

EXPLORING THE DIGITAL TRANSFORMATION OF TRAINING AND SKILL DEVELOPMENT IN IT COMPANIES

Abstract

Innovation in the area of science and technology has created a major impact on the global economy. Introduction or up gradation of a technology disrupts the solidity through variations in the flair of work, engenders exclusive models of business and leads to restructuring of the management and the workforce, creation or development of a new line of business product line or service line. The success of an organization depends largely on their ability to leverage the novelties. However, when a new technology or innovation is embraced, it leads to disruption in the regular work style and creates the necessity to upgrade or up skill the workforce to augment their existing skills and expertise. The abilities and aptitudes of the workforce can be enhanced through the process of reskilling or up skilling that will help the workforce to master new skills for an effortless performance. The need for reskilling has grown stronger in response to the rapid wave of global technological advancements and progress, compelling organizations to embrace it in order to stay relevant and avoid becoming outdated. Traditional methods of training had been adopted by organizations to develop the workforce for decades, but, in the digital era of mobile learning and social learning, online and blended method of training are recognized and accepted. With the help of technological interventions like big data analysis, design thinking among others, future methods of learning can be enhanced and upgraded.

Keywords: Business, Reskilling, Technology, Workforce, Learning

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I. INTRODUCTION

One of the primary drivers of the greater process of digitalization, also known as digital transformation, is digitization. Digital technologies are incorporated into daily life to meet specific needs, which is known as digitalization. Amazing tools and resources have been produced as a result of the digital transformation, making life easier and more efficient with regard to speed of communication and information transmission around the world. Even the old educational system, which was built on the idea of teaching facts, has undergone changes. A new collaborative and self-driven business model built on responsibility, efficiency, and openness has ushered in a new era in the conventional business landscape. The role of teachers has undergone a transformation due to the widespread and continuous integration of technology, where they now serve as facilitators in fostering a conducive learning environment. The rise of mobile and social learning trends, especially favored by adult learners, has spurred the digitalization of the learning process. Due to the Fourth Industrial Revolution, industries such as information technology, telecommunications, retail, life sciences and healthcare, manufacturing, travel and hospitality, insurance, banking and financial services, and others were compelled to embrace the Business 4.0 framework. In the twenty-first century, there is a pressing need for learning as economies worldwide generate fresh talent. To deliver maximum digital benefits, value creation, and customer service, a framework of behavioral skills has been developed, combining technological expertise with a clear purpose.

As the workplace environment continues to change, it is crucial for the workforce to acquire new knowledge and skills in order to stay current and valuable in their roles. Globally, the workforce is anticipated to be impacted by the digital revolution and automation, necessitating strategic planning of efforts for reskilling and up skilling in order to support organizational growth and innovation (LinkedIn Learning Report, 2020). Redundant jobs will be eliminated by technology, but new jobs that need complex problem solving, rational flexibility, social intelligence, empathy, and imaginative and adaptive thinking will be created (Gram & Pearson, 2018). Organizations must understand that until their people, processes, and technology are integrated to produce a holistic solution, performance and growth cannot be achieved. Organizations must be adaptable enough to meet environmental problems in order to survive and grow in a world of fierce competition brought on by automation, digitalization, artificial intelligence, virtual reality, and big data. Organizations must therefore maintain a learning environment that will enable their staff to be flexible, resilient, and malleable enough to accept and adapt to change through reskilling and upskilling them through training efforts.

Reskilling involves equipping individuals with the necessary knowledge, skills, and practical experience to effectively perform their job responsibilities. It is a deliberate and coordinated effort that involves providing information to recipients in order to achieve the desired outcomes. Training programs serve as a means to accomplish this objective. Training should be an on-going process to narrow down the skill gap by incorporating technology into learning. (Sharma, 2019). Training is the act of increasing the skills of an employee for doing a particular job (Flippo, 1984). To make the training result oriented, it ideally needs to follow a 'Need Assessment Process'. The need assessment helps to understand the gap in the organizational requirement and the employee skills thereby leading to designing a program which can bridge that gap. For a long time, corporate training has revolved around the old

system of learning, which while meeting the requirement of compliance for formal training has possibly not really taking learning to the next level. As a result, it created a huge skill gap which had to be narrowed down by incorporating technology into learning. This needs to change over time as a result of digitalization in order to keep up with the changing demands of the business environment and the requirement for ongoing, self-directed learning. Training is not a one-time initiative anymore but should be an on-going process according to the size of the organization, the nature of the job, the assessment of cost-benefit ratio, and the characteristics of the beneficiaries who opted for the program.

Among other industries, India's IT sector has significantly contributed to putting the country on the map of the world. Immediately following the economic changes in 1991–1992, this sector began to expand quickly, ranking second in the inflow of foreign direct investments (DPIIT, 2020) to the country. According to NASSCOM (2017) data, this industry makes significant investments in reskilling and skilling its workers, which might result in 1.5–2 million individuals working on next-generation technology within four to five years. Over 375 million people may need to entirely shift their skill sets by the year 2030, per a report of McKinsey Global Institute (2013). With the introduction of new technologies, the idea of skilling and reskilling the workforce, particularly in IT (Information Technology) enterprises, has gained pace. Businesses have concentrated on methods of upgrading the skill and expertise of the workforce. Online training, blended learning, mobile learning, and social learning have replaced the conventional methods of training for advancement.

II. OBJECTIVES OF THE STUDY

- To understand the concept of reskilling and why it is the need of the hour
- To identify the impact of technological evolution on the methods of training

III. RESEARCH GAP

Even though there have been many studies done in the areas of online, blended, mobile, and social learning, the majority of them have been done for banks, colleges, health care organizations, and public sector organizations in different nations throughout the world. In relation to IT firms, very few research have been done on the current and emerging training approaches in light of digitalization. As a result, the current study aims to close a gap in the body of knowledge and present fresh research findings.

IV. SIGNIFICANCE OF THE STUDY

Because the nature of the work in IT firms necessitates ongoing skill updates for employees, the training that is delivered must likewise be cutting edge. Given the abrupt alterations in reskilling practices brought on by the VUCA (Volatile, Uncertain, Complex, and Ambiguous) global market, it is crucial to comprehend how the corporation is handling the technological advancement to be interlaced with the training approaches.

V. RESEARCH METHODOLOGY

The paper is descriptive in nature. In the study secondary data has been reviewed through various research articles, news articles, business journals and various reports.

- 1. Importance of Reskilling Training:** IT organizations place a strong emphasis on their human resources to remain competitive and financially stable in the tumultuous market. However, over time, the skills of the workforce may become obsolete and require renewal (Langer and Mehra, 2010). In light of organizational, technological, and social changes, it becomes imperative to participate in ongoing learning to update and enhance one's knowledge and skills. Continuous learning is essential in order to adapt to these dynamics effectively (Muhammad and Fard, 2013; Isyaku, 2000; Oribabor, 2000) because they promote excellent performance and have a substantial impact on an organization's profitability through raising employee performance, reskilling training has thus become a crucial function in the majority of businesses (Mozael, 2015). Employee training and development and performance are significantly positively correlated (Ahmad et al., 2014). Employee training ensures quick adaptation to the changing business needs while also assisting with productivity. It is also advantageous for workers' career growth, which promotes workplace satisfaction and retention (Jahanzeb and Bashir, 2013; Nunn, 2000). Because employees are aware that their employer is investing in their future career, training enhances organizational reliability (Rosenwald, 2000).
- 2. Interlace of Technology:** It is very important to emphasize that although the newly developed technological approaches are essential for performance improvement of the organization through reskilling and up skilling the workforce of the new skills, the new technological intervention can also aid in curating the content of the program, selection of the audience, the methodology to be followed considering the ROI impact, reaction of learners, learning and application objectives of the organization.

The creation of engaging learning systems that motivate learners toward their objectives is made possible by the analysis of big data. By examining the strengths and weaknesses of the workforce's capabilities, big data analysis aids in understanding the psychology of learners and enables appropriate improvements to be made to training content and technique. Additionally, it aids in the timely and informed decision-making of organizations. Big data can be utilized to improve the effectiveness of training. Big data combines the testing results of trainees with bigger datasets, including demographics, to offer training modules that can be most successful with certain persons and their feedback suggests training efficiency-improving procedures. Big data can be used to foresee future trends, allowing training programs to be implemented when needed (McAllister, 2017). Workforce development is a crucial step in the 21st-century corporate environment that can open up new prospects for employees and generate sustainable profit for organizations by utilizing big data technology. Design thinking is an iterative process that places a strong emphasis on user-centric understanding of how and what users learn. It's a non-linear process since new ideas from various stages help to identify and systematize an original solution for a design project. The content is purposefully designed to be simple to understand and interesting for the learner in order to facilitate effective learning. Since more than a decade ago, the cloud has been a key driver of innovation and a crucial component of most digital transformations. It offers quicker, less expensive and more efficient ways to manage and carry out crucial tasks and assignments. It is regarded as a low-cost method of data storage and application operation to promote innovation, increase agility, and deliver better services (Cloud Academy, 2018). In order to generate possibilities for innovation that are accessible to all, the cloud connects a wider range of partners, including developers, designers, researchers, and other

stakeholders outside of an organization. Organizations are looking for programmatic, data-driven training solutions with a new paradigm for cloud training that is measurable, guided, business-practical, continuous, specific, and accountable for tying together learning efforts, technical roadmaps, and business results in order to dependably remain competitive. Employee development is made possible by cloud technologies in a fluid and collaborative manner, allowing materials to grow organically as the company does (Chakrabarti, 2019). Cloud computing provides anytime, anywhere access to learning apps that will streamline the delivery of learning, instant scalability to meet growing learner populations with improved management costs and efficiency, and seamless compatibility with social and collaborative tools and features that provide autonomy to the user and learning organization. Emerging technologies like AI, robotic process automation, IoT, and big data analytics are built on the cloud (Briggs et al., 2019). AI can offer Learning and Development (L&D) a significant edge over competitors. By adapting to the requirements of contemporary learners, it explores endless opportunities for growth and improvement (Belford, 2023). One of the major advantages of incorporating AI into corporate learning is the capacity to deliver personalized learning experiences. This means that each individual employee can follow a customized learning path that aligns with their unique skills, interests, and preferred learning approach. As a result, this personalized approach can enhance engagement and retention, as employees are more likely to be motivated to learn when the content is directly relevant to their specific job responsibilities. Furthermore, another benefit of integrating AI into corporate learning lies in its ability to monitor employee progress and offer real-time feedback. This feature allows managers to pinpoint areas where employees might be facing challenges and provide them with the necessary support or additional resources as required. Additionally, AI-driven progress tracking enables employees to identify their strengths, thereby creating opportunities for further growth and development in those particular areas (Aruna, 2023).

VI. FINDINGS

To meet the evolving requirements of the work environment and the growing emphasis on continuous education and self-improvement, the methods of training have undergone changes over time. Traditional corporate training has certain drawbacks because it uses a very general approach and is not customized to meet the individual's needs, particularly the digital workforce. Due to the drawbacks of on-the-job training techniques, most firms today, particularly IT organizations, have adopted new methodologies. Although it cannot be fully ruled out, it depends entirely on the organization's judgment regarding the necessity, skill gap, importance of the subject matter, learners, their attitude, and cost incurred to benefit ratio, to name a few. The realization of the workforce about the necessity for self-improvement in the digital era has triggered a shift in mindset from traditional training to a focus on continuous learning. As a result, mobile learning and social learning are rapidly gaining traction as effective approaches for knowledge dissemination. Social media offers a platform for individuals to showcase their expertise and establish credibility in their preferred field(s) or area(s) of expertise. Moreover, it enables them to access valuable information and perspectives from fellow members of the online community (Sharna, 2023).

VII. CONCLUSION

Instruction is no longer the primary focus of learning; rather, it is the flow that enables learners to pick up new information most naturally. Artificial intelligence, big data analytics, design thinking, the internet of things, and all other future technological innovations mentioned by NASSCOM will likely have an impact on how training and learning are conducted in the future. By measuring employee behavior to personalize training for each person or team, the technological innovations will assist in integrating employee training with workflow. To develop a hybrid workforce that will improve the user experience, Artificial Intelligence will ensure communication and collaboration between humans and machines. The use of technology in training will lead to greater automation, measurability, and customization in content development with an emphasis on human interaction, the elimination of bias in learning, the provision of exclusive learning methods, an increase in completion rate, and an increase in training effectiveness. The advancing technologies will take into account a number of factors, including each employee's interest and skill in curating content from various internal and external sources that is suited to their needs, as well as their work profile, educational background, prior learning experiences, and learning style. It will make the process quicker and more budget-friendly, removing the necessity for costly tools and software. The produced videos will be captivating and aesthetically pleasing, enhancing learners' ability to retain information (Wallace, 2023).

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