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A Study of Impact of EdTech Platforms on Learning Patterns in Western Maharashtra

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Abstract: ***Technology enabled education has been trending worldwide for many years but recent pandemic of COVID 19 has brought paradigm shift in teaching learning processes. EdTech has facilitated learning by breaking walls of geographical and cultural boundaries across all sections of societies in India. The paper aims at understanding perception and responsiveness of people towards EdTech. Study also focuses on identifying opportunities and challenges of EdTeching future. The structured questionnaire was circulated using convenient sampling method to collect primary data from 44 respondents. The questionnaire included aspects of devices used, frequency of use, preference to learn and so on. It was found that the respondents had fair idea about functioning of EdTech and respondents used EdTech as primary and secondary source of knowledge equally. The key challenges faced in using EdTech were found to be technical issues, lack of personal touch and attention and inability to pose questions on the spot. If interface is made user - friendly and lectures are made available on offline platform too then the utility can be multiplied so as to reach to last leg of society.***

Keywords: EdTech, Perception, New Age Methodology, Responsiveness.

1. INTRODUCTION

The word "EdTech" refers to educational technology that is utilised by educators, schools, and other organisations to enable and support their efforts to teach students in fresh and engaging ways. EdTech, then, is the application of any technological method to raise educational standards. It's crucial to understand that EdTech encompasses more than just putting tech in the classroom and giving kids computers. Instead, consider EdTech as a method for facilitating and delivering a new type of learning architecture using digital technology as a media. In other words, a new learning architecture enables teachers to provide pupils with individualised

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instruction and training depending on the needs of each student. More than ever, new technologies are making use of the power of big data analysis to determine the best paths for student advancement. School districts and educators always strive to strike a balance and show efficient use of limited resources in order to provide children with the finest education possible in an era of more accountability and shrinking budgets.

Advantages of EdTech

- **Enhanced Cooperation** -Collaboration in the classroom is being facilitated through cloud-based tools and technologies. Students may now collaborate more easily while playing educational games and taking online classes thanks to tablets and laptops. Additionally, thanks to cloud computing, students may quickly upload their digital assignments, making it simpler for them to communicate with their teachers about their homework or any assistance they may need.
- **24/7 Learning Access** -Students now have easier access to information whenever and wherever they choose thanks to IoT devices. Students can work on their projects and learn at their own pace when they have complete access to the classroom in a digital setting using Wi-Fi and cloud connectivity. Students now have access to all the knowledge they require to proceed without having to be physically present in a classroom.
- **Turning the Classroom Around** -Students would often complete homework at home after listening to lectures in a traditional classroom setting. Students can now watch lectures outside of the classroom thanks to the development of video lectures and learning tools. Traditional classroom experiences are being dramatically transformed by edtech to emphasise cross-collaboration between students and teachers. This method of learning encourages greater creativity and self-learning.
- **Personalized Learning Opportunities** -EdTech gives educators and teachers new tools to design individualised lesson plans for their pupils. This makes it possible to create a catered learning environment that is tailored to the interests, abilities, and talents of a particular learner. Digital learning materials give students the freedom to learn at their own pace and allow them to pause and replay lectures as necessary to properly comprehend each concept. With the help of analytical tools, teachers may identify which pupils are having difficulties in specific areas and afterwards provide assistance in those areas.
- **Focus-Positive Lessons** -The EdTech sector's supporters are adamant that technology is an essential tool for grabbing students' attention. Researchers are also discovering that instructors and students are supportive of the use of technology in the classroom and believe that it enhances learning, encourages engagement, and supports academic success.

Review of Literature

1) **R. Bargavi and Dr. Kavithashanmugam, (2022),** in their article named Emerging Transformation of EdTech during COVID 19 : An Analysis of Issues and Challenges of University Students in Chennai, have analysed the impact of introduction of education technology in the classroom and development of online courses for students' learning. Authors observed notable change in online teaching learning during and post COVID 19 that has resulted in paradigm shift. The primary data was collected to identify and analyse factors affecting adaptation of EdTech and its implication in higher education. The authors

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have used statistical tools like percentage, mean, standard deviation and chi square to test the hypotheses. Study concludes that there has been resistance and more of mental block in adapting technology.

2) **Irvine Clarke and etl., (2016),** in their research article, named Student Perceptions of Educational Technology Tools, have investigated the perception of students about educational technology tools based on 3 variables ; overall learning, employability and potential job performance. The study based on use of technology in marketing education. Authors conducted survey to obtain primary data through marketing course involving use of technology. It was found that respondents had differences of opinions about learning ability and job performance. Authors suggested that if instructors adapt the technology and blend with traditional learning then effectiveness of teaching learning process can be enhanced.
3) **Omer Delialioglu and Zahide Yildirim, (2007)**, in their research article named, Students' Perceptions on Effective Dimensions of Interactive Learning in a Blended Learning Environment, have explored responsiveness of students on interactive learning via hybrid mode. The findings of the study were based on a case study design involving 25 samples enrolled for tech - based communication course for a period of 14 weeks. The respondents were interviewed at the end and computer logs were used for the purpose of analysis. Authors found that when blended learning tools are used students find it easy to learn soft skills as it can provide standardised repetitive experience. The internet is likely to play role of being game changer in teaching learning process.
4) **Himani Sharma (2022)**, in her chapter named Mapping the Global EdTech Revolution during the Pandemic: From "Determinism: to "Solutionism", has reviewed opportunities and challenges in implementing EdTech in the eco – system of higher education. Author has made special mention of EdTech being catalyst in transforming higher education at global level. Based on review of literature, author is confident that pandemic has led to new dimensions in education sector and believes that the trend shall not only continue but may replace some courses on completely digital platforms. Human capital theory is proved to be right again as we can witness direct relationship between higher education and growth of nation.

Objectives

- To understand the concept and scope of EdTech
- To study perception towards EdTech platform as learning tool
- To analyse responsiveness and level of adaptation of EdTech
- To identify challenges in using EdTech as new age learning method
- To suggest measures to improve efficiency of EdTech platform

2. RESEARCH METHODOLOGY

In the study, data is taken from both primary as well as secondary sources and further analysis of the same was done.
The secondary data information was obtained, from published sources such as articles, research papers, government websites, official twitter handles of various ministries and blogs.

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For collecting information as source of primary data, a structured questionnaire was circulated amongst the learners of age 15 and above.

Research Design

1) **Universe** – The research is done for analysing the perception and
2) **Sample Size** – Sample size of 44 respondents is taken for the research. The primary data was collected through questionnaire from the respondents.
3) **Sampling Procedure** – The researcher adapted convenience sampling technique for collection of primary data through structured questionnaire design. The respondents were explained about the questions and data were collected without any biased opinion.

Findings of study Demographic Distribution

Sr. no.	Particulars	Number	Percentage
1)	**Gender**		
	Male	22	50
	Female	22	50
	Total	**44**	**100**
2)	**Jurisdiction of Area of Residence**		
	Urban	39	88.64
	Rural	5	11.36
	Total	**44**	**100**
3)	**Age Group**		
	10 – 15	3	6.82
	16 – 18	12	27.27
	19 - 21	11	25
	22 and above	18	40.91
	Total	**44**	**100**

Table1- Frequency of using the EdTech Platforms

Frequency	No. of people
Daily	10
Once in a month	11
Once in a week	14
Once in fifteen days	6
when required	1

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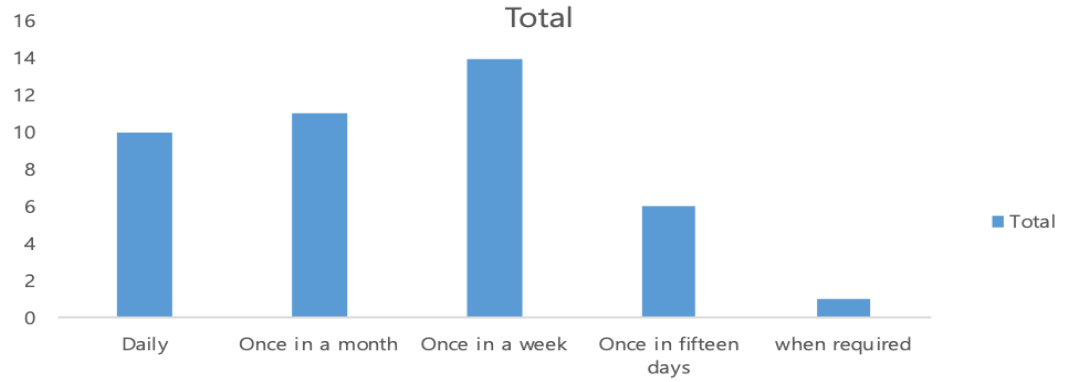
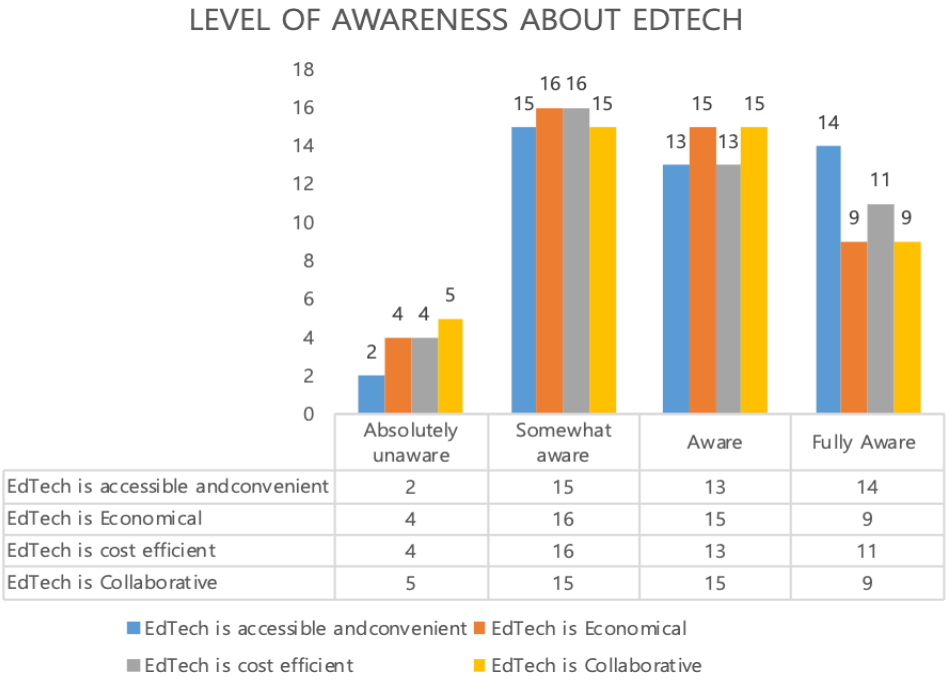


Table-2 Awareness of EdTech Platforms

	Awareness/Statements	EdTech is accessible and convenient	EdTech is Economical	EdTech is cost efficient	EdTech is Collaborative
1	Absolutely unaware	2	4	4	5
2	Somewhat aware	15	16	16	15
3	Aware	13	15	13	15
4	Fully Aware	14	9	11	9

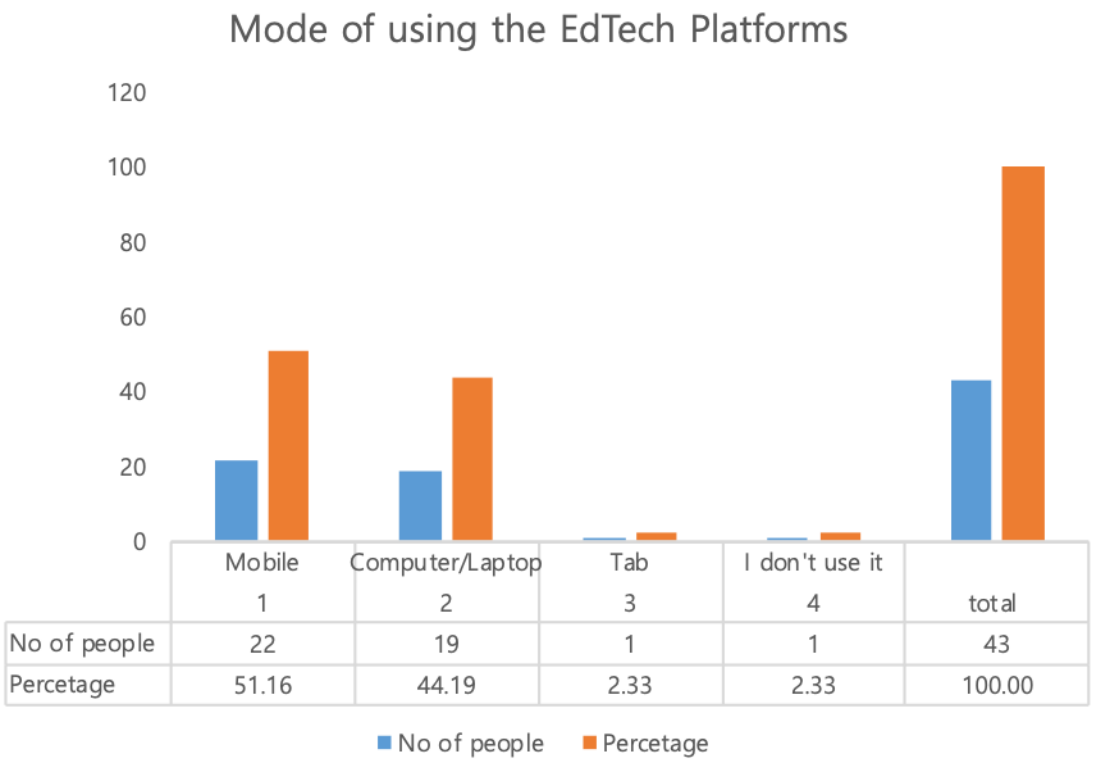


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Table- 3 Mode of using EdTech Platforms

Sr.no	Particulars	No of people	Percentage
1	Mobile	22	51.16
2	Computer/Laptop	19	44.19
3	Tab	1	2.33
4	I don't use it	1	2.33
total		43	100.00



- 77.3% respondents have used EdTech platforms for the studies.
- The key reasons for using EdTech were found to be ease and convenience, peer pressure and opportunity to learn contemporary issues.
- The respondents who haven't used EdTech for learning feel that, it is time consuming and there no mechanism to solve queries on the spot.
- 62% of the respondents find it suitable to learn theory subjects on EdTech platforms.
- 46.5% respondents prefer EdTech platforms as primary source of knowledge which suggest that EdTech platforms have established themselves as important tool for learning.
- The main challenges in using EdTech platforms were found to be lack of interaction and physical touch, increase in screen time connectivity issues and time consuming process.

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Suggestions and Recommendations

1) The content and interface of EdTech should be made specific and user – friendly for improving efficiency of the platform.
2) The content may be made available on offline mode so that constant need of internet connectivity can be eliminated.
3) EdTech platforms should create community learning centers so as to reach the last mile of the society.
4) Higher education institutions must make it mandatory to earn credits through MOOCs for learners.

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