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E-TRAINING BASED INNOVATION STRATEGIES FOR SKILL DEVELOPMENT

Abstract:

Learning is a part of every human, which means it is a part of student as well as of an employee. Trainings are an integral part of any organization. But most organizations faces a challenge to organize training sessions for employees, moreover these days companies are widely spread with their workforce located in geographically different locations. Companies have to invest large part of capital in organizing trainings and calling workforce located in diverse location to physically attend these trainings. The innovation in e-training strategy has taken the world to the virtual cloud of instructors and trainees. It has given a scope to skill development across the world and has linked India's skill development initiative of skilling approximately 500 million people (FICCI Skill Development Forum). So, today organizations are not only limited to in-house manpower but have started taking up initiatives and developing business models to train masses in the country and transform India into a manpower hub.

Innovative E-training platforms are gaining more popularity and can be deployed to bridge the skill gaps across the world. It has offered flexible and mobile learning environment to the instructors and the trainees. Learners can attend virtual classes, animations and participate in discussion forums online. Innovative e-training model can bridge the skill gaps and revolutionize the "Make in India" initiative.

Research Objective: The paper tries to highlight the innovation in E-training, which demonstrate the innovative strategies opted by organizations for skill development. The research would propose the e-training model to develop manpower skills.

Methodology: The research will be based on extensive literature review and the case studies of organizations working on content development and methods of delivering the content to masses using e-training approach.

Expected Findings: The review paper majorly focuses on innovative use of e-training platform to enhance the skill development initiative and bridge the skill gaps.

Originality/Value: The study will be beneficial for various organizations and institutions to understand different e-training approaches for developing manpower skills. This paper will also be an add-on to an existing literature on e-training with the proposed model for enhancing skill development.

Keywords:

Skill Gaps, Skill Development, Innovation, E-Training

1   Introduction

The Make in India initiative was launched by our honourable prime minister Mr. Narendar Modi in September, 2014 which aims to promotes India as a manufacturing hub and also aims at providing other foreign companies to open up their units in India (Deka, R.J, Batra, B,. 2016) Make in India initiative emphasis on localization of technology, promoting local skills and provides the opportunity for international business, technology transfer and collaboration. This "Make in India Initiative" fosters innovation, skill development and protection of intellectual property rights. According to this initiative, India has to focus on skill development, Punjani, K.K., 2016 it is important to focus on skills of Indian labours and provide them with developmental opportunities to promote innovation, Technology localization and transfer. According to Planning Commission report only 10% of the Indian labours undergo a formal training course. In order to increase the number of skill and trained labour, Government of India launched this initiative.

Skill Gap and Skill Development

Skills and knowledge are the main driving forces of an economy (Planning commission, 2010), with the globalization and increasing pace of technological changes, economy encounters several challenges in terms of skill up-gradation and job creation. According to Planning commission of India and as mentioned before, only 10% of Indian labours undergoes formal training course and rest of the population lacks appropriate skills required for individual, organizational as well as economic development. Considering labour market, it is been divided into three relevant sectors as shown below:
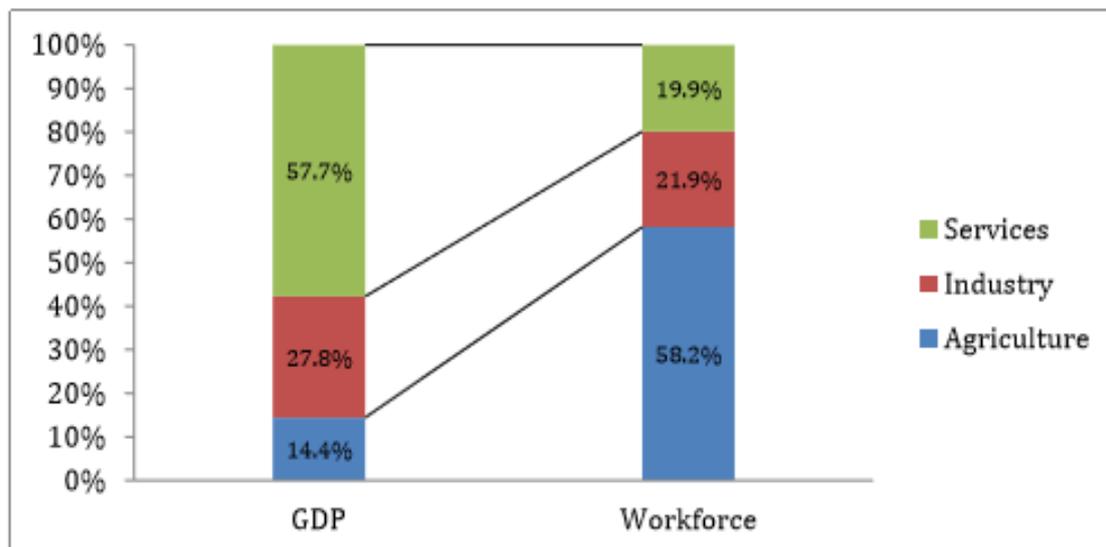
Exhibit 1: Sector-wise labour distribution[ix]
Source: Tejas, Indian Institute of Management, Bangalore, November, 2014

This indicates the high size of workforce in agriculture sector but only 14% of this contributes to our GDP. 21% of workforce in industrial sector contributes to 27% of GDD and services sector records 19% of workforce that contributes 57% of GDP. The major problems associated with these sectors are over employment and under-skilled labours.

For India to become manufacturing hub and attract investors, it becomes necessary to upgrade the skills of its labour. It has been observed that there is a huge gap between industrial labour demand and the appropriate labour in the labour market (Deka, R.J, Batra, B,. 2016). To overcome this gap, skill development acts as a lubricant to impart the required skills and produce efficient manpower. This will indeed help our economy to grow by providing potential and productive labours which in turn produces innovative and effective products and services. Therefore, it becomes necessary to impart relevant training sessions to upgrade the skills of workers. In order to cover masses, organizations should look for innovative methods for skill development. One of the method that can be useful in imparting skills to masses is E-training.

E-Training

E-training resembles to e-learning in many ways especially in terms of the methods of delivery and technology used, specifically designed to achieve a certain learning objective or skill (Ramayah, T. et al, 2012). E-trainings can take place synchronously as well as asynchronously, synchronously refers to live training sessions between instructor and the learner whereas asynchronous sessions refers to those training session which takes place with some time delay. Therefore, when India claims to initiate digital era (DIGITAL INDIA) it becomes important to use technology applications for imparting specialized skills not restricting to one area but increasing its reach across masses.

This study tries to highlight the use of E-trainings for skill development.

Therefore, the objective of the study remains:

- This study tries to highlight the use of E-trainings for skill development.
- The paper also studies the initiatives taken by Government and other organizations for skill development.

2   Methodology

The research comprises of an exploratory research where it explores the initiatives taken up by government and other organizations for imparting relevant skills to the workers. The paper applies a review approach where the data is collected from the secondary resources such as Planning Commission of India, MAKE IN INDIA initiative report, previous studies in the area.

E-Training For Skill Development

E-Training refers to e-platform that provides teaching to distance learners using electronic media to provide higher education and skill development courses (Vibrant Gujarat, Global Summit, 2017). This platform is administered through Information and Communication Technology via web pages, online repositories, e-mails and other sources.

The basis advantages of using E-training platform are:

- Fast delivery of learning

- Self paced Learning
- Flexible timelines
- Development of courses catering to varied skill requirements.

E-training platform encounters content developers, electronic tools to provide learning material to users across the world. The operating model can be composed as follows:
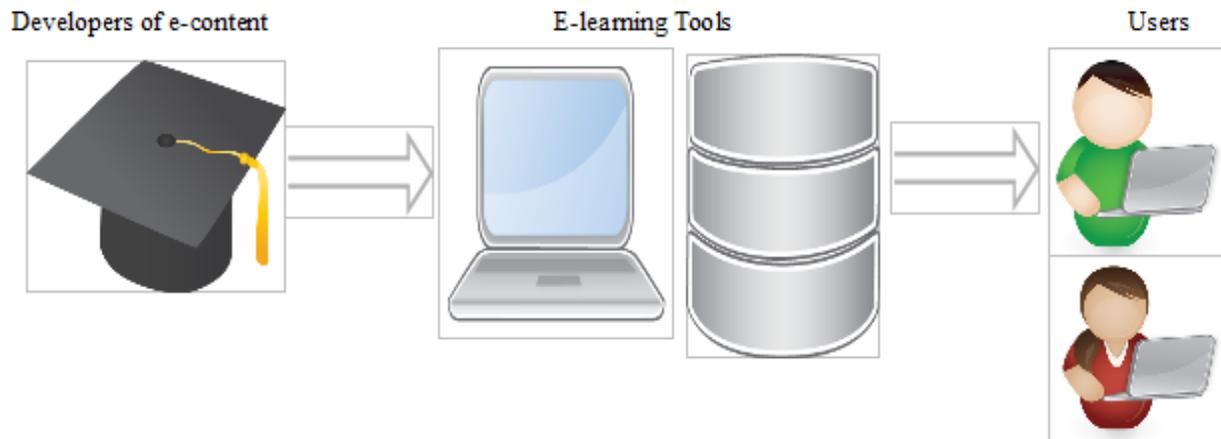

Figure 1: Operating Model of E-Training Platform For Skill Development

Developers of E-Contents

These developers comprises of highly qualified experts mainly from IITS, IIMS, NITs and other panel of scholars across the world who would prepare the high quality content that can be uploaded, stored and maintained as an e-content.

E-Learning Tools

This provides the electronic platform through which the e-content can be stored, maintained and accessed by the users. These tools can web pages, video courses, webinars, virtual classrooms, e-mails and many more.

Users

Users are the learners or trainees who access the e-content as per their requirement for enhancing their skills. Using this e-training platform users are free to access the content from anywhere and anytime. The pace of learning can also be controlled by the learners.

Initiative s by Government

To promote skills, ministry of Human Resource Development has created a platform called "SAKSHAT". This platform is the part of national mission in education through Information and Communication Technology (Kumar, A. et al, 2013). E-Content projects has been initiated by government (NME-ICT, MHRD) to promote education and skill development using electronic platform. This project includes e-learning platform, below is some of the projects initiated under E-Content.

- *E-Yantra*

This is an initiative to promote robotic education with an objective to engage students and teachers in live projects and hands-on applications. IIT Bombay has been an active participant to E-Yantra that provides workshops on e-yantra platform to students from engineering background. Under this initiative e-yantra lab set-up is maintained which encourages teachers from different colleges to participant and use the existing robotic set-up. It provides training to teachers in two phases: one is face to face training where they are exposed to robotic set-up and works on Firebird V robot. The other phase consists of task based training which provides teachers with online training over the period of 3 to 4 weeks where teachers are assigned six tasks. Each task pertains to specific concept of the embedded system. On completion of the training the trainee is given an opportunity to participate in Task based Training test where their skills are tested by implementing a live project.

- *E-GyanKosh*

It mainly maintains the digital repository of knowledge resource. As the name, itself indicates "e" for electronics, Gyan is Knowledge and Kosh stands for repository. This e-learning platform provides e-content for distance learning. It is developed by Open and Distance Learning Institutions in the country (Kumar, A. et al, 2013). It is maintained by Indira Gandhi National Open University (IGNOU), the university gives access for free downloads. The repository consists of wide variety of e-contents in different areas such as Humanities, Sciences, social sciences, management sciences, linguistic and languages, mathematics and other subjects.

- *Virtual Learning Environmental*

This is an online environment that provides various courses for undergraduate and postgraduate students. This is initiated by Institute of Life-Long Learning, University of Delhi. The content for different course are developed by highly qualified faculty across the universities and are periodically reviewed, edited and published as an e-resource.

- *National Programme on Technology Enhanced Learning (NPTEL)*

This is an initiative funded by MHRD, it provides high quality course material for students from engineering background. It provides 125 web courses and 136 video courses which covers various engineering disciplines (Kumar, A. et al, 2013).

- *A-View*

This is an award winning initiative which is part of "Talk to Teacher" program coordinated by IIT Bombay and funded by MHRD. A-View stands for Amrita Virtual Interactive e-learning world which incorporates e-learning platform into their classrooms. This is a part of Amrita Vishwa Vidhyapeetham which has developed real time classroom experience by its Amrita e-learning research lab. Today, A-View is deployed by various IITs and NITs.

3 Conclusion

E-Training platform has given a new scope to the learning fraternity. This platform can be a major backend support for initiatives like DIGITAL INDIA, MAKE IN INDIA, SKILL INDIA. Today e-trainings have gone beyond education and now can be deployed for creating a wide learning environment across the world. This providers learners to have free access to the online

repositories of their interest meeting their skill requirements. It can provide flexible leaning environment where learner is free to access the online course as per their timeline and pace.

The research study further provides us with the scope to study the operating model and analyse the successful implementation of initiatives taken by Government of India.

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