

TRAINING THE WORKFORCE FOR INDUSTRY 4.0

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ABSTRACT

Training opportunities provide employees with adequate chances to enhance their knowledge base. Providing the essential training would help the employee to progress in his/her career and it equally benefit the organization in meeting the quality standards through a reduced employee attrition rate. The need to invest in employees to improve their competencies was felt due to the changing demand for skills in the Fourth Industrial Revolution. This study highlights the need for training and development in the era of Industrial Revolution 4.0. The study also gives a distinction between the traditional training methods and the training methods for the next generation and throws light on the latest training tools adopted by organizations.

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INTRODUCTION

Training in general sense means to equip employees with the essential skill sets to perform a job or to advance new skill. In this era of Industrial Revolution 4.0, employees should not only focus on acquiring the required skill set to perform the job rather they should prepare themselves to sustain this competition with the robots. With the augmented implementation of digitalization and automation, the employees will have to equip themselves with the right skills to survive.

The careful selection of employees alone does not guarantee effective performance. It is only possible through effective orientation on what to do and how to do the job even high potential employees can perform the same. The sole purpose of orientation is to make sure if the employees know what to do and how to do their job. A company's orientation and training programs are generally designed by the human resources department. The objectives of employee orientation are to provide them with a better work environment thereby reducing their anxiety and to convey what the company expects from their performance. The training programs adopted by the company should be in line with its strategic goals. Training and development also helps in managing the performance of the employees. Training is one of the best ways by which an organization helps its employees to meet those goals which are set by their managers.

NEED AND IMPORTANCE OF TRAINING AND DEVELOPMENT

The major element which differentiates a great company from a good company is its human resource. Organizations should invest in training and development programs for its human capital which will help them in achieving their short term as well as long term goals. Organizations should ensure that training and development programs are effectively implemented as it will help them to attain optimum returns from its investment in human resources(Maimuna& Fard, 2013).

The need for upgrading an employee's knowledge and skill is very essential as organizations are always dynamic in nature. The technology they use and the environment they work often change due to this dynamic nature. Training an employee is an invaluable part of his/her career as it restricts an employee from being stagnant(Langer & Mehra, 2010).Training brings out an employee's real potential and it has the key for his/her development and growth. Through

training and development programs an employee gains a competitive edge over others (Devi & Shaik, 2012).

Organizations should provide training and development programs to its workforce as it will enhance their level of productivity. The three major elements which determine an employee's performance are his abilities, skills and knowledge. Organizations should focus on providing training and development for these three major elements which will help them increase their employee's productivity (Noe, Hollenbeck, Gerhart, & Wright, 2012).

A major impact of training and development in employees is in their morale and productivity. Training programs have always had a positive impact on the morale of employees. This is why most of the successful organizations invest a lot into development programs (Hamid, 2011). Training and development programs help in reducing the attrition rate. Training and development helps in career advancement and these advancement opportunities help in reducing absenteeism. It also increases the level of satisfaction and commitment of an employee which in turn reduces the attrition rate (Anis, Nasir, Rehman, & Safwan, 2011).

Organizations must ensure that the design of the training and development program not only makes an employee productive but also more satisfied. Employees who are trained are more efficient and effective in the workplace as the training program increases their motivation, confidence level, team work, technical skills and interpersonal abilities (Hutchings, Zhu, Cooper, Zhang, & Shao, 2009). Training can be used as an instrument or a tool to accomplish the organization's objectives and goals. Only a workforce which is effective and efficient can generate greater returns. An organization's ultimate goal should be to create efficient employees who in turn will maximize their profits. Only when proper training is given to employees, they will be more productive in their work place (Colombo & Stanca, 2008).

Training the top management of an organization is very crucial as they perform many integral duties. They are the ones who will decide what to train the employees and studies prove that they have a strong influence over their subordinates' values. When the employees have the right set of values, they will be more productive (Rynes & Rosen, 1995). The main areas which should be

taken care when the training program is implemented are the characteristics of the trainee, design of the training program, method of evaluation of the performance of employees. Another important aspect which the management should consider seriously is the process of transfer of the trained skills into efficient utilization (Wells & Schminke, 2001).

The rapid change of the industrial environment has forced organizations to expand the activities related to training. But the pace of expansion in training activities when compared to pace of change in the environment is very slow. Over the years, the applicability of the training theory is questioned over its unrealistic expectations especially in developing countries like India. It is not feasible to integrate these theories and practices in developing countries. The main objective of training is to make sure that the employees get to know what they are supposed to do, to ensure that their work is better and also to develop their hidden talents which will help them in their career advancement (Seth, 1980).

EVOLUTION OF TRAINING AND DEVELOPMENT

The concept of training and development emerged during the period of the World War II when there was an increased need for trained labor force. As (Swanson, 1995) stated, “Although the popularity and influence of labor unions has undergone significant change over time, organized labor has consistently supported extending the availability of education and training seen as broadening the skill base of its membership”. Training director – a new profession was established after the wartime training movements. On the job training and class room training were two types of training that gained the acceptance during the post-war period. The dominant model used to design the training was the ISD (Instructional Systems Development) which gave rise to ADDIE (Analyse, Design, Develop, Implement and Evaluate). This model focuses on measuring the effectiveness of the training through proper assessment and evaluation (Campbell, 1984).

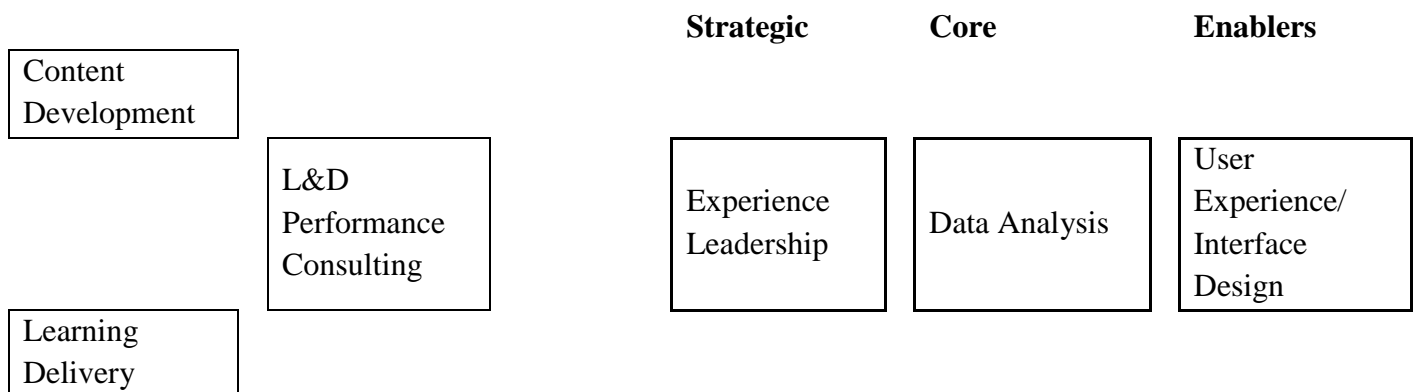
The contribution of vocational education on the training and development of employees is noteworthy. The instructional delivery model was normally practiced through apprenticeship and structured on the job training programs were conducted by providing vocational and applied academic skills (Jacobs, 1995). The Human Capital theory emphasizes that the employee training

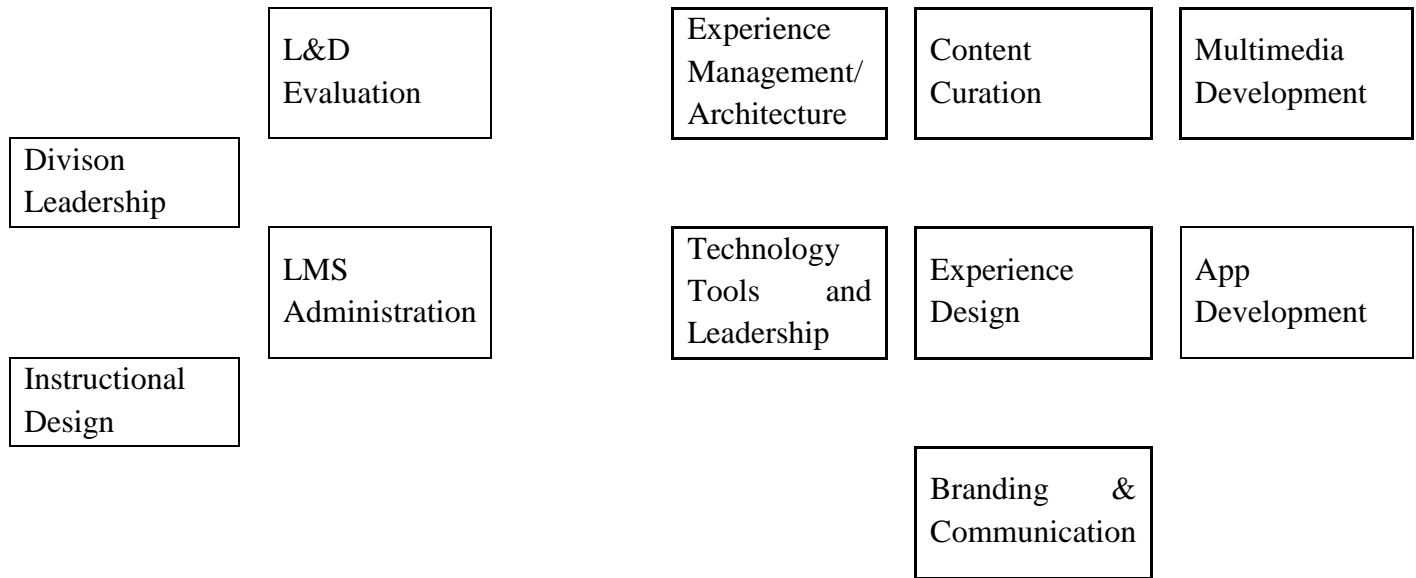
should be viewed as an investment to the productivity rather than cost(Becker, 1993). Later the employee performance was measured in terms of the sophisticated and diverse training programs available.

Employee training- A shift from classroom to computers

According to(Nichols, 2018)has suggested in his research work that a lot of alternatives has been tested and tried in order to integrate technology and move out from traditional modes of training.Technology is making a wave in every sector,andit is making the way people think different. The advent of technology has revolutionized andmade it a pleasant experience for an employee to upgrade their skills. (Kumpikaite & Ciarniene, 2008)found there is a positive relationship between the latest technology adopted and the end outcome of training and development has become progressive. Also, emphasizing on the fact that technology in training methods has led to increased productivity in the organization.The information and knowledge transfercan easily be made through advancements in technology. The knowledge sharing capabilities normally include dissemination of the technical know-how, expertise, and contextual information with the rest of the employees by way of both formal and informal interactions. Through user friendly IT system and software this transfer of knowledge becomes easy (Lee, 2006). Learning/ knowledge transfer, situated cognition and systems thinking paved way to a computerized training technique.

Traditional Learning Organization CapabilitiesNew/ Enhanced Learning Organization Capabilities





Training in the pre IR 4.0 period	Training in the IR 4.0 period
<p>Learning is a sequence of corporate schemes built around L&D - designed content and carried out by L&D - approved experts</p> <p>A corporate learning management system direct the learning environment – generally a large archive of courses</p> <p>The business along with the L&D and compliance expert identifies the courses to be completed based on the role of employees</p> <p>The focus of the traditional methods is on internal training endorsed by the company</p> <p>Training professionals are not specialists and they do everything from design to development, logistics and measurement</p> <p>Training is conducted through a lecture based model led by an expert</p> <p>Employees are guided by the experts to learn specific skills</p> <p>Organizations create complete, comprehensive, skill based proficiencies that drive the learning agenda</p>	<p>Learning is an "environment" and an "experience" leveraging experts, materials and content sourced and recommended by internal experts, external communities and other employees.</p> <p>The learning environment provides precisely what they need through a consumer website that delivers courses, content, videos and access to experts (including recommendation engines)</p> <p>Employees draw learning opportunities and they navigate and access the same from within and outside the company</p> <p>External training is accessible through any online source</p> <p>Training professionals are experts who are excellent in their domain</p> <p>Training is demonstrable, depending on case studies, experiential and flipped classroom</p> <p>Employees learn through coaching and facilitation</p> <p>Organizations create high quality structures that outline wider capabilities</p>

The traditional 70:20:10 ratio is used which focuses on providing work experiences, sociability with others and the structured formal training in this kind of learning organization

This type of organization plays a supporting role the learning process by expanding the 10 to cover both learning from within and outside, developing the 20 to incorporate internal and external networks, and redefining the 70 to embrace corporate, community and social experiences

LATEST TRAINING TOOLS

When employees are inducted for an organization a lot of time is spent in understanding the work nature and meeting the expectations of the task assigned. The current generation prefers learning not just confined to walls but also self-learn by technology. Employees always tend to have quires may it be an old or a new employee providing the correct training tools with the integration of technology has become the need of the hour. The below listed are some trainingtools in the current market which provide support and guidance making sure employees are more productive and efficient at their workplace.

- a) Whatfix: There is always a lag time between the training given to employees and the execution of work.To help in reducing this lag a software name wafix was created.Whatfixexist electronically in-app guidance in supporting as an in house application to train the employees
- b) Moodle: It is an open and most popular learning management system(LMS) offering customisation and integrating The trainer can constantly monitor employee performance,and employees can alwaysaccess to the training material made available
- c) Loop:Mostsorted online learning platform provided. This software initiates specific responses to the question addressed or with which the employee is troubled with. Not providing the whole module and saving the time of the employee is trying to understatingonly what is required.
- d) Totara: Training tools which initiatetwo-way communication providing feedback by online trainers.Totara again is an open-access online training platform.
- e) WebEx: Software created by the famous software company Cisco. The webex training centre makes it special by connecting remote employees and training them.

CONCLUSION

Change is the only constant in life and there is a shift in the way people work and live. In the upcoming years many existing jobs may be replaced by a whole new set of jobs and roles giving importance to critical thinking and creativity. To survive in this competition of the fittest employees will have to keep themselves updated and up skilled thereby gaining an overall understanding of the organization and its functioning. Learning integrated with work will produce better results in terms of behavior change and performance improvement than when learning is entirely separated from work. Organizational growth can be better attained by giving importance to design thinking.

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