

Impact of E-Learning on Employee Training and Productivity at QAFAC

Posted on October 23, 2018

Abstract

The aspect of e-learning used as a corporate educational tool has many advantages and disadvantages. Employee productivity is greatly impacted by investments in learning and training. Employee turnover and job satisfaction were linked to employee training by the research. An employee wishes to stay at a firm longer and works much harder if an investment is made by the firm to train that employee. The aspects of profitability and productivity of an employee both have the potential to increase with a lower turnover. However, both the aspects of satisfaction and productivity can have a potential negative impact due to the contrary side of inadequate training. Corporate e-learning has been developed due to many different factors.

The requirement of high connectivity internet in order to use these modern technologies, the utilization of adaptive technology and digitization, and the increase in demand for education and training are some of these factors. Due to the advancement in communication systems and refinement in communication technology, industry dissatisfaction with the responsiveness of traditional modes of delivery and higher demand for the latest technological innovations, an alternate for training and education has been found by corporations in e-learning. The work environment is greatly affected by the use of e-learning by major corporations, as most of the knowledge transfer occurs in a digital space instead of a physical one.

The expectations of e-learning that are required by major corporate organizations have been redefined thanks to the extensive expansion of the Internet, the considerable improvement in information technology and communication, the successful experiences of e-services around the world and fast advances in technology. Since the wide adoption of the internet and the use of digital technology in almost all fields, the educational industry has long been aware of the potential of training and education through a digital medium. Hence, there are many organizations that have already adopted the process of e-learning for cost-efficient, flexible, specific and more adaptable training of their employee force, while many other organizations and some governments are also encouraging their institutions to implement education through a digital medium. Using e-learning allows the organization to eliminate or reduce, to a great extent, all the non-learning expenses related to training which may include traveling costs or lodging costs of the participants of the training program.

Discussion And Analysis

In this chapter, the analysis of the data collected using questionnaires will be done. The discussion related to the adoption and implementation of e-learning techniques for the purpose of training and development of employees in the petrochemical industry in Wimbledon. Furthermore, this chapter will involve explaining the existing techniques used in the selected company for training and development purposes.

When the emphasis of any research is on objective measurements using statistical, mathematical or numerical data, the best approach to complete the research study is the quantitative research method. The primary data collected for successful quantitative research is usually collected through votes, questionnaires, polls and surveys. The existing data available from prior research on the same subject matter can also be used for carrying out quantitative research. The data collected is manipulated using statistics, mathematics as well as computational techniques. The purpose of quantitative research is the collection of numerical data, and then using analysis techniques, the results are generalized to explain a particular phenomenon across a particular population. The aim of a quantitative researcher is to determine and objectify a relation between one variable, which is independent in nature, and another dependent variable within a particular group of people in the populace.

Quantitative research designs are often descriptive when a relation between two variables is being described. On the other hand, quantitative research can also be experimental in nature. This research study is basically descriptive in nature because it establishes only relationships and associations between the two variables. The aim of this research study is to explain and describe the adoption and implementation of e-learning for the purpose of training employees in the petrochemical sector. The aim of this study is to assess the adoption and implementation of the latest e-learning techniques in a petrochemical company.

Purpose Of Research

The purpose of quantitative research is to deal with any data that is numerical in nature and can be explained using mathematical logic. The data that is collected for quantitative research is usually unchanging and detailed. Using these numerical data, the research outputs are spontaneous and free-flowing in nature. The major characteristic of quantitative research is that the primary data collected for the purpose of analysis is usually collected through a structured approach like questionnaires and polls. The designs are based upon a collection of data from a large sample which represents the whole population. The research study can be repeated because numerical data has greater reliability as compared to qualitative analysis because quantitative research usually provides objective outputs. Quantitative research has a clear and definite research question that has to be answered.

The quantitative research study has a defined structure even before the primary data is collected.

Data available for analysis is usually in the form of numbers and statistics, which can be arranged in the form of tables, charts, graphs or textual formats. The major tools used to collect data for the quantitative research study include questionnaires, polls or votes, etcetera. The major steps included in the quantitative research method are quite simple and easier to follow. The first step is to explain the primary data that has been collected by using statistical treatment as well as other mathematical techniques. The results are not interpreted in this section, but the basic explanation of the data that has been collected is provided.

In addition to just explaining the collected data, a researcher has to report all the unanticipated events that may have occurred during the data collection phase. Furthermore, the researcher has to provide an analysis of the differences between the past research carried out by other researchers and the new results. It is very important to choose a method of analysis that is most appropriate with regard to the nature of the data being collected for the purpose of research. A quantitative study is especially known for diagrammatical representations of data using statistical and mathematical techniques and then presenting those results in the form of graphs, charts and tables. The diagrams and graphs are a summarization of the overall data and the results generated from these data sets. The study is classified as a mixed method study because, in addition to using a quantitative approach, the study will also include some qualitative analysis because it draws on several disciplines.

Case Study

The study draws on education, human resource management, psychology, and computer science disciplines. Primary research is employed by the researcher through the use of data collected using structured questionnaires. The study also applies secondary research by drawing on the existing research available on the subject matter. Another important reason for this study being a mixed method study is that the main methods for data collection and analysis are a case study (secondary) and a survey (primary). Case studies belong to the qualitative range of research techniques, while the survey generates quantitative data.

Research shows that the word case study is one of the most widely used strategies for research when the aim of the study is to provide a description, test a hypothesis, or generate a new theory based on a hypothesis. By employing a case study for this research, the aim is to focus on the understanding and comprehension of dynamics related to the adoption and implementation of e-learning for employee training in the selected petrochemical company. Case studies are the most appropriate qualitative research method when dynamics are to be tested within a single setting. Case studies can only be used in research under two circumstances. It can be used to document proof or evidence that a certain research objective has been studied and to compare dynamics within a single setting or multi-settings.

Traditional Training Techniques

Training and development of the employees at QAFAC has been traditional for a major part of the company's existence, as per the answers of the employees working at this company. In response to various questions related to the training and development procedure at QAFAC, the employees responded that the traditional training programs were a huge part of the training regime of the company. The traditional training programs included induction training as well as on-the-job training. In induction training, the company provides a series of training sessions before the employees are given any official work. The company had to pay for the induction training without getting any work from the employees in return. This was an additional cost for the company, where the productivity of the employees was literally zero since they were not doing any work. (Qatar Fuel Additives Company Limited, n.d.)

In addition to this, the company also invested heavily in on-the-job training for employees who were not really an expert in the field of petrochemicals. The on-the-job training requires employees to learn new skills while they are also working on company projects. This turned to unmotivated employees whose performance was dwindling due to extra stress and effort both at work and in rainy sessions. Traditional training has its advantages because it allows the trainer to actively participate in the training program, but productivity is lower when the number of trainees is higher. When the number of trainees increases, the productivity of the transfer sessions may be negatively affected.

Changed Training Protocols

Upon asking about the latest changes in the training protocols at QAFAC, the participants of the research study responded that now the company is shifting towards newer technologies related to the training and development of employees. Recently, the company entered into a contract with a solutions seller regarding e-learning. In 2014, The Company known as Malomatia and QAFAC entered into a contract where the former company was tasked with providing eLearning solutions and services to the latter. The introduction of the latest trend in the training and development of employees has created a positive vibe among the whole company, and the relationships between the company and employees have seen a positive trend.

Changes From Traditional Training To E-Learning

Another question was related to the e-learning services and solutions that QAFAC and the response of the participants showed that the company has been able to change its training and development sessions a great deal, which has reduced the training costs of the company and has also led to a positive attitude in employees. They replied that the latest contracts have allowed the QAFAC to be well equipped with all the necessary services that it requires to support its employees by improving the relevant skills and knowledge that they need. This has led to a positive change among employees

because now they are able to thrive and excel in their workplace, and their productivity has resulted in greater profitability for the petrochemical company.

Positive Impacts Of The Implementation Of The E-Learning

Upon being asked about the positive impacts of the implementation of the e-learning platform for training purposes, the respondents revealed that they had been inspired by the use of the newest technologies in the form of self-development initiatives so that employees are able to build their own careers and also develop their knowledge and skills. The solution provider Malomatia is one of the leading eLearning services providers in Qatar. This company serves various sectors and caters to their various needs. QAFAC has been highly encouraged for its adoption and implementation of eLearning solutions for the skill-building of its employees.

E-Learning Services At QAFAC

Upon further investigation, it was revealed that the eLearning services QAFAC profits from include Hosted Learning Management System (LMS), which is supported by various devices, including mobile and tablets. A digital environment where all the training systems can be transferred is known as Learning Management. Building online courses for training purposes is the most common way of formulating a LMS. Course-related forums can also be provided to the employees for use as an effective addition. These systems are quite adjustable and easy to use and can be specifically designed to cater to the brand of a specific company.

Various training programs have been designed and implemented through the use of LMS in QAFAC, including leadership advantage, which is specifically designed to help the senior management in better leadership skills. There are more than 350 courses that are based on various skills and will be offered to more than 300 employees selected based on their contributions and performance. In addition to this, now the company is able to provide 24/7 support to all its employees.

Factors That Promote Or Encourage E-Learning

Upon investigation about the factors that can promote the learning environment for training and development of employees, the respondents creamed dad the transition of dreaming from one platform to another is never easy. The company has to consider several factors that can allow a successful conversion from workplace training to e-learning. The major success factor includes identifying whether or not a company needs to transition from one training platform to another. If the challenges associated with training sessions in traditional settings are substantial due to the huge number of employees, then it is justified to transition from traditional learning and training to e-

learning.

Upon further discussion, it was revealed that an open system organization that allows its employees to participate actively in their own training sessions is a huge requirement for a successful transition to e-learning. By having an employee-focused training program, the company's system focused on building positive relationships with the organization rather than focusing on costs. In addition to this, the initial investments in e-learning are huge, but the training costs over a longer period of time are usually minimal due to e-learning training protocols.

E-Learning And Employee Motivation

Another question posed with regard to the impact of e-learning on the attitude and productivity of the employees the respondents stated that the job satisfaction of an employee is hugely impacted by the employee motivational levels and can be impacted and increased in many ways. Efficient training programs have been highlighted to be among the most useful approaches to enhance the aspect of employee motivation. Through e-learning and training employees are able to greatly enhance their skills while also gaining knowledge. Employee motivation can greatly be increased through the implementation of specific e-learning courses which exactly cater to the needs of specific employees who lack in certain aspects that are required in the job description. These e-learning courses can be very beneficial and adaptable as they are designed in specific ways to include very specific content relating to the shortcomings of that specific employee and how these shortcomings can be improved and further training and knowledge on how to improve these shortcomings. Efficiency training (organizational: day planning, prioritization, working from lists), effective problem-solving solutions and positive thinking exercises are some of the courses and exercises that may be included in these specific e-learning programs. The other main determinant highlighted above was peer support. It links to benefits and opportunities in terms of being a part of the learners' circle during the electronic learning procedure and has been recognized as motivating to the procedure.

Attitude and perception of employees (National Academies of Sciences, Engineering, and Medicine, 2018)

The respondents clearly stated that they are highly interested in the newer prospects of learning new skills at their own pace and convenience. Through e-learning programs, the employees will be able to work on the areas that they lack without having to go to classes or training sessions on a regular basis. In addition to this, employees perceive e-learning as a convenient method where they can learn on the go. The use of mobiles and tablets for e-learning helps employees in taking their online sessions while they travel and are at home in a relaxed environment. The tension and stress related to the traditional training programs can now be shed after the introduction of e-learning. Employees are enthusiastic and motivated for their new training sessions that can cater to their individual needs. Employees can take extra training sessions based on their preferences with skills. Employees can train for promotions and build relevant skills through e-learning.

The Introduction Of Bespoke

When questioned about the bespoke e-learning platforms, it was found that it is a unique e-learning platform that is highly organization-centric and is tailor-made to suit the needs and requirements of a particular organization. For huge companies like QAFAC, building a tailor-made e-learning platform is highly convenient for future prospects rather than buying off-the-shelf e-learning. A tailored Bespoke e-learning for QAFAC will not only make the training successful and easier to depart but will also provide a definite branding for the organization and let the employees know of the culture of the company. Especially in Qatar, where the international language English is not a commonly understood language, bespoke e-learning will be tailored for QAFAC in the mother tongue so that the training sessions are able to achieve its objective. Employees are excited, and the management is highly active in an attempt to provide bespoke e-learning to its employees. Qatar is one of the leading developing nations in the Middle East due to the advancements in the business sector and technological innovations. Companies like QAFAC can gain a lot by investing in prospects like bespoke e-learning and building the skills of employees for better performance and productivity. Employees feel as if the company is investing in their futures, and this increases their motivation levels. When employees feel cared for, their efforts to fulfill the objectives and achieve the goals of the organization.

Conclusion

Job satisfaction of an employee is hugely impacted by the employee's motivational levels and can be impacted and increased in many ways. Efficient training programs have been highlighted to be among the most useful approaches to enhance the aspect of employee motivation. Through training, employees are able to greatly enhance their skills while also gaining knowledge. The workplace and the site were the main venues commonly used for training the employees; however, these rituals are being changed with much more flexible methods of training available to firms recently. Training practices are being updated simultaneously with job demands as everything is becoming digitized in this modern and digital era. There are many benefits of e-training, and it is a greatly effective way for the purpose of training an employee force.

The rapidly evolving and constantly developing technological era may make it tough for firms to continuously invest in other new technologies required to maintain the process of e-learning for the employee force. Since the new inventions on the market are rapid and almost non-stop, older systems employed by firms may not be valid for far too long and may become obsolete and of no use very quickly, requiring firms to reinvest in new technology.

Human resources are another critical factor. Firms usually ignore the factor of hiring other personnel for training of employee force, completely relying on the technological aspect due to the huge investment in e-learning systems. For effective administration of the e-learning systems, firms also

need trained and familiarized personnel.

The aspect of e-learning used as a corporate educational tool has many advantages and disadvantages. Employee productivity is greatly impacted by investments in learning and training. An employee wishes to stay at a firm longer and works much harder if an investment is made by the firm to train that employee. The aspects of profitability and productivity of an employee both have the potential to increase with a lower turnover. However, both the aspects of satisfaction and productivity can have a potential negative impact due to the contrary side of inadequate training.

Due to the advancement in communication systems and refinement in communication technology, industry dissatisfaction with the responsiveness of traditional modes of delivery and higher demand for the latest technological innovations, an alternative for training and education has been found by corporations in e-learning. The work environment is greatly affected by the use of e-learning by major corporations, as most of the knowledge transfer occurs in a digital space instead of a physical one.

Both corporations and educational institutes have adopted the new technique of e-learning. The term e-learning can be defined in many ways. Technology-based learning, distributed learning, web-based learning and online learning are just synonyms of the term e-learning, which means the same thing, i.e., gaining knowledge through the technology of the web. The synchronous and asynchronous learning events, which are simulated through the use of web technology in order to educate one person or for one person to gain knowledge, are defined as e-learning. Digital collaborations, satellite broadcasting, CD-ROMs, videos and audio conferences, mobile technology, interactive TVs and web-based technologies are some of the technologies that can be used for the purpose of learning.

One of the reasons for providing employee development and training is because it leads to increased productivity and quality of their work. Employee training leads to the transfer and accumulation of knowledge. Knowledge is one of the resources that businesses need in order to compete successfully, and the main way they can access it and include it in the business process is through their employees.

Training of employees builds human resources that can respond adequately to short- and long-term requirements of the company. Furthermore, learning can create and enhance competitive advantage and this makes it one of the elements that support business strategy. Thus, learning can be related to the development of the core competencies of the company. In order for e-learning to have a real impact in terms of training effectiveness and business development, the perspective of the participating employees needs to be taken into account. Some of the factors have to do with the ways trainees perceive and experience e-learning, and outcomes from such research tend to be related to the impact and implications for e-learning effectiveness. Furthermore, the identification of these factors for a specific company can inform the development of a bespoke e-learning platform. E-learning platforms have shown that they can help decision-making on the characteristics of online training resources in terms of technical aspects as well as modes of access and delivery.

Increased quality of work and productivity are two of the major objectives of an organization for

providing an employee with training. The transfer and accumulation of knowledge occurs through employee training. Knowledge in the current market is one of the most crucial factors for a business to gain success, and the only way they can implement the knowledge present in the organization into their own business practices is through their employee force.

The long-term and short-term requirements of an organization can easily be completed through the training of the employee force as this builds the human resources of an organization. Additionally, business strategy is also supported by the factor of e-learning as it can give a huge competitive edge to an organization as the better trained the employees are of an organization, the more productive their performances will be, leading to the ultimate advantage for the firm.

Companies grow more and more formal with their training procedures as they grow and expand, and a larger company offers much more extensive training procedures to maintain the human resources of their organization. Hence, a large firm or organization gives great importance and focus to maintaining an online educational program for this specific purpose. Research on e-learning effectiveness in view of its impact on the strategic development of the company has identified three backgrounds to the process: training technology, training, design, and trainee characteristics. As this research focuses on the first and the third items, they have been discussed in the preceding sections and form the conceptual background of the current research. The respective research results can be used to inform the development of an e-learning facility similar to the approach. Training design also represents an important element in the planning of e-learning facilities. However, it has to do with the content and structure of the training material and would benefit from being informed by training experts.

The trend of using e-learning and all and acknowledging to provide training confirmed good employees has become a common practice also the developed countries. The major advantage of using e-learning to train employees for better skills is flexibility and speed. Easy is this ability for all employees without being present in the classroom. One of the major trends that is being Used to train and develop employers is Gamification, which is a subset of e-learning. This technology involves the use of various game mechanics to make sure that the training process is interactive and engaging. These activities are based on games, where employees may be asked to complete stages, reach certain milestones and earn badges, which will instill training and develop employees while keeping them interactive and interested in the training process. (Sitzmann, T., 2011)

There are several distinctive benefits of using e-learning as a means to provide training and development to employees. One of the major brothers of using e-learning technology is that it wisely increases and spreads the scope of the organisations ability to train its employees. Using e-learning allows the organization to eliminate or reduce, to a great extent, all the non-learning expenses related to training which may include traveling costs or lodging costs of the participants of the training program.

Drawbacks have also been witnessed with the process of e-learning as every survey conducted with a

number of employees usually reveals the preference for traditional training over e-learning according to employees due to the factor that traditional training is more intimate and face-to-face, helping employees grasp concepts and learn in a much easier way. Face-to-face training methods can also be enhanced by the factor of e-learning.

It is not necessary that the desired learning outcome will be gained through the factor of e-learning as it is human nature to understand and learn new things in a much better way in an intimate and close-up environment rather than a virtual platform. The relatively lower completion rates of e-learning as compared to traditional methods are another major drawback that is faced by the e-training of employees.

References

Qatar Fuel Additives Company Limited. (n.d.). QAFAC. <https://www.qafac.com.qa/>

Sitzmann, T.. (2011). *A meta-analytic examination of the instructional effectiveness of computer-based simulation games*. Personnel Psychology, 64(2), 489–528.
<https://doi.org/10.1111/j.1744-6570.2011.01190.x>

National Academies of Sciences, Engineering, and Medicine. (2018). *How people learn II: Learners, contexts, and cultures*. National Academies Press. <https://doi.org/10.17226/24783>