as online learning, internet learning, distributed learning, networked learning, tele-learning, web based learning, computer-assisted learning and distance learning. It can be broadly classified to two methods as shown in fig 2.

Fig 2. Types of E-learning



i. Synchronous E-learning:

It is the forms of education, instruction, and learning that occur at the same time, but not in the same place. The term is most commonly applied to various forms of tele-visual, digital, and online learning in which employees learn from instructors, colleagues, or peers in real time, but not in person. For example, educational video conferences, interactive webinars, chat-based online discussions, and lectures that are broadcast at the same time they delivered would all be considered forms of synchronous learning[3][4].

ii. Asynchronous e-learning

Asynchronous learning is a general term used to describe forms of education, instruction, and learning that do not occur in the same place or at the same time. The term is most commonly applied to various forms of digital and online learning in which students learn from instruction—such as prerecorded video lessons or game-based learning tasks that employees complete on their own that is not being delivered in person or in real time[3]. Yet asynchronous learning may also encompass a wide variety of instructional interactions, including email exchanges between trainers, online discussion boards, and course-management systems that organize instructional materials and correspondence, among many other possible variations[5].

It is essential for the organization to provide training to its employees in workplace without disturbing the regular work routine which cannot be possible with traditional training as some days are spent for learning which may obstruct the continuity of work to be paused for a brief period of time. Also, there is a provision to have batches divided for learning such that one batch carries the work while the others is learning and vice versa [6].

In this paper we look in to asynchronous method of E-learning as most of the organization training is based on this method because of the time constraints.

ASYNCHRONOUS E-LEARNING CHALLENGES

At the provider's side: E-learning is not, however, the be all and end all to every training need. It does have limitations, among them[7][8]:

- **Up-front investment** required of an e-learning solution is larger due to development costs. Budgets and cash flows will need to be negotiated and the course prepared may be out date by the time it's waiting for the final approval by organizations[4].
- **Technology issues** that play a factor include whether the existing technology infrastructure can accomplish the training goals, whether additional tech expenditures can be justified, and whether compatibility of all software and hardware can be achieved and the time constraint should not be violated[7].
- **Inappropriate content** for e-learning may exist according to some experts, though are limited in number. Even the acquisition of skills that involve complex physical/motor or emotional components (for example, juggling or mediation) can be augmented with e-learning[5].
- **Storage Space** for e-learning according to some experts there will be a huge requirement for storage space and it would not be economically feasible to have own storage space.
- **Understanding of domain** for e-learning the may be need for the course designers to visit the organization otherwise the efficient content cannot be prepared or modified.

At the organization side: *Technology issues* of the learners are most commonly technophobia and unavailability of required technologies[9].

- **Portability** of training has become strength of e-learning with the proliferation of network linking points, notebook computers, PDAs, and mobile phones, but still does not rival that of printed workbooks or reference material[9].
- **Reduced** social and cultural interaction can be a drawback. The impersonality, suppression of communication mechanisms such as body language, and elimination of peer-to-peer learning that are part of this potential disadvantage are lessening with advances in communications technologies[10].
- **In-Flexible** Some employees cannot feel comfortable to learn in the organization and this leads to he problem of losing an employee innovativeness[11].
- **No backup for clarifying** Employees may rise some general doubts and sparing time to clarifying these doubts is not a simple task.
- **Lack of appreciation** most Organization will not consider the motivating factor to the employees
- **Copy rights issues** Organization may not check the course contents legal rights simply by trusting on the provides and this may cause a huge problem
- **Computer competency** All employees might not be too comfortable using computers, especially if their jobs don't require them to. Therefore these employees are likely to learn a lot less than they would from a physical course.

PROPOSED SOLUTIONS FOR EFFECTIVE ASYNCHRONOUS E-LEARNING

The solutions to the challenges in asynchronous e-learning are as follows

At the providers Side:

- The experts along with online trainers should design course in accordance with the organizations working environment rather than in general. The content should be in independent modules such that, only relevant information is provided to the respective class of employees with a brief overview of the course. This will eliminate unnecessary waste of time and resources.
- The online trainers should occasionally modify the course content if at all it requires any updating and this should be notified to the learners through mails or other means so that they would come up accordingly
- The learners should be examined in regular interval of times by the corresponding personnel before they move to the next stage of course. This will result in necessary backup classes to be conducted for making the employees up to date
- Course providers should use the latest cloud environment to overcome the limitations of infrastructure and storage spaces.
- Course providers should also check the integrity of their trainers to not lose reputation in the market. If feasible, course designers should visit the organizations to have face to face communication with the learners to know their experiences rather than depending on questionnaires.

At the organization side:

- The organization should verify the reliability of the course by checking copyrights and other legal issues.
- The administrators of the organization should also involve in content preparation such that an effective curriculum could be made basing on the organizations working needs. They may also add pre-learning sessions for the elderly employees who may be naïve to the course work.
- Each organization may choose one employee for each course such that he should be able to understand the content in advance and could clarify any queries to his colleagues rather than waiting for the online trainer's response.
- The organization should also give the flexibility to its employees of learning according to his comfortable time and place but within a period of time under supervision over his progress.
- Appraisals should be offered to the employees whose performance is promising which makes the others to participate actively.

Finally, organization should also encourage employees to express their interest in their favorite courses and additional training is to be conducted for them to improve their commitment towards organization

CONCLUSION

The need for companies, organizations and their employees to continually upgrade and maintain skills and knowledge is currently broadly reflected in the idea of e-learning. In this paper we have given an introduction to e-learning and challenges related to asynchronous learning and proposed solutions for effective measures. The main challenge for above solution is the problems related Internet access, speed, time required to upload or download an average sized hard drive image. But, still it may not remain a problem in future with faster connections of internet are going to be available. Requirement of qualified personnel are also a major requirement.

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