The Future of the Classrooms in Digital Evolution: A Bird's Eye View.

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Abstract—Technology has evolved into the most essential component of our lives, and it is assisting in the resolution of the many complications that are associated with our busy lifestyles. In the 21st century, science and technology are playing an essential part in the process of making the economy of the whole world stronger. According to the findings of several experts, a company or economy that does not possess advanced technology is unable to experience future expansion. Its relevance can now be seen in every industry, and education is one of those sectors where it can be seen. In many different ways, the field of education has been significantly altered as a direct result of the impact that technology has had. Technology and other electronic devices are increasingly being used in the classrooms of both public and private schools, which has made the teachers' jobs much simpler. When education is combined with technology, according to the findings of several surveys that were carried out by education specialists, both students and teachers find the subject matter to be more interesting. This is because the exchange of knowledge becomes more interactive, straightforward, and uncomplicated. The Internet is largely responsible for the increased availability of technological resources to the general public.

Keywords— Expert systems, management, Artificial intelligence, human resource, education specialists

I. INTRODUCTION

Many students in today's digital age are gradually but surely gravitating towards taking their education in the form of online digital courses. These courses are becoming increasingly popular in almost every academic discipline, including business, the arts, engineering, as well as programming languages and technical tools. Learners from all over the globe are eagerly filling up the seats in the various online courses that are already accessible in each and every discipline thanks to the proliferation of digital education. Digital learning is a sophisticated technology medium that provides students with a great degree of freedom. It enables students to study whenever they want, whenever they want, and at whatever pace is most comfortable for them without having to worry about timetables or schedules. It gives students the freedom to focus on the aspects of their education that are most important to them. The proliferation of technology developments is bringing about fresh shifts in the manner in which education is disseminated and understood by students. Since education is increasingly being delivered through digital platforms, the reach of educational programmed is becoming greater with each passing day. The use of digital education is facilitating new options for teaching, learning, and personal

development for students and educators alike, consequently enhancing the learning process as a whole. (Lindquist & Melinder, 2019)

II. OBJECTIVE

The research aimed to fulfill the following objectives:

- E-Learning, which is an adaptation of the modern learning technology
- Massive Open Online Courses
- Results Showing Promise in the Rural Area
- E-learning? eLearning pros and cons?

III. METHODOLOGY

In the field of education, the function of technology can be broken down into four distinct subfields: it can serve as a component of the curriculum, an instructional delivery system, a means of assisting instructors, or both, and it can also be used as a tool to improve the learning process as a whole. The focus of education is still mostly on digital spheres. This, however, has to change, and practices technology in educational practises should no longer be seen as only an accessory facilitator but rather as an essential component. Until the crisis with Covid-19 arose, there wasn't anything on at all. While there were several e-learning platforms, such as Biju's, the incorporation of technology into educational stop undergos very limited. The majority of educational institutions see technology as the establishment of a computer or information technology lab in which an outmoded curriculum is followed. The majority of the time, you will not find any initiative or support coming from the institutions; nonetheless, there are a number of unofficial clubs that have been founded by students.

IV. E-LEARNING, WHICH IS AN ADAPTATION OF THE MODERN LEARNING TECHNOLOGY

The dissemination of education in schools and colleges has undergone a sea shift as a result of the introduction of cutting-edge teaching instruments that are supported by technological advancements. The Internet of Things is proving to be an effective and cost-efficient means of integrating experiential learning for people of all ages, as well as a method that may be used to educate young brains. Those who are presently having trouble obtaining adequate educational facilities are among the target demographics for the digital learning firms, which is why they are always developing more sophisticated solutions. The function of educators is undergoing transitions. By the use of digital displays, they now have access to the whole classroom. Combining a number of different pedagogical approaches results in a greater student reach and engagement. It makes it possible for each student to experience a world-class education, which is something that was not possible with the traditional chalk and talk method. Studying in the privacy and convenience of one's own home is made much easier by the availability of this method. Students may now learn, engage in experiences, put what they've learned to the test via self-assessment, and even monitor their development and the milestones they achieve. The digital media has also shown to be suitable for corporate training because to the portability, effectiveness, adaptability, and sturdiness of the mechanisms that comprise online learning platforms. A significant number of businesses have recently begun to make considerable use of digital learning technologies in order to teach their staff, assist them in improving their abilities, and offer smooth sessions for the transfer of information. (Llevot Calvet et al., 2019)

The percentage of young people throughout the globe who choose to get their education online is rapidly climbing to new heights. One of the most significant benefits of a digital education is that the materials that are developed only need to be done so once and may then be utilized again for many generations to

come. This results in significant savings in both time and resources. In addition, instructors are able to tailor the curriculum to the specific requirements of each student thanks to the personalization capabilities of digital education.

Massive Open Online Courses

MOOCs, or massive open online courses, are providing a significant boost to the concept of independent study. There is a current trend in India towards increasing participation in massive open online courses (MOOCs). They are assisting young people in the nation to improve their qualifications and skills, and they are providing millions of Indians with access to education at a price that they can afford. This will allow them to improve their employability by gaining access to a variety of courses that focus on skill development.

Students and working professionals are able to learn at their own convenience from any location and at any time thanks to this platform's flexibility. In addition, a few of the courses that are made available via this platform culminate in the awarding of a legitimate certificate that is appropriately recognized by organizations. After the United States of America, India has become the world's second largest market for massive open online courses (MOOCs). On the other hand, in the years to come, it is anticipated that India will surpass the United States. (Prickarz & Röck, 2022)

It is estimated that there are 430 million children in India that are between the age range of 0 to 18 years old. This makes India the nation with the greatest number of children in the world. Learning in India is going to transition to using digital education as the primary method. The general educational structure in the nation is undergoing transformation as a result of the smart and creative technology. The rate at which digital education is being adopted in India's rural areas is accelerating. Since online learning platforms collect a vast quantity of user data, they are able to employ machine learning algorithms to improve people's learning habits. This helps individuals learn more effectively and efficiently. The information shown to each user is customized via the use of pattern recognition. For instance, if a student has trouble grasping a certain idea over the duration of the class, the platform might modify the e-learning material to include additional information that is specific to the student's needs in order to assist them.

The steepness of the learning curve is reduced because to the platforms' built-in immediate feedback loops, which are supplied either by other online students or by the platform itself. This also gives those who are more reserved or shy the ability to engage in class discussions in a way that is less intimidating than traditional in-person classroom settings. (FEDOROVA & DOZHDIKOVA, 2022)

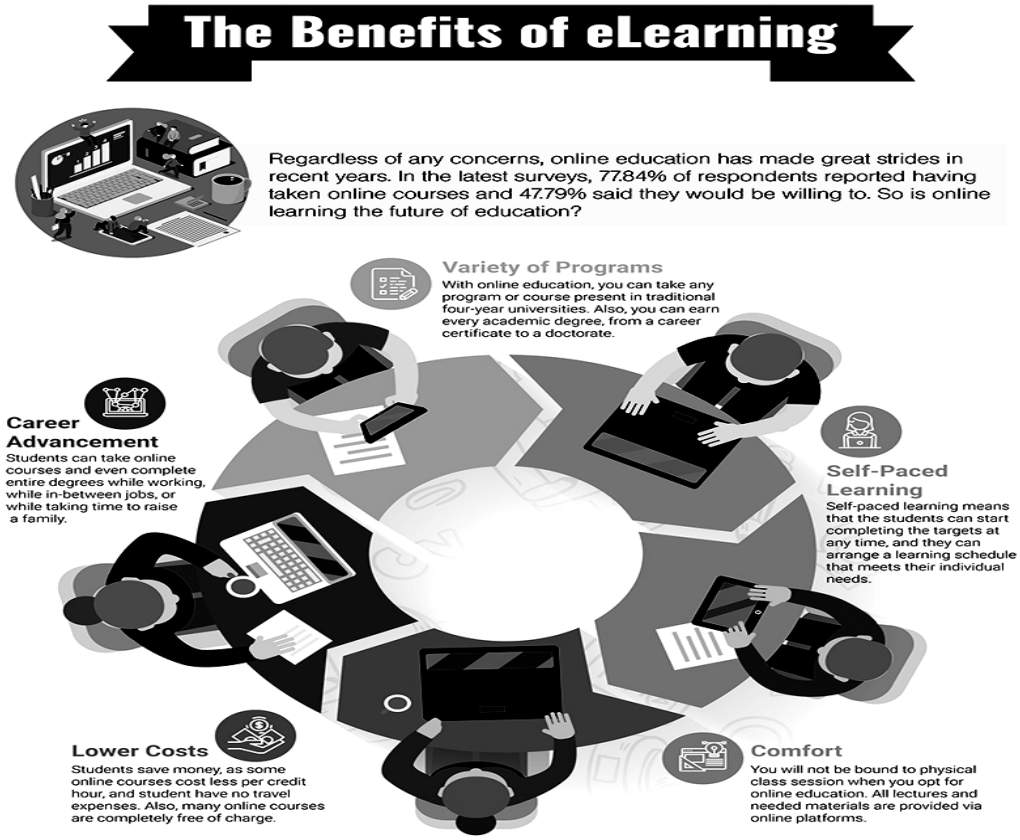

FIGURE1: E-LEARNING

V. RESULTS SHOWING PROMISE IN THE RURAL AREA

Inadequate teaching materials, a low student-teacher ratio, and an ageing teaching staff are just some of the problems plaguing rural education today. As a result of education's digitalization, even pupils in traditionally underserved regions (most notably the country's rural interior) now have access to cutting-edge pedagogical resources. This technology is facilitating instantaneous communication between professors and students located in different locations. In the long run, this will aid in reducing the current disparity in the student-teacher ratio. The UK-India Business Council predicts that the e-learning market in India would develop at a compound annual growth rate of 17.4 percent between 2013 and 2018, making it grow at twice the pace of the worldwide market. Although though the vast majority of Indians cannot read or write English, education resources are now accessible online in both English and regional languages thanks to technological advancements. Students may view the information offline as well, which can be synchronized as and when internet connection is available, which is very helpful given the ongoing problems with connectivity in India, especially in rural regions, where e-learning and m-learning efforts are being implemented. Online courses are cheaper than traditional classroom instruction because they use openly licensed educational resources that may be accessed by anyone. As a result, a culture of open education is fostered. Digital education will replace traditional classroom instruction as internet availability and affordability improve. Small, medium, and large-scale digital learning start-ups will flood the education market with a wide range of new digital solutions designed to support and enhance online education. The government is lending a hand by formulating laws that will increase demand for online courses. The state of the nation's digital infrastructure is a perpetual work in progress,

but with the help of cutting-edge pedagogical resources, there are ongoing attempts to boost it. (Ghelani, 2022)

University and college education in general, and digital education in particular, will be undergoing significant transformations in the not-too-distant future. The potential for digital education to equip the next generation of leaders is vast.

Universities and colleges in India may benefit from advanced Learning Management Systems (LMS) by using its knowledge management features to enhance the course development and delivery processes.
Many kinds of linguistic barriers are being broken through by digital technology. It is now possible to digitally provide educational resources in a variety of regional languages. Government and corporate organizations have encouraged e-learning and m-learning efforts so that educators and students alike have access to a plethora of educational resources.

The Development Of India's Technologically Oriented Educational System

India is a leading educational powerhouse in the world, and its universities are among the most prestigious in the world. It also has the ability to greatly advance educational systems. Even more encouraging for the development of distant education in the nation is the government's new goal of increasing the current gross ratio enrollment to 30% by the end of this year.

It is estimated by IBEF that by FY19, India's education industry would be valued $101.1 billion, up from FY18's $91.7 billion. As of now, the United States is the largest market for online learning, but India is swiftly closing the gap. The industry is expected to be valued $1.96 billion by 2021, including around 9.5 million customers. There will have been $3.24 billion in FDI into India's schooling sector between April of 2000 and March of 2020. To paraphrase (Miller, 2023)

A programme called PM every was introduced by the Indian government a few months ago to increase people' access to digital as well as online education via many mediums. After the rollout of Mano Darpan, initiatives such as the New National Curriculum and Pedagogical structure, the Nation Foundational Literacy Mission, and the National Numeracy Mission will be implemented. For the purpose of bolstering the Skill India Mission, the Cabinet Committee on Economic Affairs (CCEA) of the government of India has approved two new schemes totaling 66.55 billion rupees: Skills Acquisition as well as Knowledge Awareness for Livelihood Promotion (SANKALP), and Skill Strengthening for Industrial Value Enhancement (SSIVE) (STRIVE). The World Bank (WB) has pledged its assistance for these efforts.

It is predicted that by 2021, India's e-learning industry would be worth $1.96 billion, having grown at a compound annual growth rate of 25%. Around $247 million in 2016, KPMG predicts that India's edtech sector would grow to $1.96 billion by the end of 2021. As part of its Digital India initiative, the Department of Human Resource Development (MHRD) of the Indian government has introduced a variety of programmes to promote the growth of the educational technology industry. Such examples include the pre-programmed E-Yantra, the virtual lab, FOSSEE, the NDL, SWAYAM, and SWAYAM Prabha.

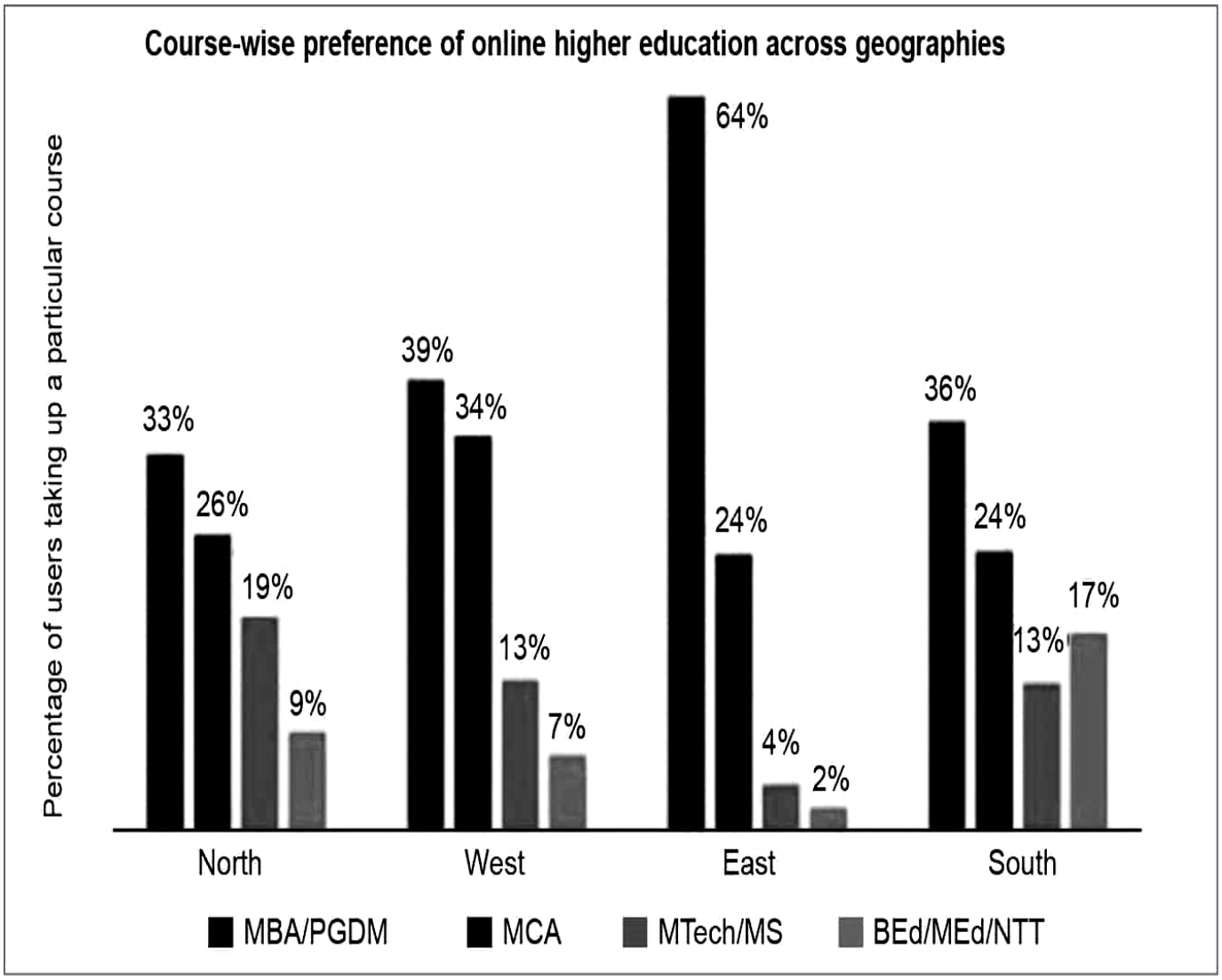

FIGURE 2: TECHNOLOGY'S INCREASING ROLE IN EDUCATION AND SKILL DEVELOPMENT

VI. E-LEARNING? ELEARNING PROS AND CONS?

E-learning uses computers, laptops, tablets, and cellphones to learn. E-learning allows remote access to systematic learning or any chosen course through a digital device with steady internet connection. E-learning lets students study any topic from anywhere in the globe. Traditional learning requires professors and students to be present, whereas online learning does not.

The coronavirus epidemic changed schooling. E-learning emerged when social alienation and global lockdown caused educational institutions to close indefinitely. Notwithstanding the recession, contemporary technology and creativity made this learning revolution feasible. (Aidarbekova et al., 2021)

E-learning has pros and cons, despite its popularity.

E-learning benefits

This popular learning option has several benefits. Modern learners benefit from e-perfect learning's design. E-learning has several benefits that will improve our future.

1. Remote education convenience

E-learning protected young learners from the epidemic. The internet revolution made systematic learning distant for millions. E-learning lets you access every course from a web-enabled device at home, unlike the old approach.

2. A viable, irreplaceable alternative

E-learning enables anybody of any age, gender, country, or faith to study. Since the pandemic, e-learning has been an essential way to master new skills and knowledge at home.

3. Affordable

Online courses are cheaper than traditional schooling. E-learning courses eliminate travel, gasoline, restaurant, and printing costs. E-learning saves money on many manual learning essentials. It saves you time getting to school, which you may use to master a skill or relax.

4. More versatility.

E-learning lets you study at your leisure. It lets you set your own schedule and course length for short-term or full-time courses. If you forget anything or miss certain points during the course, you may review the recorded sessions to better grasp the subject. (Tavits, 2020)

Online vs. Traditional Learning

E-learning drawbacks

1. Missing class

E-learning may be convenient, but it takes away the excitement of classroom learning, friends, games, lunch breaks, penalties, and more. You'll miss learning alongside peers. It separates you from social life, which is essential for mental health and growth.

2. Inactivity increases disciplinary concerns.

E-learning prevents teacher-student engagement. That makes it impossible for professors to tell whether pupils are paying attention or submitting their own work. Digital learning does not enable instructor attendance during sessions and examinations. That raises distrust for their field. It questions a distant student's genuineness.

3. Screen time and inexperience

E-learning requires screen-time. Screen time is bad for kids and adults. Screen time impairs youngsters' mental development. It greatly affects their conduct. Exposure might damage vision and cause early migraines. To limit screen time, advocate hands-on learning.

4. Absence of digital education for the poor

Rural people everywhere dream of e-learning. Online learning is difficult for them due to internet connectivity issues. The issue persists throughout cities. Underprivileged pupils and those who attended government schools before the lockdown cannot afford bandwidth and devices for online lessons. Due to

the epidemic, many who work from home cannot attend online courses. Due to job loss fears, most cannot afford extras. (Kiser et al.)

Yet, governments and educational institutions worldwide are working to close this learning gap caused by the digital revolution.

CONCLUSION

It won't be long unless artificial intelligence is acknowledged as an essential component of technology that must be used in order to improve the efficiency of information system security teams. Artificial intelligence (AI) provides security professionals with the much-needed analysis with threat detection that they can use to lower the risk of security breaches and enhance security posture. AI also provides the much-needed analysis as well as threat detection. AI is able to give us with the essential analysis in addition to the identification of potential threats that we need. AI is necessary because humans can no longer scale to the point where they can completely protect an enterprise-level attack surface. This is why we need AI. In addition to this, artificial intelligence may be able to assist with the identification and prioritization of risks, the direction of incident response, and also the detection of malware assaults even before they have the chance to take place. As a result, artificial intelligence will serve to progress cybersecurity and assist enterprises in developing a more robust security posture. This will occur despite the fact that there are possible drawbacks associated with AI. Despite the possibility that doing so would help advance cybersecurity, this is the situation we find ourselves in.

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