

Anekant Education Society's Anekant Institute of Management Studies (AIMS), Baramati

13th National Conference 2024

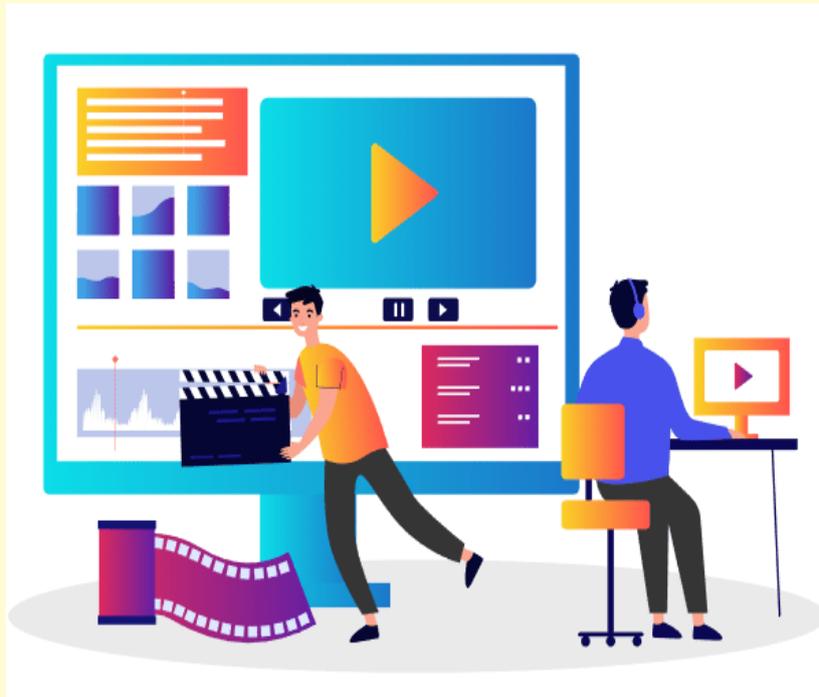
on

Future Nexus: Technology Enhanced Learning

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director@aimsaramati.org | www.aimsaramati.org

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Anekant Education Society

Anekant Education Society is established in 1961 under the able guidance of Late Shri Fulchandji Gandhi, Education Minister of the Former Hyderabad State. The founder President of the Society Late Shriman Seth Lalchand Hirachand Doshi, founder President of Premier Automobiles Ltd., and Walchand Group of Industries was determined on attracting the best talent to institutions operating under the auspices of AES. The society has chosen the Jain concept of "Siddhirnekantat" and "Anekantvad" in the nomenclature of the Society. The Society started Undergraduate Programs in Baramati in the year 1962. The college eventually was renamed as Tuljaram Chaturchand College. In a span of about 5 decades of its presence, Anekant Education Society has touched upon the lives of almost every household in and surrounding areas of Baramati.

Anekant Institute of Management Studies (AIMS), Baramati

Anekant Education Society has added another feather to its cap by starting AIMS to provide MBA course. AIMS is certainly working beyond excellence in all the accreditations, affiliations and Certifications of the nominated authorities. The initiative is to develop management professionals with a view to excel in the corporate world as well as take it to new heights. The need is to nurture the talents and hone their skills which are achieved only through AIMS. Since its inception, AIMS is providing quality education and in a period of few years the Institute has made its mark on academic, cultural and social environment of Baramati.

About the 13th National Conference

The aim of proposed conference is to enhance the quality of education by adopting various technology enabled platforms. The expected outcomes of this conference are as follows :

- I. Participants will able to realize the importance of technology enhanced learning.
- II. Participants will able to discuss various technological possibilities that will enhance the future curriculum.
- III. Participants will able to share the ideas about different applications of technologies in education sector.
- IV. Participants will able to discuss the challenges in adaptation to changing pedagogy.

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From AES President's Desk

Dear All,

Warm greetings from the AES's Anekant Institute of Management Studies Presidential Desk. Communication technology, computer networks, and information technology have all increased profoundly in recent years throughout the world. Technology has become a driving force, particularly in achieving the goals of the National Education Policy 2020, Multidimensional and Outcome-Based Education. With this theme I congratulate AIMS Team for consistently hosting conferences and now 13th National Conference on Future Nexus: Technology Enhanced Learning.

AIMS Baramati has always aimed to provide conference theme that is both novel and up to the minute. We want to provide a comprehensive education through such conclave. Holistic education is designed to assist overall learning by addressing students' social, emotional, physical, and intellectual development. I'm certain that this conference will help us to realize the comprehensive vision for growth.

I am sure the eminent resource person and delegates will share their expertise, idea and thought processes which will help conference to achieve objectives fully. I wish all the stakeholders of this conference a huge success.

Warm Regards,

Shri. Jawahar M. Shaha (Wagholikar)
President,
Anekant Education Society, Baramati



From AES Secretary's Desk

Dear Friends,

Information and communication technologies are now experiencing rapid growth with changing requirements. This has a wide-range impact on our society and education sector. Technology Enhanced Learning (TEL) is rapidly being viewed as a necessity in a world where fast change, increased deep knowledge, and the need for a regularly updated high-level education have become permanent requirements. With this inference, Anekant Institute of Management Studies once again made us proud by organizing the 13th National Conference on Future Nexus: Technology Enhanced Learning.

Technology provides us with easy-to-access information, accelerated learning, and fun opportunities to practice what we learn. It enables students to explore new subjects and deepen their understanding of difficult concepts, particularly in STEM. Through the use of technology, students can gain 21st-century technical skills necessary for future career. The conference theme assumes greater relevance to the current trends in education sector.

I extend best wishes and regards to those concerned with this scholarly endeavour.

Shri. Milind R. Shah (Wagholikar)

Secretary,
Anekant Education Society, Baramati



From the Desk of Secretary, AIMS

Dear All!!!

I warmly welcome all of our renowned resource persons, teaching faculty members, and the all student community to the 13th National Conference on Future Nexus: Technology Enhanced Learning. The theme is particularly relevant given the current state of education. Technology is not the future of education, it's the present. As rightly said by Albert Einstein "Education is not received. It is achieved." The way to achieve the education in today's time is to integrate technology.

Technology enhanced learning is reshaping and improving education and educational institutions beyond recognition. Therefore, it is impossible to ignore! This is especially true given the increased use of education applications, instructor software, and e-learning services. We are approaching an era of education in which technology is more than simply a useful resource; it is critical to improving the experience for both students and teachers.

I'm certain that the present conference theme touches on these issues and delivers appropriate results.

A handwritten signature in black ink, appearing to read 'Dr. Harshvardhan Vhora', written over a white rectangular background.

Dr. Harshvardhan Vhora

Secretary,
AIMS, Baramati



Preface

My Beloved Learned Folks,

Indeed, it my privilege and pleasure to welcome your honor to our 13th National Conference, 2024 at AIMS, Baramati and delighted to network with you. I am happy to share that, 'AIMS' is a legendary arm of T.C., College accredited with NAAC A+, under the aegis of Anekant Education Society, Baramati, which was established in the year 1961. AIMS is known as 'Charismatic Institute' in management education.

Our blend of stakeholders namely, students, alumni, industrial and MoU partners and dedicated staff both teaching and non-teaching are integral mainstay of AIMS. The consistent and continual planned efforts have upheld the Institute name and profile at pinnacle in the sector. Really it is matter of deep appreciation and high commendation. At AIMS all staff are really working with the management insight and skills for the improvement of the students and fostering them to be more industry friendly by the virtue of Technology Enhanced Learning.

The title of this 13th National Conference, 'Future Nexus; Technology Enhanced Learning'. A very thoughtful theme, which has been deeply contemplated by faculties and industrial fraternity. Pragmatically the theme of the 13th National Conference is very much useful to students, teachers, researchers, industries, and society as a whole. This online mode conference further enlightens with the confluence of power-pack, paper presentations and discussion from industry, academia, students' fraternity and NGOs.

The review of papers shown researchers contribution from PAN India, namely Tamil Nadu, Kerala, Andhra Pradesh, Karnataka State, UP, Jharkhand, Punjab, from our own state Maharashtra and other.

The herculean task-of review and editing of the papers is well done by Pro.Dr.A.Y Dikshit, Prof.Dr.Smita S.Khatri, Prof.Dr.Sandhya Khataavkar, and Prof.Anuradha Kadam. The other supporting committee done commendable work namely, Prof.Dr.D.P.More headed by Anchoring, Prof.Dr.P.D.Hanchate monitors paper presentations, Prof.Dr.M.A.Vhora dealt with registration assignment, Prof. Sachin S. Jadhav lead the team of social media, Dr.T.V.Chavan and Prof.H.G.Giri looks after the promoting of the conference. Last but not least the entire inter alia work is fully minutely monitor and supervised by Prof. Dr. P.V.Yadavas a Convener of the conference.

Dr. M.A. Lahori
Director, AIMS, Baramati.

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CONTENTS

Sr. No.	Research Article	Page. No.
1.	NEW PRODUCT DEVELOPMENT <i>Dr. M. A. Lahori</i>	1-4
2	Empowering Minds: The Vision of National Education Policy 2020 <i>Ulfat Andrabi, Aaliya Ashraf, Syed Rizwana Qadri</i>	5-9
3.	A Study on Technologies Used for Learning <i>Manu Goswami, Dr. Asha Yadav</i>	10-13
4.	The Intersection of Individuals Social and Career Learning Processes: A Study on Higher Secondary Students of East Delhi <i>Raghav Acharya, Dr. Toran Talwar</i>	14-17
5.	Research, Planning and Implementation of Technologies and Approaches for Mobile Learning <i>Naginderpal Singh, Er. Ishwar Singh</i>	18-29
6.	A Conceptual Study: Stock Market and Its Relation with Human Psychology <i>Hemraj Gokul Giri</i>	30-32
7.	Emphasis of AI-Powered Technology for Gen Alpha Education System <i>Dr. Prakriti Dixit Porwal</i>	33-37
8.	Perspectives on NEP 2020: Stakeholder Insights and Concerns <i>Dr. Arun H. Patil</i>	38-43
9.	A Study on Role of ICT In Teaching: A Teacher’s Perspective <i>Anuradha Kadam, Dr. Dattatray More</i>	44-46
10.	Neuromarketing Ethics: Striking A Delicate Balance Between Unveiling Consumer Insights <i>Rahul Mangal Kumavat, Dr. Prabhakar Sakharam Mahale</i>	47-52
11.	Implementing Blooms Taxonomy Using Tel in Management Education <i>Dr. Praveen Nayak</i>	53-58
12	Financial Innovation in The Banking Industry: A Review of The Evolution, Drivers, And Challenges <i>Ms. Leena R. Lassi, Riya C. Rizwani & Shailee K. Khivasara</i>	59-63
13	A Study on Revenue Collection System of Baramati Municipal Council Properties <i>Snehal Bhosale Dr. Manisha Vhora</i>	64-67
14.	A Study of Job Satisfaction & Stress Management at Colleges Affiliated to KBCNMU Jalgaon <i>Mr. Deepak Aba Sonar, Dr. Prabhakar Sakharam Mahale</i>	68-71
15.	The Transformative Impact of Artificial Intelligence on Business: Opportunities, Challenges and Future Prospects <i>Nishika R, Amith Donald Menezes</i>	72-76
16.	A Study on CNN Algorithm-Based Gesture Recognition for Human Interaction <i>Dr. Pravin V. Yadav</i>	77-80

17.	A Theoretical Study on Optimizing Pedagogical Strategies Through Technology Integration <i>Naziya Khanum</i>	81-86
18.	A Study on Socioeconomic Implications of Women's Education in The Indian Context <i>Leena Lassi, Nikita Kothari, Simran Deshmukh</i>	87-90
19.	Role of National Education Policy, 2020 (NEP) in Transforming Learning Experiences <i>Dr. Shweta Verma, Dr. Sapna Dogra</i>	91-94
20.	A Study on Impact of Technology in Higher Education <i>Dr. Sandhya Khatavkar, Dr. Smita Khatri</i>	95-97
21.	Management Perspectives on Changing Socio Economic Environment: Vision and Challenges for The Indian Women <i>Sachin S. Jadhav</i>	98-101
22.	Impact of Job Absenteeism on the Organisational and Employees Development <i>Dr. Nimisha. M</i>	102-105
23.	Technology Tools Used for Learning Purpose <i>Archana Khanderao Mane</i> <i>Dr. V. S. Gavali</i>	106-109
24.	Teacher Training and Development Systems in Indian Higher Education Institutions: A Priority under National Education Policy 2020 <i>Dr. Abhishek Y. Dikshit</i> <i>Dr. Tanaji V. Chavan</i>	110-115

New Product Development

By

Dr. M. A. Lahori

Director

Anekant Institute of Management Studies (AIMS) Baramati -Pune

ABSTRACT: *In business as well as in human life 'Development' is intrinsic and inextricably tied up with augmentation, innovation, advancement, new life style and new Products. In Human Development nature has its own course of time and schedule of progression. But in business the competition, technology and need of the customers are the driving force for the Product Development and New Products. In the study it is categorical observed that, the life cycle of the Products has to face its Development and most of the time New Product Development take place. The journey of the products has phases namely; introduction, growth, maturity (peak), sustainability (diversification) and decline. In the product life cycle the maturity and sustainability plays very important role and the Research and Development wing of the organization has very significant role to play. The maturity is the peak period of the product in term of sales and demand. The sustainability phase really a time to have diversification in product line or to have New Product itself.*

A New Product Development is an idea generation and it is entangle with market research, idea screening, business analysis, market stimulation (test) feedback inputs modification and then it may go for commercialization. The market as a whole very much volatile as to have continuity in business a consistency in New Product Development is must. Thus, this paper is all about New Products Development in existing as well as for new start up.

Keywords: *Competition, Technology, Product Life Cycle (Maturity and Sustainability Phase), Consistency, Market Research.*

Introduction: The review of the study or otherwise, the etymology term development is from ages and it is very much embed in the journey of human life with incremental progression and in the case of the product development and new product, it will be incremental as well as radical (new product) because of the innovation process, competition and market forces. This paper is focussed on two kind of Product Development namely;

1. Incremental Development of Products like adding new features to the existing product line 'Product Depth' the best example is adding new features to the mobile set.
2. Totally New Product Development by the organization, based on the market research, customers' requirement and to encash the opportunity, the best example is Reliance Industries coming with Jio Telecom Services. It is new product in Reliance Umbrella.

In the critical review of the study and literature of the Product Development, it is noted that, the survival of the organization and growth solely depend on the product development or rather Product Development is the "SOUL" of the organization. The organization who have not given priority to the Research and Development (Product Development Process) they are today out of market for instance, Premier Automobile Ltd (Premier Car), Kodak reel, Nokia, and e-number of the organization of the white goods. The organization

that have spent three things in their R & D of the products have buckled the market, they are;

1. **Intellectuals Energy and Property:** In the product development the organization necessarily has to provide autonomy to their intellectual employees, who are really brain of the organization in development of the product. Let them sniff the market pulses and based on the availability of the resources product may be customized and New Product may be Development.
2. **Organizations Paid Time:** In the product development process organization indeed has to spend its valuable time and even paid time of the other employees like marketing, front line staff and most important is the customer by virtue of the market research, launch chat, cafe-hangout, etc.
3. **Considerable Expenses / Investment:** Organization is expected to have completed infra for the Research and Development with all facilities. The overhead of research camps, research-lab work, product campaign and all other allied indirect expenses. Hence need to invest a considerable money and time.

Basically in the present market scenario, the organization has to work with the 'Speed, Cost, Rightness' while developing the product or New Products. The experience and rightful intellectuals really work on **Do First: Do Right** and doing right at source saves lot of money and time. The

Research and Development department of the organization has to be a unique entity and top in class, since it works on innovation and new product development (life line of the organization).

Objectives of the Study: The objectives of the study are basically are research problem, by virtue of this study an attempt has been made to find out the solution.

1. To study the role of Product Development in the organization.
2. To examine the benefits of Product Development in the survival of the organization.
3. To analyze the financial impact of New Product / Product Development in the life of the organization.
4. To understand connect of customer ‘Loyalty’ with the organization.
5. To learn the Employees Attitude of the organization in the process of product development.

Research Methodology: This paper is totally an experiential driven paper of the author. The author has corporate rich and resourceful PAN India experience in the marketing for three decades. Thus, author has first-hand polled information of the study and the collection of secondary data was not an issue in the study. The study being an experiential conceptual off-shoot, the analysis of data and information was presented in this paper. This study basically pertains to;

1. Existing product line with better depth of a product mix offered to the customer viz product development and
2. Totally launch of new product with its width and breath of product mix viz for the startups and Research and Development activities of the organization.

The main respondents of the study of author’s organization where he has worked namely Co-optex -Tamil Nadu Handlooms, Chennai and Rubco, Kannur-Kerala. Naturally, it has further scope of study segment wise as well as product wise. On need base the simple statistical tools were used.

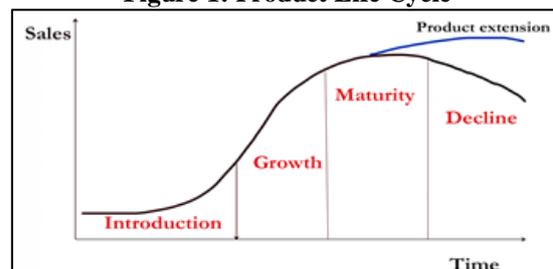
Crux of the study: It is being experienced that most of the organization and entrepreneur facing the sagging sales of their products. The product extensions and diversification of product may give some relief but New Product Development really a need though it looks herculean task. With this study and rich experience of the author an attempt has been made to focus on New Product Development. Author has put his experience into practice, along with the basic principles of the management science. Further the study depicts the **5 Ms** (money, machine, martial, manpower and market) of the economy, which are slowly losing its usage and the new concept of **INA** (idea, networking and aggregator) is into the place

because of the technology. Thus author has contemplated this paper title ‘New Product Development’.

Discussion: Every living and non-living thing has life span, after that particular life span, it has an auto mode to get into the decline stage and slowly out of life. In the marketing term it can be coined as ‘Shelve Life’ of the product. This discussion shall deal with the existing product line of the organization.

Study reveals that, product as such has four phases in its life cycle namely introduction, growth, maturity and decline but the market experience, customers demand and on top of it the existence and survival of the organization, has given one more phase that is sustainability (diversification) also known as ‘stagnation’ phase. This phase is within the crease lines of growth and maturity of the product when it reaches its peak in sales volume, it naturally dwindle its acceptability by the customers (decline stage). The following diagram may give more clarity.

Figure 1: Product Life Cycle



Source: Secondary Data
www.economicshelp.org

Existing Products: Generally, the market as such is very grey and has always healing time to reach the sustainability rather stagnation of the products. But the so-called competition, needs availability of products and services instantly. Further, it requires augmentation in features of products and services, which compels the organization to go for product development by adding more features and extensions to the products. This, help them to survive and fight in the competition by maintaining the customer pull.

In the study it is categorically found that, in the life cycle of product viz Growth and Maturity the *sustainability* (diversification) has wakeup call for existing product (cash cow) to revamp with few more additions to its, means the product depthness, by adding variants in form of product development is need of hour and the organization must provide the same to cherish the market. Thus, organization should not allow the product to slip into the decline stage rather organization must be in the position and be ready to feed market with product development (diversification).

The important factor in this process is the ‘time element’. A product and services right on time

certainly a big cash deal for the organization. Hence the organization’s planning of product development should be well in times, which become a key for their growth and development.

Start-ups: In the study it is noted that, the golden **5 Ms** of the economy slowly getting retro in the business development and start-up of the new ventures. And the new skilful youth embed with information and technology have given the new concept of the business and for ‘New Product development’ viz **INA**. The 5 Ms are popularly known as Money, Manpower, Machine, Material and Market. For doing business and new product development these were basic element an organization supposed to have. But the new concept has turndown all these into **Idea, Networking and Aggregator**. Basically idea plays vital role for the ‘New Product Development’ and the journey of the idea is well explained in the following diagram;

Figure 2: New Product Development



Source: Secondary Data www.mbalearners.com

New Product Development: This is the mainstay of the study viz New Product Development, in this process it has 8 stages as shown in the diagram. The customers’ feedback, market research, benefits to the organization and the positive attitude of the employees are the main arteries to launch the New Products. The stages are discussed herein;

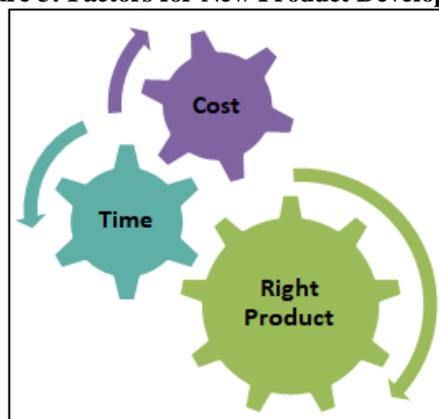
1. **Idea Generation:** New product development basically supported by the ‘Pool of ideas’ which were either by the entrepreneur itself or by the market research outcome or feedback of the customers’.
2. **Idea Screening:** The non-feasible and non-viable ideas were drop out in this process. The availability of the resources and ROI- return on investment etc., are consider to take the idea further.
3. **Concept Development:** Here the selected ideas are turning into the concept and real time stimulation of the ideas may be made and tested.
4. **Marketing Strategy:** In this stage the entrepreneur has to develop a marketing

strategy for the New Product. This means all the 4 Ps viz price, product (width and depth), promotion and place of selling the new product has to be strategize. The role of digitalization and digital marketing need to be in place to speed up the marketability of new product.

5. **Business Analysis:** The business aspect of the New Product, scratch to finish of product need to be work out and analysed. The emphasis is also given on the product life cycle.
6. **Product Development:** Actual prototype product is developed and it runs through the feasibility test, to understand the acceptability.
7. **Test Marketing:** The business strategies and the predetermined business analysis are being tested in real time tested market as to ascertain its reliability and acceptance of new product. If any modification and improvement are needed that will be carried out.
8. **Commercialization:** After all the above process the introduction of new product shall take place in the market by the launch of the product.

In the above New Product Development the all three factor viz, right product, cost and speed is most important and influencing factors on the success of the new product. Right product in right time is the mantra for the success of the product and a complete delight for the customer. The study has revealed that Customer has lot of enigma while taking the purchase decision but the influencing factors does it all in the purchasing process. The factors to consider in the New Product Development are;

Figure 3: Factors for New Product Development



Source: Secondary Data

Right Product: The entrepreneur and the organization at the first stage should take lot of research work based on their idea so as to the product development should be ‘Right’ in tune and demand of the market. Such new product will generate high saleability and give lot of revenue. Thus the Right Product Development really important for its successful journey in the market as well as in the product width and breath.

Time: The role of time in the product development management is very significant because timely providing product to the market will fetch greater marketability, customer pull and that time the product may be cash-cow product. Thus a lightning speed working environment and culture is essential.

Cost: The cost to the customer, it means the price should be affordable and motivate the customer's buying behaviour towards impulse purchase. The right product may give greater scale of economy in production which may reduce the cost of the production and meaning thereby affordable price to the customers.

Thus in the managing the New Product Development either the product diversification during the maturity phase or new product development by the entrepreneur the focus need to be on Right product, time and cost while developing the products. This kind of strategy certainly creates positive mind-set among general customer and more particularly with the loyal customer of the organization.

Findings: The following are the findings of the study,

1. It is observed that the span of the product is limited and after that it will go into the decline phase. The span of product in the maturity phase may be 6 month only. Hence new product need to be launched at this time, otherwise the product may lose the customer's pull and loyalty (CRM).
2. The intellectuals of R and D have to work on the pulses of the customer and the competition. A consistency in new product development and feeding on right time to the market, shall keep customer really delightful.
3. In the study the significance of product development in the organization is very essential to keep the organization on progression track.
4. It revealed that, Product Development really gives lots of benefits to the organization, such as more profit, customer's satisfaction and a competitive tool to survive in the market.
5. It is found out that, the financial impact of New Product / Product Development in the life of the organization really matters most. The effectively working on the time, right product and cost of the product development make the organization to win and lead in the market.
6. In the study it is observed that, customers connect is very much important. It generates customer's loyalty and help to retain the customer-ship with the organization for longer time by virtue product and new development with proper intervals.

7. In the literature review it is indicated that, employees of the organization also looking for the dynamic nature of work rather than monotonous. Employees are always having positive attitude towards new product development since it makes their life lively and active.

8. The launching of new product and a calendar of thereto keeps the employees motivating and engaged for better productivity and new level of job satisfaction due to the working road-map.

9. On time new product development keeps the organization always ahead in the competition and healthy fund flow. The most important are the fleet of customer adding every time, meaning thereby boom in the sale.

Conclusion: The product has to be there either in the form of 'Product Development' or divarication / extension etc., in PLC phases for the existing product. In case of start-up and new entrepreneur new product need to be launch by adopting the 8 stages as explain in the above figure No.2. No matter whatever the scenario may be the three elements must be in place viz right product, time and cost while developing the new products.

Product development and new product strengthens the organization financially, customer retaining, keeping actively engaged the employees and over all happiness of all stakeholders. The organizations goodwill, consistency and continuity will be for longer time in the market. The use of the upcoming technology and aggregators' thought-wear will be a wonderful money dynamo in today's market.

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EMPOWERING MINDS: THE VISION OF NATIONAL EDUCATION POLICY 2020

By

Ulfat Andrabi

Research scholar, Mittal School of Business, Lovely Professional University

Aaliya Ashraf

Research Scholar, Mittal School of Business, Lovely Professional University

Syed Rizwana Qadri

Research Scholar, Mittal School, Lovely Professional University

ABSTRACT: Education is crucial to the development of a country since it determines both the future of the country and the fate of its citizens. In terms of the country's and citizens' long-term growth and development, the effects will be profound. In the current context, the function and significance of education cannot be understated. When comparing the pre- and post-independence eras, we can observe the growth and progress. The Indian government is planning to alter our educational approach after 34 years; this is the third revision to the education strategy. The new National Education Policy 2020 has several reforms that will undoubtedly affect all parties involved. This paper explores the transition from older education policy to new educational policy and the Provisions of New Educational Policy (2020).

Keywords: Education, Citizens, Strategy.

Introduction: Education plays a key role in the development of human capital and the construction of a society that is equitable. According to Ball (2016) and Mundy, Green, Lingard, and Verger (2016), the efficiency of a nation's educational system is a significant factor in the formation of inventions, economic progress, social fairness, and equality within that nation. According to Article 26 of the United Nations Declaration on Human Rights (1948), education should be freely provided and mandatory, particularly in the basic stages, as a method to enhance and defend the fundamental freedoms of individuals (Claude, 2005). This is especially important in the elementary stages. The Right to Education Act was enacted in India in 2009 to ensure that education is granted as a fundamental right and to provide access to primary education for children between the ages of 6 and 14. In addition, the education system in India mandates a reservation of twenty-five percent of the available seats for members of the underprivileged segments of society (Chhokar, 2010). During the 2018–2019 fiscal year, India ranked 62nd in the world in terms of total public expenditure on education. The country allocated 305.28 billion USD for education, which was equivalent to 3% of the total GDP. Although it is the major economy that is expanding at the fastest rate worldwide, India has the greatest young population in the world. It has been proposed by the National Education Technology Forum (NETF) that children should be taught vocational and technical skills beginning as early as the sixth grade. The National Education Policy (NEP) 2020

has been put into effect by the Government of India (GOI) to bring about a substantial change in the educational system of the country. The fact that this new policy is India's first education policy in the 21st century and just the third policy since the country achieved its independence in 1947 is a significant factor that highlights the significance and importance of this new policy. The two education plans that came before this one were implemented in the years 1968 and 1986. In the most current modification, which took place 34 years ago, the primary focus was on upgrading the primary education system in India through the implementation of initiatives such as the "operation blackboard" (Colclough & De, 2010; Pandey, 2019). In addition to this, education needs to evolve to meet the difficulties that are brought about by cultural, economic, and technical shifts on a more widespread scale. This is especially true considering the considerable technological developments that have occurred. According to the new National Education Policy (NEP) 2020, it is therefore of the utmost importance to establish an education system that is comprehensive, multidisciplinary, and focused on the development of skills for the next generation in India. The implementation of this strategy is being hailed as a crucial step towards establishing India as a worldwide knowledge powerhouse. It offers a comprehensive framework for improving accessibility, equity, and quality within the educational system. In addition, the National Education Policy 2020 (NEP 2020) actively works towards the goal of aligning the education system

in India with the fourth Sustainable Development Goal (SDG) of the United Nations' 2030 agenda for sustainable development. Up to 6% of the country's gross domestic product (GDP) will be allocated to education, according to a commitment made by the Government of India (GOI). To shed light on how the policy is poised to revolutionize the education landscape in India, this research dives into the alignment of the National Education Policy 2020 (NEP 2020) with the Sustainable Development Goals (SDG) 2030 agenda. It also takes into consideration significant insights and obstacles in the implementation of the policy. This recommendation is in accordance with Sustainable Development Goal (SDG) 4.2. Contributing to the achievement of Sustainable Development Goal 4.3, which is centered on the promotion of vocational and technical education, is the goal of this program. The goal of nurturing increased and relevant abilities in individuals for the purpose of achieving financial success, as described in Sustainable Development Goal 4.4, is fulfilled by placing a considerable emphasis on improving enrolment rates in higher education. In addition, the implementation of the academic bank of credit and the introduction of internationalization in higher education have been highlighted to provide a quality education that is comparable to that of a worldwide standard. The new educational strategy incorporates internet-based e-learning, with a primary emphasis on capacity building and digital infrastructure. This is in accordance with Sustainable Development Goal 4.5, which seeks to eliminate discrimination in the educational system. The National Foundation of Literacy and Numeracy (NFLN) initiative is being supported with the intention of ensuring that all students be proficient in literacy and numeracy abilities by the third grade. This is in line with the goals of Sustainable Development Goal 4.6, which aims to achieve universal literacy and numeracy.

Literature Review: There is an abundance of literature on transformative education in educational settings, especially when it comes to its relationship to sustainability and morality. But the scope of the material that is now available on this topic is quite constrained. Through focus groups, interviews, and observations, Adams (2019) concluded that the curriculum had a significant impact in her research, "The Far-Reaching Impact of Transformative Curriculum: A Narrative Critical Ethnographic Case Study." It caused a change in the way that students thought, strengthening their sense of value and dignity, encouraging academic success, and establishing a dedication to advocacy. Luitel (2018) looked at the creation of a revolutionary vision for math instruction with the goal of embracing a range of viewpoints and ideas. Luitel conducted a careful investigation on the "mindless" and "mindful" elements of Nepal's

mathematics curriculum. The study explored the curriculums tightly defined disempowering presumptions, engaged in dialectical interactional texturing among various viewpoints, and eventually determined that it had transformative potential. In a similar vein, Clifford, and Montgomery (2014) concluded that transformative learning requires significant changes in the social and personal perspectives of staff members as well as students. They underlined the necessity of transformation and active involvement in postsecondary educational institutions at all levels. Diem and Carpenter (2012) suggested developing a revolutionary curriculum especially for programs that prepare future leaders. Aboytes and Barth (2020) investigated the conceptualization and operationalization of transformative learning in the context of sustainability learning and education for sustainable development (ESD) in a different study. The goal of the study was to compile data on the best ways to facilitate transformative learning in formal and informal learning environments. The results pointed to an expanding field of study as the relationship between transformative learning and sustainability grew. Though transformative learning theory has been widely applied, if somewhat superficially, in many studies, the research highlighted how much these studies can contribute to the development and use of educational interventions and evaluations that support sustainability. Pasa and Kharel in their 2020 study explored the relevance of transformational education in the Nepalese context, highlighting its increasing prominence on the global agenda for sustainable development. The study brought to light issues with passive educators who found it difficult to impart civic virtues in their students and students who had trouble internalizing the qualities that are necessary for a just and equitable society. Adopting a contextual paradigm for transformational education—specifically, the one described by university professors in the paper—was advised by the research. In a similar vein, Adesina (2020) explored the useful features of transformational learning (TL) within the framework of Virtue and Ethical Stewardship (VES), a novel concept. This idea is about building character through responsibility fulfilment with an emphasis on moral behaviour. The VES transformational learning paradigm incorporates leadership, stewardship, virtue ethics, and transformative learning from both historical and modern theoretical viewpoints.

Objectives of the Study

1. To study the transition from older education policy to New educational policy (2020)
2. To study the Provisions of New educational policy (2020)

Research Methodology: In conducting research that relies on secondary data, the chosen

methodology involves the systematic collection and analysis of existing information from previously conducted studies, reports, or other available sources. The first step involves defining the research objectives and questions to guide the search for relevant secondary data. Subsequently, a thorough review of academic journals, government publications, statistical databases, and other scholarly sources is undertaken to identify pertinent data related to the research topic.

Transition from older education policy to new educational policy: Moving from an older education policy to a new one is a complicated process that requires a comprehensive examination of the structures that are now in place, the identification of the requirements that are currently being faced, the participation of stakeholders, and the resolution of any issues that may arise during implementation. When it comes to the fields of educational policy, study frequently starts with a careful examination of the advantages and disadvantages of the system that is currently in place. To gain a better understanding of the effectiveness of the current policy, academics investigate the curriculum, teaching approaches, and assessment strategies. The use of this retrospective technique assists in identifying areas that demand improvement and paves the way for the development of a new educational framework that is more robust. In the context of this transformation, academics stress the significance of determining the ever-evolving requirements of both society and the labour force. This entails doing an in-depth investigation into socio-economic tendencies, technical innovations, and changes in the landscape of the world or of a particular location. The purpose of this endeavour is to bring education in line with the requirements of the modern world, with the intention of ensuring that students are provided with the knowledge and abilities needed for success. Researchers can get insights into the precise capabilities and competencies that should be addressed in the new policy by conducting detailed needs assessments. The key to effective changes in educational policy is stakeholder involvement. Academics frequently support engaging a range of stakeholders in the policy-making process, including parents, teachers, students, and business professionals. By involving those who will be directly touched, this participatory approach guarantees that the new policy is supported by them and is well-informed. Research examines how involved stakeholders were in previous policy, evaluating the efficiency of routes for communication and cooperative decision-making techniques. Comparative studies play a crucial role in shaping new educational policies. Researchers examine successful transitions in other countries or regions, seeking inspiration and lessons that can be applied locally.

Comparative analyses may encompass curriculum structures, assessment methods, teacher training programs, and the overall education ecosystem. These cross-country examinations contribute valuable insights into what has worked elsewhere; helping policymakers make informed decisions that align with the unique needs of their own educational landscape. Implementation challenges often pose significant hurdles during the transition from old to new policies. Research in this area explores the obstacles faced by educators, administrators, and policymakers when implementing changes. Resistance to new methodologies, inadequate resources, and the need for comprehensive teacher training are common themes. Understanding these challenges is crucial for devising strategies that facilitate a smoother implementation process. Within the domain of research discoveries and ideas, several important themes surface. Research frequently supports the creation of dynamic, pertinent curricula that meet the needs of a changing labour market and society, making curriculum development a primary focus. Everyone agrees that using technology into teaching and learning processes and using multidisciplinary approaches are essential. The importance of professional development and teacher training is highlighted, with the belief that educators must always be learning to adjust to new approaches and tools. Scholars examine assessment procedures and offer alternatives to conventional evaluation techniques. It is suggested that project-based assessments, competency-based evaluations, and portfolios be used to give a more thorough picture of student learning. As research supports policies that encourage equitable access to high-quality education, address inequalities, and create a varied and inclusive learning environment, inclusivity and equity emerge as major themes. Studies consistently highlight the importance of technology integration in education, with a focus on skill development and personalized learning. Additionally, a focus on global perspectives draws attention to the necessity of policies that equip students for a workforce that is increasingly international. This entails developing cross-cultural awareness, encouraging language skills, and establishing international cooperation. In result, study outcomes and thoughtful considerations drive the multidimensional process of replacing a decades-old education policy with a new one. It entails a thorough comprehension of current structures, an examination of current needs, stakeholder involvement, and implementation problem-solving techniques. Comparative research, lessons learned from other successful transitions, and an emphasis on important topics like curriculum creation, teacher preparation, assessment techniques, inclusivity, technological

integration, and global perspectives all influence the final policies.

Provisions of New Educational Policy (2020):

The goal of the National Education Policy 2020 is to considerably increase the gross enrollment ratio in postsecondary educational establishments. The goal is to raise it to 50 percent from the 26.3 percent that was reported in 2018. The proposal also intends to increase enrollment in higher education by 3.5 crore seats. The UGC is going to be replaced by the Higher Education Commission of India, which would supervise all forms of higher education except legal and medical education. To achieve world-class standards, this commission will establish multidisciplinary teaching and research universities on par with IITs and IIMs. The National Testing Agency will provide a general entrance exam to assist admission to these institutions. Technical institutions will include the teaching of Arts and Humanities, and the entrance exam will be optional, doing away with the need for required subjects. Students will be allowed to select any subject they want, as the old distinction between Arts, Science, and Commerce will no longer exist. Every institution in the nation, including the IITs, will take a comprehensive approach.

Four bodies of Higher Education of Commission (HECI):

1. National Higher Education Regulatory Council (NHERC): The regulatory body in charge of the higher education industry, which encompasses teacher education, will be the National Higher Education Regulatory Council (NHERC).
2. General Education Council (GEC): In a consequence, the framework for desired learning outcomes—or the effort toward standardization—for higher education programs will be established.
3. National Accreditation Council (NAC): These organizations have accreditation and will operate mostly based on three fundamental standards: results, good governance, and public self-disclosure.
4. Higher Education Grants Council (HGFC): This entity manages the funding initiatives for colleges and universities.

Now, organizations like the National Council for Teacher Education (NCTE), the All-India Council for Technical Education (AICTE), and the University Grants Commission (UGC) oversee monitoring higher education institutions.

An adaptable approach to the undergraduate curriculum is introduced by the National Education Policy 2020, allowing for many points of admission and exit. Students in a three- or four-year undergraduate program can opt out at different points during the program and receive degrees or certificates in accordance with their decision. For

instance, students may receive a certificate after a year, an advanced diploma after two, and a bachelor's degree or graduate certificate with research after three or four years. It will be possible for four-year students to complete an MA and Ph.D. program in one year.

Provisions related to online and digital education:

To advance digital education, a National Educational Technological Fund will be built. This organization will oversee organizing initiatives pertaining to materials, capacity building, and digital infrastructure. The creation of study and assessment tools will be included in these endeavors, with a special focus on teacher preparation.

1. To ensure the advancement of substitute, superior teaching approaches, the Ministry of Education will become a specialist organization with an emphasis on digital material, digital infrastructure, and capacity building. The goal of this adaption is to meet the demands of e-learning for both secondary and tertiary education.
2. Educational content will be provided for learning in local languages.

Conclusion: If the new National Education Policy, 2020—which the central government has approved—is properly implemented, it will elevate India to the top of the global education rankings by adapting the Indian educational system to the demands of the twenty-first century. Comparable Children from three to eighteen are covered by the Right to Education Act of 2009 under the new education strategy, 2020. After 34 years, a new education strategy was implemented with the goal of giving all children access to higher education. By 2025, pre-primary education (for students between the ages of 3 and 6) would be provided to all students. India's higher education system is undergoing significant change. It is imperative that 21st century talents such as creativity, problem-solving, research, and innovative thinking be integrated into higher education for the complete development of students. This is only possible with an all-encompassing, multidisciplinary strategy. On July 29, 2022, the new National Education Policy—2020 (NEP–2020) was unveiled after a wait of more than thirty years. It highlights the value of multidisciplinary education through disciplinary and professional programs for cultivating in students the competencies of critical thinking, adaptability, and self-management.

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A STUDY ON TECHNOLOGIES USED FOR LEARNING

By

Manu Goswami

Research Scholar, Dept. of Education, Om Sterling Global University, Hisar

Dr. Asha Yadav

Associate Professor, Dept. of Education, Om Sterling Global University, Hisar

ABSTRACT: *Technology has profoundly changed for learning. It has opened doors to a massive amount of information through online books, podcasts, and learning materials. Technologies used for learning is one of the cornerstones of the 2030 Agenda for Sustainable Development set forward by the United Nations. It seeks to guarantee comprehensive, equitable, and high-quality learning through technology for all. The utilization of technology in education has significantly transformed the landscape of learning, providing numerous opportunities for both teachers and students. In order to accomplish this, technology has become a vital instrument and an important role in reversing the traditional and developing modern outlook. Providing adequate education to all children is the main goal of digital technology. Effective education system is the foundation of opportunities to lead a great life. There is a large disparity in education opportunities between countries and in reducing global inequality. This paper is brief about the need, impact and challenges of technology used for learning has been studied.*

Keywords: *-Learning, Sustainable Development, Technology, Education, Challenges.*

Introduction: Education is now seen as an endeavor for social and political change, with each person's growth serving both her financial interests and the creation of a fair and compassionate society. In order to achieve sustainable development and peaceful coexistence, it also has to raise awareness and develop agency. Universal education is emphasized in international policy initiatives as the Sustainable Development Goals, the Millennium Development Goals, and the Education for all (Dakar, 2000; Jomtien, 1990). Technologies have progressed from isolated initiatives to global networks of instruments and applications that link individuals and objects while assisting in resolving both local and global issues. Sustainable Development Goal 4 (SDG 4) for education has the potential to accelerate progress toward achievement and change the ways in which universal access to education is provided. New media is centered on technologies and information science. Information technology's all-encompassing capabilities are applied to integrate its various domains, including science and art, business and education, culture and the arts, and management, all based on the creative techniques of modern art and the philosophy of mass communication. New media comprises a broad spectrum of media formats. The communication medium and the digitization of its content distribution are what set new media art apart. Because digitization makes data gathering, access, processing, and sharing easier, it helps new media artists meet their creative needs. In the post-language era, following text and electronic technology, it has emerged as a new information carrier. Digital innovation has proven

to have the ability to enhance, augment, and revolutionize education. It can boost learning outcomes, relevance, inclusiveness, and elevate the governance and management of education. Conventional classroom training fails to offer an instantaneous learning environment, quicker evaluations, and more participation. Conversely, technology and digital learning resources fill this gap. Traditional learning approaches just cannot match some of the efficiencies that these technologies offer. It makes sense for schools and other educational institutions to make effective use of cell phones and other wireless technology devices by integrating them into the classroom as these devices become more and more common among the general public. Learning is, in fact, more enticing to the younger generation because of the versatility and non-intrusive nature of today's technology. When schools close and there is disruption to education, online learning can help lessen the impact. Digital technologies in education offer several advantages, one of which is their increased accessibility. Geographical boundaries are eliminated and chances for lifelong learning are created when learners may access instructional content at any time and from any location to online platforms and digital tools. Learning experiences can be tailored and self-directed to this flexibility, which also accommodates different learning styles and individual pace. Digital technology can be a distraction in the classroom, as children are easily distracted by games, social media, and other non-educational content. This distraction may impede learning and degrade the quality of instruction. The usage of digital technology may put personal

information and student data at risk of privacy and security breaches. To protect student privacy, educational institutions need to implement robust security measures. Digital methods has transformed education and spawned innovative methods of both instruction and learning. It has made online education easier, enhanced availability of instructional materials and provided customized learning experiences. It also poses a variety of challenges, such as the digital gap, distractions in the classroom, and privacy and security concerns. Educational institutions need to solve these challenges and capitalize on the benefits of digital technology in order to provide students with a top-notch education that prepares them for life in the digital age. In the present study, it is examined how the shift to digital technology and how well people use it in our contemporary society create new opportunities, challenges, and barriers for education. As a result of young people's widespread usage of technology and the difficulties schools confront in integrating and utilizing it.

Theoretical Background of the Study:

Technology Enabled Learning (TEL) encompasses the application of technological tools, networks, systems, and digital content to extend and enhance the paradigm of student-centered learning, thereby fostering advancements in education. The integration of various technologies into the educational landscape facilitates a more dynamic and interactive learning environment. This approach not only broadens the scope of educational resources but also promotes a more personalized and adaptive learning experience for students. Through the utilization of digital platforms, TEL endeavors to optimize the dissemination of knowledge, catering to diverse learning styles and preferences. In essence, TEL serves as a catalyst for the evolution of traditional educational methodologies, aligning them with the capabilities and opportunities afforded by contemporary technological advancements.

Research Methodology: This paper based on secondary data sourced from diverse journals, newspapers, and websites. The methodology involves a conceptual exploration of the key aspects of the Technology Enabled Learning (TEL).

Need of Technology in Learning: Over the past twenty years, technology has brought about substantial changes in learning. Nowadays, the majority of students do their academic work, including taking notes, attending lectures, and managing their assignments, using internet-enabled devices like laptops and smart-phones. India is among the world's second-largest online markets, according to research from 2022, with 900 million active internet users and a 47% internet penetration rate. According to reports, by 2025, the percentage of people using the internet is predicted to surpass

55%. The unexpected rise in internet usage has caused digitization in many sectors of the economy, most notably education. According to Higgins, Xiao, and Katsipataki (2012), digital technology can be useful and competent when used to enhance learning outcomes. For example, teachers utilize chalk and blackboards to write them when instructing and teaching their students. The children who are seated towards the rear of the classroom have difficulties. Education institutions provide education on technology for their students' needs. It is regarded as the learning process' lifeblood. Technology is an essential component of any task that people do when working on articles, reports, research papers, or projects. Although many believe they can obtain a wealth of information on the internet, books, journals, periodicals, and papers are still valuable. Universities today have adopted digital technology to enable people to access a vast array of electronic journals and books on the internet.

Impact of Technology on Learning: An enormous amount of data can be stored in comparatively small spaces to digital technology. Small devices like mobile phones are capable of holding large volumes of media, including images, music, movies, contact information, and other documents. Numerous learning opportunities have been made possible by developments in digital technology. Information may now be transmitted to any group of people, from any location, due to technology. Worldwide access to education has increased, and information and communication technology now plays a vital role in daily life. In the present world, one of the most talked-about subjects is digital education. With information readily available to us and a world growing increasingly interconnected, it is getting more and more difficult to tell what is real and what isn't. Some positive impact on learning is given below:

Positive Impact

1. Monitoring student progress is crucial for identifying areas for improvement and areas that require attention. Digital Technology, schools can keep a close eye on their students' progress. This can include attendance data, individual assessments, and exam outcomes. With the use of this data, we can organize classes and provide the appropriate materials to support students in reaching their objectives. These factors combine to make digital learning enjoyable in addition to being advantageous. It is an excellent method for group work, conversation, and general learning improvement.
2. Students now have greater influence over their education to digital learning, which fosters a culture of increased student accountability and autonomy over the subjects and methods of study they choose to pursue. The student will

have some control over the learning environment, even though the institution will still have some responsibilities in this regard.

3. Teachers and students can strengthen their relationships by participating in online communities. Sharing with peers virtually is often more comfortable for younger people in particular than it is in person. Technology may be a great tool to create communities between students and teachers, offering support and advantages to all, whether through community chat groups or a more formal learning environment.
4. We must always be moving, always learning new things. Since technology is always evolving, we must stay ahead of the curve by implementing digital teaching and learning strategies along with engagement tactics. It is crucial to provide students with the technological skills and problem-solving abilities necessary for success in the workplace.
5. We have to accept new methods of doing things as education develops. In the classroom, micro-learning, and other instructional strategies are gaining traction. By implementing new digital learning methodologies, students can acquire new abilities and learn how to use and embrace new technologies.
6. Students now have access to internet communication tools that they did not have before. As a result, students can now interact with their classmates on projects, ask questions, and offer comments in a way that was not previously feasible.
7. Technology is a potent instrument that has the potential to both promote and change education in a variety of ways. It can facilitate new methods of learning for individuals as well as make it simpler for teachers to select instructional resources. An exciting new era in education is emerging thanks to the internet's global reach and the readily available smart devices that can connect to it.

Negative Impact

1. The goal of technology is always to expedite and simplify the execution of specific mechanical tasks. The majority of schoolwork has been mechanized, nevertheless, by technology. When they have access to a phone calculator and autocorrect software, why would a child still need to learn the fundamentals of algebra and spelling? Thus, what started out as a good idea has resulted in a situation where future generations will need technology to do daily cognitive task. Furthermore, it should be mentioned that youngsters who rely solely on technology to find solutions to their academic challenges

eventually lose the highly-sought-after ability to solve problems.

2. One of the biggest issues teachers deal with is exam cheating and their inability to gauge how well their students have understood a lesson. The largest issue with online exams is that teachers frequently are unaware of whether or not their pupils are using another device to complete the test. Due to educational institutions' incapacity to ensure that students truly acquire the knowledge required for higher education or to perform their jobs, this issue may have long-term repercussions.
3. Digital tools, while demonstrated to enhance student progress and collaboration on projects, ignore our innate need for immediate, face-to-face engagement. To be more precise, despite having evolved into social creatures over tens of thousands of years ago, we now believe that we can simply manipulate our genetic makeup. While teenagers engage with their parents, instructors, and peers, the rate of adolescents diagnosed with depression has been rising, and it currently stands at an astounding 20%. Teachers and educational institutions can only hope to address this issue by encouraging youth to contact with others in person.

Challenges Faced by Technology in Learning:

Digital learning involves many different factors. Zoom calls are just one aspect of online learning. Both students and teachers can benefit from digital learning when it is implemented properly. Many challenges are faced during the implementation of digital technology. Some challenges are mentioned below:

1. Self-discipline is a common problem for students, and attending classes online might exacerbate this issue. Pupils who struggle with procrastination may find it difficult to sit down and do the assignment on their own without prompting. Since attendance is typically not required, it can be simple to overlook an assignment or even the entire class when learning digitally.
2. One of the main problems with digital learning is that it lacks teacher interaction. Many students find it challenging to interact and communicate with their lecturers through online learning. When a teacher is not there, it might be difficult to maintain students' attention. The same is true for subjects like the sciences, where attendance is usually required, which might make it challenging to understand the material. Peer social contact is another issue. Students are unable to collaborate in person on projects and do not form friendships as soon. Pupils are unable to participate in group projects, vigorous conversations, or classroom humor.

3. Educator-student relationships are cultivated as part of the learning process. Teachers now need to come up with new strategies for grabbing students' attention as more instruction is done online. Nonetheless, it's becoming much more important to keep pupils engaged and inspired. Instructors find it challenging to keep things under control while students are learning online since it is so easy for them to become sidetracked.
4. AI has the potential to be beneficial if it is applied to give educators a variety of pedagogical and content options based on assessments of learning environments. It is evident that there is a risk of using this to further de-skill and diminish the function of teachers. Second, the way that these "big data" are being gathered by businesses under the "finder is owner" paradigm may expose instructors and students to political and economic spying. Perhaps more significantly, from the standpoint of education, the transformative potential of education necessitates a move from the historical to the normative, but the fundamental function of artificial intelligence is to forecast future events based on historical patterns. AI is already entangled in bias disputes due to its propensity to project the past.

Conclusion: To maximize all of the benefits and minimize all of the drawbacks that technology, whether it be knowledge or practice-based, offers to students' education, it is essential to strike a balance between technological use and social contact. Provide all students online access to high-quality instruction and opportunities for learning in locations where they would not otherwise be available by utilizing technology. The possible benefits of online learning include greater educational access, better learning opportunities, enhanced student performance and abilities, and a wider range of educational possibilities. With the help of technology, students may easily access a great amount of material, which facilitates their study and learning about a variety of disciplines. Information availability also makes it possible to create more individualized learning programs that are tailored to the interests and needs of each individual learner.

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THE INTERSECTION OF INDIVIDUALS SOCIAL AND CAREER LEARNING PROCESSES: A STUDY ON HIGHER SECONDARY STUDENTS OF EAST DELHI

By

Raghav Acharya

Ph.D Scholar, Department of Psychology, School of Humanities & Social Science, Sharda University, Greater Noida, Uttar Pradesh, India

Dr. Toran Talwar

Assistant Professor, Department of Psychology, Sharda University, Greater Noida, Uttar Pradesh, India

ABSTRACT: *This study embarks on an exploration of the dynamic interplay between individual social influence and organizational career learning processes among higher secondary students in East Delhi. In today's educational landscape, the comprehension of how social interactions and institutional mechanisms shape students' career development stands as a paramount concern. Employing a mixed-method approach integrating surveys and qualitative interviews, this research delves into the intricate connections between social networks, institutional support, and students' career aspirations. The findings illuminate the multifaceted nature of career learning, revealing that while 72.75% of students acknowledge personal relationships as influential factors in their career decision-making process, a striking 85.7% recognize institutional structures such as career counselling programs and vocational training initiatives as significant contributors to their vocational pathways. These statistics underscore the critical characters both personal relationships and formal educational structures play in shaping students' career trajectories. By unravelling these intersections, this study provides invaluable insights into optimizing career guidance strategies and fostering holistic student development. Moreover, the study delves deeper into the nuanced dynamics within social networks and institutional support systems. It reveals that within students' social circles, peer influence plays a substantial role, with approximately 56.33% of respondents indicating that their friends' career choices and aspirations influence their own decisions to some extent. Family members, particularly parents, also emerge as influential figures, with 68.45% of students citing parental guidance as a significant factor in their career exploration journey. On the institutional front, the study unveils varying levels of satisfaction with career-related services provided by educational institutions. While 79% of students express satisfaction with career counselling services, only 63% feel adequately supported through vocational training programs. These findings underscore the need for targeted interventions to bridge existing gaps and enhance the efficacy of institutional support mechanisms in facilitating students' career development.*

In addition to uncovering the influence of social networks and institutional support, the study also examines the intersectionality of these factors with students' socio-economic backgrounds. It reveals disparities in access to career resources and opportunities among students from different socio-economic strata, with those from marginalized communities facing heightened barriers to career advancement. Despite these challenges, the study highlights the resilience and resourcefulness of students in navigating their career pathways, underscoring the importance of fostering inclusive and equitable educational environments. By acknowledging and addressing these socio-economic disparities, stakeholders can work towards creating more equitable opportunities for all students to thrive academically and professionally.

In conclusion, this study underscores the complexity of factors influencing students' career development and the imperative of adopting a holistic approach to career guidance and support. By recognizing the interconnectedness of individual social influence, institutional mechanisms, and socio-economic factors, educators, policymakers, and stakeholders can collaboratively design interventions that empower students to make informed career choices and realize their full potential.

Keywords: *Career Willingness, Urban Delhi, Social Issues, Job Insights, Higher Secondary Student*

Introduction: The transition from secondary to higher secondary education represents a critical juncture in the academic and vocational journey of students. At this pivotal phase, individuals encounter a diverse array of influences that mold their career aspirations and decision-making processes. While traditional career theories have long emphasized the importance of individual agency and aptitude in shaping career trajectories, recent scholarship highlights the profound impact of social contexts and organizational environments on career development. Recognizing the evolving landscape of education and employment, the present study endeavours to explore the intersection of individual social influence and organizational career learning processes among higher secondary students in East Delhi. By delving into this dynamic interplay, the study seeks to unravel the nuanced factors that shape students' career pathways and inform strategies for enhancing career guidance and support within educational settings.

The significance of the transition from secondary to higher secondary education cannot be overstated, as it represents a period of heightened exploration and self-discovery for students. Amidst the myriad of influences encountered during this phase, individuals grapple with questions of identity, interests, and aspirations, all of which contribute to the formation of their career trajectories. While traditional career theories have often focused on the individual's innate qualities and abilities, contemporary perspectives emphasize the interconnectedness between personal experiences, social relationships, and institutional contexts in shaping career pathways. As such, the present study seeks to delve deeper into the complex interplay between individual social influence and organizational career learning processes among higher secondary students in East Delhi.

In East Delhi, a diverse and dynamic urban landscape, students navigate a plethora of socio-cultural, economic, and educational factors that shape their perceptions of career possibilities and opportunities. Against this backdrop, understanding how social networks, family dynamics, school environments, and community resources intersect to influence students' career decisions is imperative. By illuminating these intricate dynamics, the study aims to provide valuable insights into the unique challenges and opportunities faced by higher secondary students in East Delhi as they embark on their career journeys. Moreover, the evolving nature of the contemporary job market underscores the importance of equipping students with the skills, knowledge, and resources necessary to navigate an increasingly complex and competitive employment landscape. Beyond traditional academic curricula, educational institutions play a pivotal role in fostering career

readiness and preparing students for the demands of the twenty-first-century workforce. Through career guidance programs, vocational training initiatives, and experiential learning opportunities, schools have the potential to empower students to make informed career choices and pursue pathways aligned with their interests and aspirations. Thus, by examining the intersection of individual social influence and organizational career learning processes, the study aims to inform the development of tailored interventions and support mechanisms to enhance students' career preparedness and resilience.

Theoretical Background of the Study:

Theoretical frameworks such as “Social Cognitive Career Theory” (SCCT) & Social Learning Theory offer valuable insights into the intricate back-and-forth between social dynamics and career development. According to SCCT, individuals' career decisions are shaped by various factors including observational learning, social persuasion, and self-efficacy beliefs, all of which are deeply rooted within social contexts. This perspective emphasizes the importance of role models, social interactions, and environmental cues in shaping individuals' career aspirations and behaviours. Moreover, SCCT underscores the dynamic nature of career development, highlighting the reciprocal relationship between individuals and their social environments.

Similarly, Social Learning Theory provides a framework for understanding how individuals acquire new knowledge, behaviours, and skills through observation, imitation, and modelling. Within the context of career development, Social Learning Theory suggests that individuals learn from the experiences and behaviours of others, particularly those within their social networks. By observing successful role models, receiving feedback from peers and mentors, and engaging in collaborative learning experiences, individuals can enhance their career-related competencies and confidence.

The concept of organizational career learning underscores the pivotal person of educational institutions in facilitating structured opportunities for career exploration, skill development, and self-reflection. Through career guidance programs, internships, workshops, and experiential learning activities, educational institutions provide students with the resources and support needed to navigate the complexities of the job market and make informed career decisions. By fostering a culture of continuous learning and professional development, organizations can empower individuals to adapt to changing career demands and pursue pathways aligned with their interests and goals.

In instantaneous, theoretical frameworks such as SCCT and Social Learning Theory offer valuable perspectives on the interplay between social

dynamics and career development. By recognizing the influence of social contexts and organizational environments on individuals' career pathways, educators, policymakers, and practitioners can design interventions and support mechanisms to enhance students' career readiness and resilience.

Methodology: For this study, the sample size 136 Students (Male Students-72 & Female students-64) from East Delhi of Govt Schools has admired to this research. A mixed-method approach was adopted to comprehensively explore the nuances of individual social influence and organizational career learning processes among higher secondary students in East Delhi.

Initially, a structured survey instrument was designed and administered to a representative sample of higher secondary students in the target area. The sample size aimed to encompass diverse demographic characteristics such as gender, socioeconomic background, and academic performance. The survey included questions pertaining to students' social networks, including the frequency and nature of interactions with peers, family members, teachers, and mentors. Additionally, students were asked to articulate their career aspirations, including preferred industries, job roles, and long-term career goals. Furthermore, the survey gauged students' perceptions of institutional support, including the effectiveness of career counselling services, availability of vocational training programs, and overall satisfaction with career-related resources provided by educational institutions.

Results & Analysis: The study involved 136 students from government schools in East Delhi, comprising 72 male students and 64 female students. The data analysis involved various statistical techniques, including regressions, to explore the relationships between individual social influence, organizational career learning processes, and students' career aspirations.

1. **Demographic Profile:** Among the 136 students surveyed, 53% were male, while 47% were female. This distribution reflects a relatively balanced representation of gender within the sample. The age range of the participants varied between 15 to 18 years, with an average age of 16.5 years.
2. **Social Influence and Career Aspirations:** Regression analysis revealed a significant positive correlation between the strength of students' social networks and the clarity of their career aspirations ($\beta = 0.45$, $p < 0.01$). Male students tended to report a higher level of influence from peer networks on their career aspirations compared to female students ($t = 2.14$, $p < 0.05$).
3. **Organizational Career Learning Processes:** The availability of career counselling services significantly predicted students' perceptions of

institutional support ($\beta = 0.38$, $p < 0.01$). Female students, on average, rated vocational training programs offered by schools higher than male students ($t = 3.02$, $p < 0.01$).

4. **Gender Differences in Career Aspirations:** Regression analysis indicated that gender was a significant predictor of career aspirations, with male students expressing a stronger inclination towards STEM fields compared to female students ($\beta = 0.28$, $p < 0.05$).
5. **Socioeconomic Factors and Career Preparedness:** Students from lower socioeconomic backgrounds tended to report lower levels of perceived institutional support compared to their more affluent peers ($F = 4.56$, $p < 0.05$). However, socioeconomic status did not significantly predict the clarity of students' career aspirations ($p > 0.05$).
6. **Qualitative Insights:** Qualitative analysis of interview data revealed that parental influence played a pivotal role in shaping students' career aspirations, particularly among female students.

Additionally, students expressed a desire for more hands-on career exploration opportunities and mentorship programs within their schools.

In summary, the results suggest that individual social influence, organizational career learning processes, gender dynamics, and socioeconomic factors collectively shape students' career aspirations and perceptions of institutional support. The findings underscore the importance of targeted interventions to enhance career guidance services, promote gender equity in STEM education, and address socio-economic disparities in educational opportunities. These insights can inform policymakers, educators, and stakeholders in designing more inclusive and effective career development initiatives for higher secondary students in East Delhi.

Discussion: The discussion of the study's findings sheds light on the intricate dynamics of individual social influence, organizational career learning processes, and demographic factors among higher secondary students in East Delhi.

Gender disparities in career aspirations were evident, with male students showing a stronger inclination towards STEM fields compared to their female counterparts. Addressing these disparities requires targeted interventions to promote gender equity and encourage diverse career paths. The study revealed a significant positive correlation between the strength of students' social networks and the clarity of their career aspirations. Peer relationships, family dynamics, and mentorship play pivotal roles in shaping students' career trajectories. Empowering students to leverage their social networks can enhance their confidence and inform career choices aligned with their interests. Institutional support emerged as a crucial factor in

students' career development. While the availability of career counselling services positively influenced perceptions of institutional support, disparities existed in access to vocational training programs. Bridging these gaps is essential for enhancing students' preparedness for future careers.

Socioeconomic factors also prejudiced perceptions of support, with students from lower socioeconomic backgrounds perceiving lower levels of institutional support. Efforts to promote socioeconomic diversity in career pathways and provide tailored support to marginalized students are necessary steps toward addressing these disparities. Qualitative insights underscored the significant role of parental guidance and the need for experiential learning opportunities within schools. Future research should explore the intersectionality of social influence, cultural norms, and institutional practices in shaping students' career aspirations.

In conclusion, fostering inclusive environments and addressing gender disparities are crucial for empowering higher secondary students to pursue meaningful careers. By leveraging social networks, enhancing career guidance services, and advocating for systemic change, stakeholders can contribute to a more equitable and inclusive workforce.

Finding & Conclusion: In conclusion, the study illuminates the intricate dynamics influencing individual social influence and organizational career learning processes among higher secondary students in East Delhi. The findings underscore the significance of peer relationships, family dynamics, and institutional support in shaping students' career aspirations and decision-making processes. Gender disparities in career preferences and socioeconomic factors also play crucial roles in students' perceptions of support and access to resources.

Efforts to address these disparities and promote inclusive environments are essential for empowering students to explore diverse career pathways and pursue meaningful vocations. By leveraging social networks, enhancing career guidance services, and advocating for equitable access to resources, stakeholders can contribute to the holistic development of students and foster a more inclusive and equitable workforce. Moving forward, interventions should prioritize promoting gender equity, addressing socioeconomic barriers, and providing tailored support to marginalized students. Additionally, further research is needed to explore the intersectionality of social influence, cultural norms, and institutional practices in shaping students' career aspirations. By fostering collaborative partnerships between educational institutions, policymakers, and community stakeholders, we can create opportunities for all students to thrive and achieve their full potential in their academic and professional endeavours.

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RESEARCH, PLANNING AND IMPLEMENTATION OF TECHNOLOGIES AND APPROACHES FOR MOBILE LEARNING

By

Naginderpal Singh,

*B.Ed-M.Ed Student, Department of Education,
Khalsa College of Education, GT Road, Amritsar, Punjab*

Er. Ishwar Singh,

*M.Tech Student, Department of Mechanical Engineering,
K.C. College of Engineering & Information Technology, Nawashahr, Punjab*

ABSTRACT: This study explores the impact of mobile learning on individuals worldwide, particularly in remote areas of India. The literature review reveals a lack of efficient mobile learning frameworks capable of assessing learning quality. The study encourages the development of a Mobile Learning Management System (MLMS) to address these challenges. The study also investigates the use of agents in real-life services to address network capacity and latency issues. The system's performance with and without agents is compared, and the findings are discussed. The acceptability of the prototype by learners is also examined, using a statistical model to analyze the acceptability of technology-friendly and technology-oblivious learners. A comparison study reveals that the new MLMS has been adopted by both technology-savvy and unaware learners. The MLMS is expanded to include a consortium model for sharing educational resources, encouraging the development of a theoretical model of Mobile Learning. The study concludes that a mobile learning management system can assist learners in their learning needs and has sufficient motivation capabilities.

Keywords: Prototype, Mobile Learning, MLMS, Network Capacity, Educational Resources

Introduction: Mobile devices have become an integral part of our lives, providing multimedia functions, internet browsing, TV, GPS, and GIS technologies. Global market assessments show high mobile device penetration, with 48 out of 1000 people in India using mobile phones. However, the use of mobile technology in education and training is limited. Mobile learning can make learning more flexible and ideal for learning outside the classroom. This study investigates the creation of a technology-enhanced learning model using mobile devices and discusses various issues related to learning using mobile devices. It also explores the adoption of Learning Management Systems (LMS) in mobile learning, the importance of implementing m-learning in consortia, and the need for innovative quality assurance and audit processes.

Literature Review: SMS technology had been extensively used to develop m-learning scenario. A project emulated an wireless handheld (W/H) device on a desktop to permit students send short messages within a classroom on a variety of conversation topics on a course provided to them in hardcopy earlier using distance education mode (Motiwalla, 2007) [1]. In this project participants were provided a mobile emulator on desktop inside a classroom. Responses by participants against a questionnaire in "Yes"/ "No" form were sent from said mobile emulator. The responses were received by the mobile emulator of instructors. The questionnaires were based on effectiveness of the

course. Feedback from the participants on the organized SMS campaign was collected. The analysis of feedback explored a positive influence of SMS campaign. In this project administrative information exchange between instructors and students was absent. It is a known fact that some administrative information exchange lies between instructors and students to run an educational environment. Later on, it is felt that communication between instructors and students can be better handled if administrative information can be exchanged using SMS.

For management of administrative information between instructors and students, a mobile technology named Information Gathering and Lesson Tool (IGLOO) (Samuel, 2009) [2] was developed. It satisfied both pedagogical and technical issues. The main system was controlled by the instructors. This was developed for devices which were compatible with Symbian OS. 88% of the users satisfied with the technology. Both these projects handled the communication between teachers and students inside an educational campus. Further, researchers (Tan, 2004), (Ogata, 2008), (Looi, 2010) [3] thought to spread the benefits of SMS outside closed environment especially to learners of rural areas to explore better social impact of mobile learning.

To foster such an atmosphere, the University of Pretoria in South Africa initiated the implementation of mobile phone technology across

three paper-based distance education programs. This decision was motivated by the fact that over 99% of the 1,725 enrolled students possessed mobile phones (Traxler, 2006) [4]. The mass of these learners used to live in remote rural areas where telecom infrastructure was totally absent. Using Mobile phone these students were made enable to send prior designed SMSs to a specific group from database to support administrative helps (customized group SMSs). Here administrative support meant, sending SMS to aware participants about information on a course registration process. The benefits and achievements were noteworthy. A notification prompting registration for contact sessions was activated, with 58% of the learners responding prior to the deadline, surpassing the anticipated percentage of under 40%. Similarly, contact session dates' reminder was triggered, and 95% of the learners responded positively. Registered users responded in bunch and almost instantly to information supplied in SMS messages. This project provided paper based materials after communicating with students through mobile devices. Learning material using hardcopy and learning in a closed environment were not efficient process as far as technology is concerned. It is observed that though SMS had not been used in disseminating direct education, it had the potential to manage learners in an education environment.

Utilizing SMS enhanced communication between educators and learners, facilitating learning on the go. The transition from "E-learning to M-learning" (Keegan, 2002) [5] is an ongoing initiative focused on crafting a learning atmosphere through wireless technologies, tailoring course content for various mobile devices. Several types of handhelds were used in this project to provide course material like Symbian supported device (small screen), PDA (large screen). It was observed learners accepted learning on PDA compared to small screen devices. The effectiveness of course materials was not analyzed.

The significance of educational resources has been examined by initiatives such as Ultralab (Bradshaw, 2005) [6], which created materials addressing literacy and numeracy skills while emphasizing theories of lifelong learning. The Mobilelearn (Matthee, 2007) [7] project connected mobile devices with internet. It developed learning assistance to help the learners during field trip like context sensitive art and historical and cultural knowledge while visiting museum and galleries. Mobilelearn also extended the learning assistance program to MBA and medical students. This was a technology rich project which followed constructivist learning theory and a broad pedagogical aspect. The ultralab (Bradshaw, 2005), mobilelearn (Matthee, 2007) [7] were projects those developed text and graphic based educational

content. The Tate Modern Multimedia Tour pilot (Proctor, 2004) [8] was a project which launched an interactive audio-video tour and allowed learners using wireless network and Pocket PCs. Classroom environment was not considered in the above mentioned projects. RAFT Project (Kravcik, 2004) [9] (Remote accessible field trips) combined classroom and on-site research. There were two groups of learners. One group was inside classroom and other group visited a field trip and communicated via mobile learning interface. This was also a technology rich project which followed constructivist theory. The participants of all these projects were adult learners. Children were not included in any study.

HandLeR (Kukulska Hulme, 2005) [10] was an initiative launched at the Tampere University of Technology, focusing on utilizing PDAs for facilitating lifelong learning among children. The project employed a gamified approach to deliver educational content, particularly targeting mathematics. Its aim was to foster engagement and collaboration among pupils, encouraging communication and peer assistance within the learning process. This project was quite successful. Observing this success, (Kumar, 2011) [11] planned to use mobile learning to improve the literacy rate in rural India. A 26 week study was made in rural India to examine how children willingly make practice of mobile phones to surf educational material. It examines how mobile learning can help to improve literacy in a developing country. As presented in research report, 57% children go to school and rests do some kind of work for food. The researchers insist that, in m-learning helped them to communicate each other within the learning environment. Children attending the learning program were provided with mobile phone and related materials which made them highly motivated.

(Sharma, 2004) [12] developed web service based architecture. This was based on client/server architecture using web services. This project tried to deliver multimedia based content to learners. To deliver multimedia contents properly the project needed separate virtual file creation system which used lot of spaces. Thus the efficiency was not achieved by the author of the work. To send multimedia documents it also faced network bandwidth related problem. To reduce network traffic, latency, and utilize the mobile device's own storage and processing capabilities using web service has been discussed in another project (Lai, 2005) [13]. This project managed the multimedia content depending on user's profile and device's profile. It successfully delivered content to user. It could not track user's learning progress properly. To solve this, with web based framework, mobile learning management system concept came into account. A mobile LMS provide more efficient,

personalized, situation optimized, learning materials and methods. Moodle is an existing electronic LMS. Interconnection between MLE (Mobile Learning Engine) (Meisenberger, 2004) [14] and Moodle makes possible to import moodle (Dougiamas, 2003) [15] course contents into mobile devices. Thus a user accessed the features of LMS through mobile platform. But by using Moodle the system can focus on only one LMS, so content of other LMSs are unavailable. Implementing SOA (Service Oriented Architecture) this problem can be eliminated to some extent as described in (Guerrero, 2009) [16].

Research Methodology: This research is an experimental, mixed-methods study that collects quantitative and qualitative data through questionnaires and program simulations. The analytical stage uses graphical data analysis and program simulation to prove results. In the design phase, mathematical methods and program simulations are used to verify the worker's claim, demonstrating the effectiveness of the proposed mobile learning model.

Results and Discussion: The portable education administration system employs a client/server framework, where the client component operates on mobile devices like smartphones, tablets, or laptops, while the server component operates on desktops or laptops. The system has three master databases: student, teacher, and administrator, with test results stored in the LMS server. The system is designed for three types of users: student, teacher, and administrator. Users can access course materials in text and video formats, and can be evaluated after completing a module.

Few screenshots of master databases are given below:

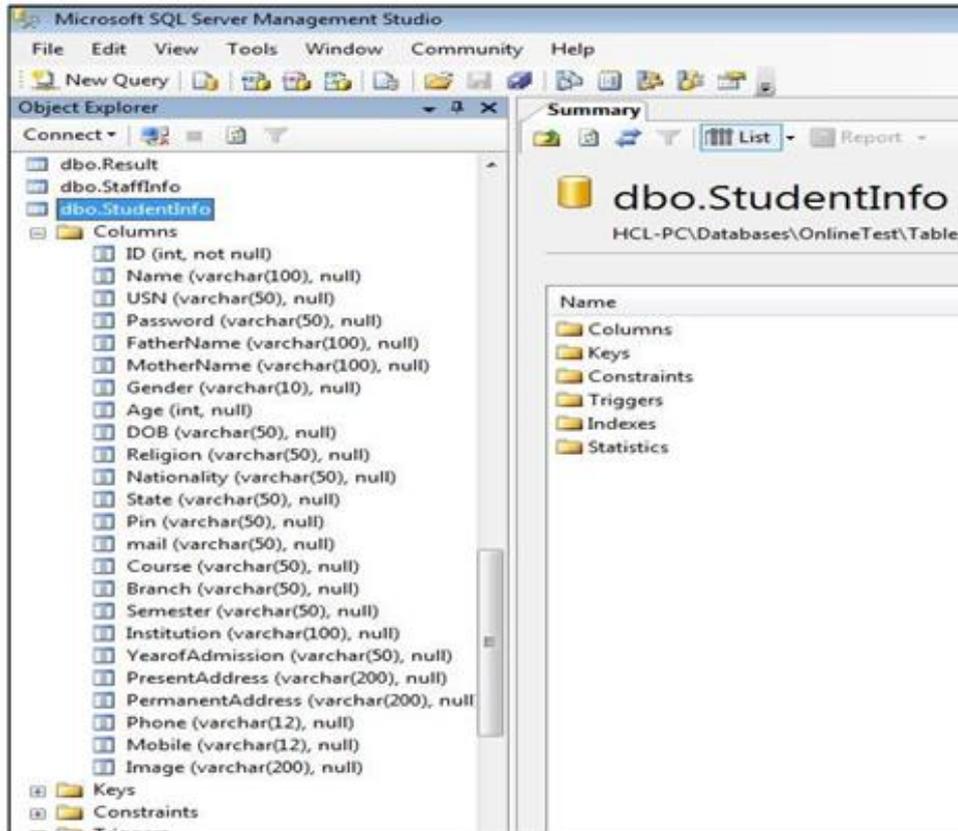


Figure 1 Attributes of Student Database

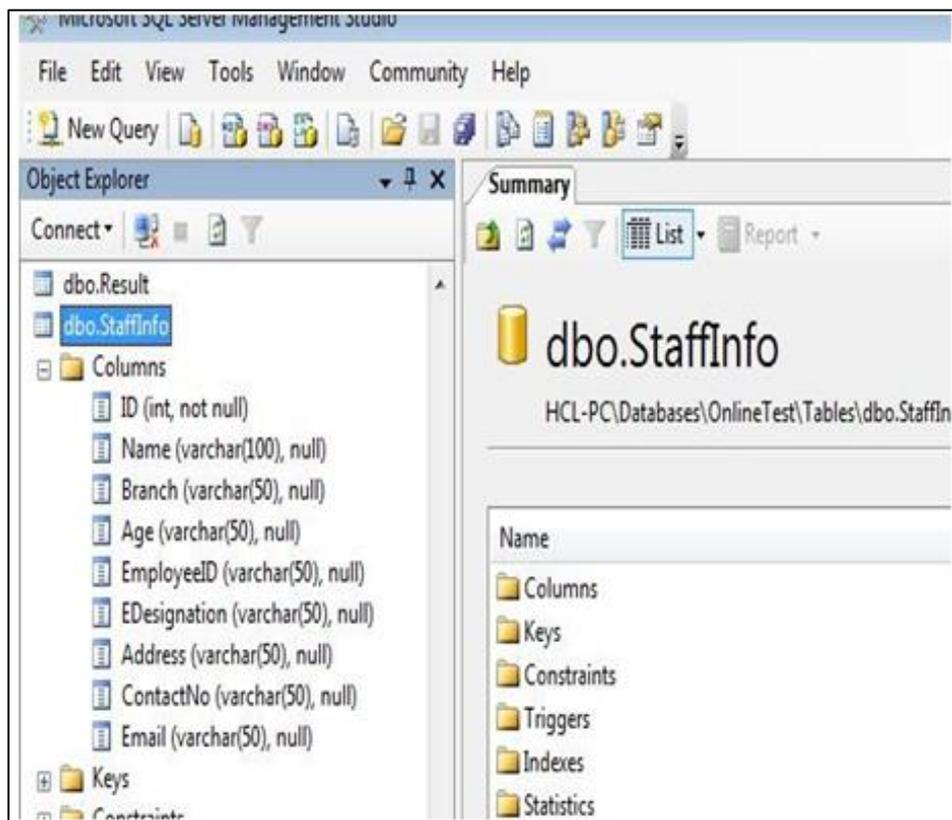


Figure 2 Attributes of Staff Database

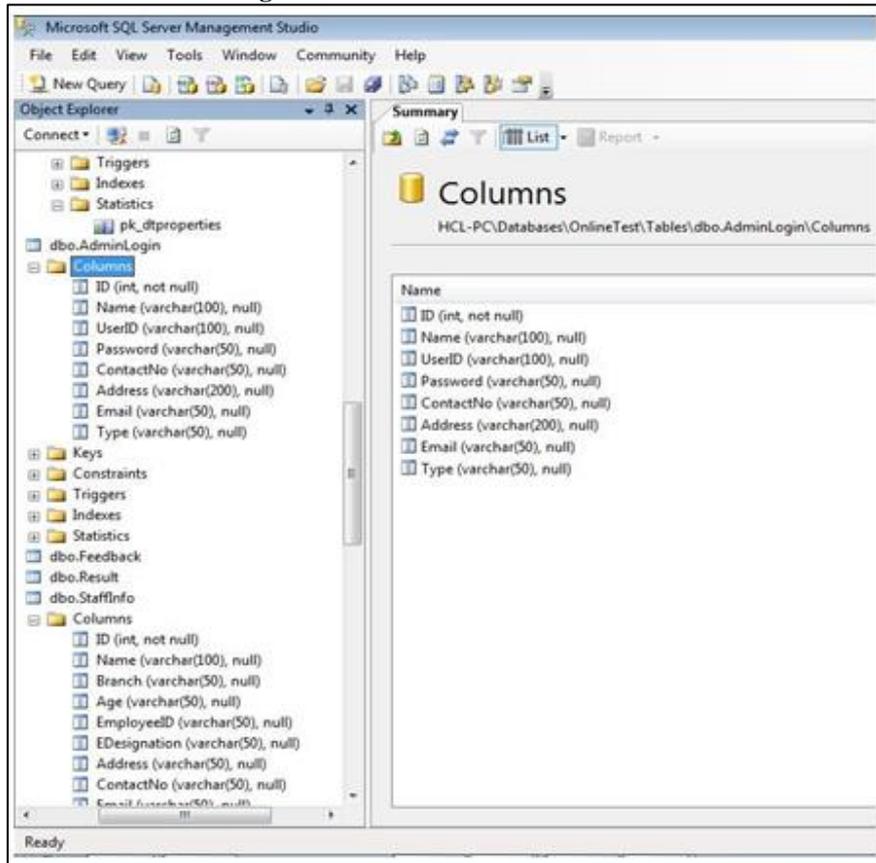


Figure 3 Attributes of Teacher database

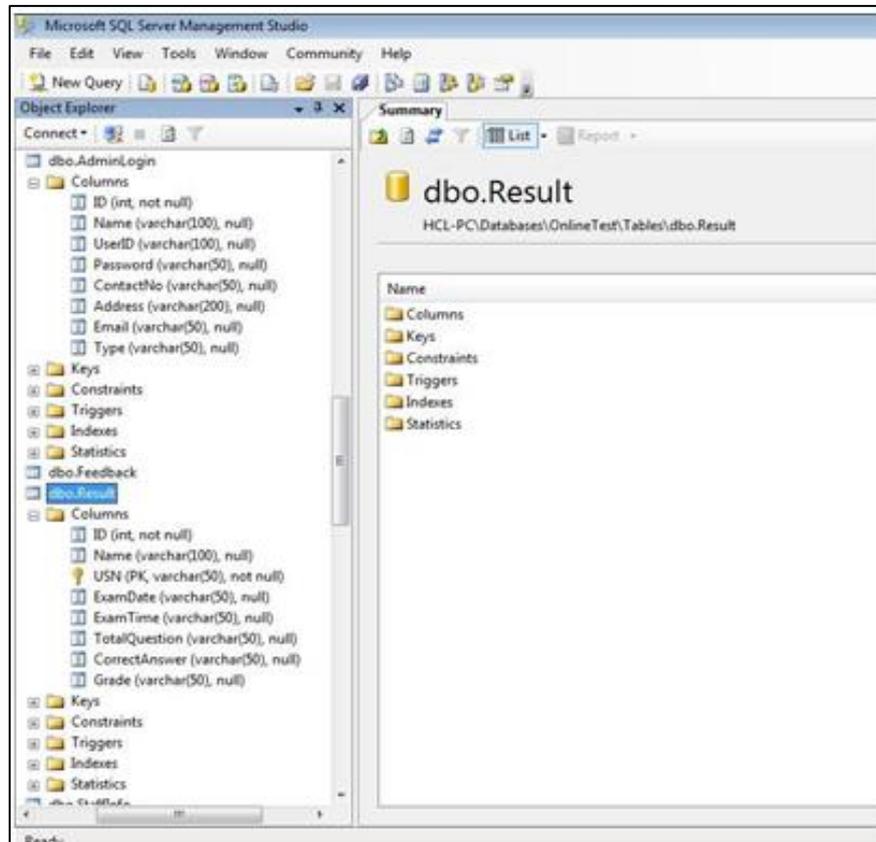


Figure 4 Attributes of Result database

Interpretation: As soon as user connects to the LMS the following screen opens up (Home screen) (Fig 5). New user can sign up (Fig 8). Next he/she can sign in (Fig 6). She can sign up as a student/admin/teacher (Fig 6). After logging in teacher can upload course material (Fig 7 and Fig 9) or view students detail or send SMS to them or reply to their SMSs.

A student can download and read material (Fig 11, Fig 12). Student can appear for evaluation (Fig 10). Evaluation result is instantly displayed (Fig 13). A teacher can crosscheck a student’s result (Fig 14). The screenshots are given below.



Figure 5 Home of MLMS

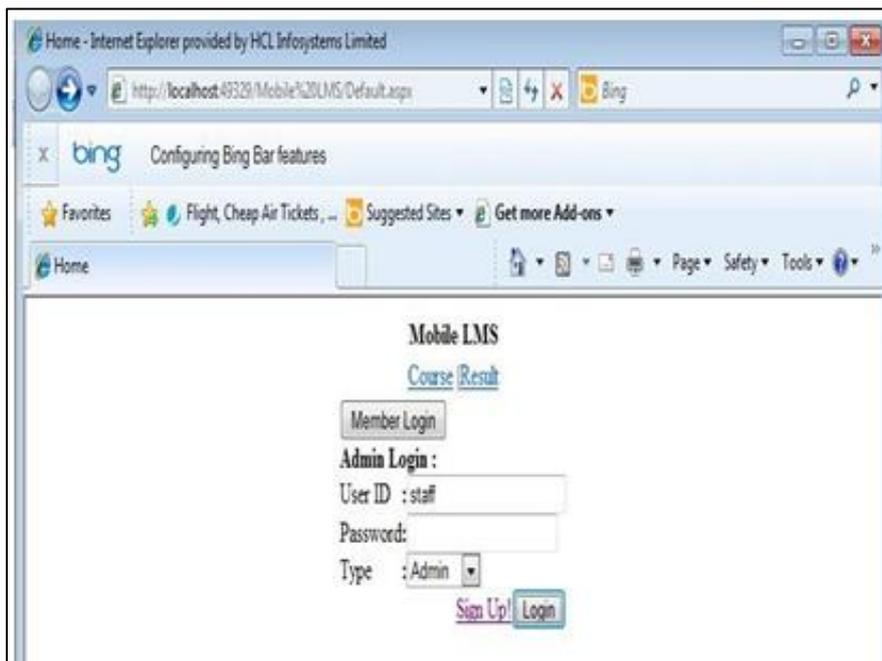


Figure 6 Sign in Page

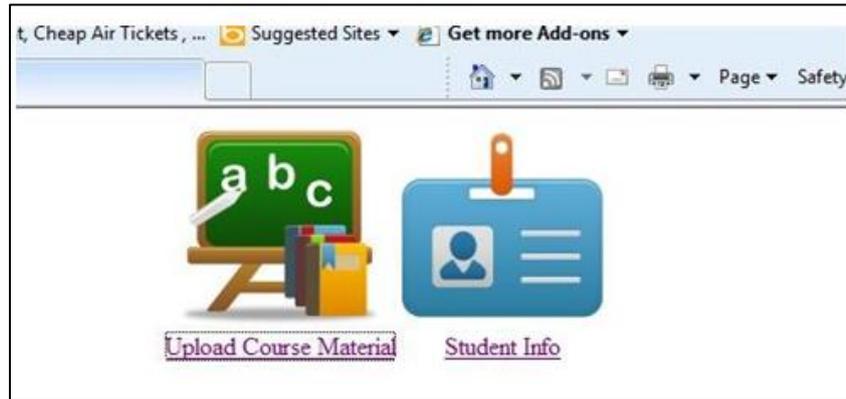


Figure 7 Interfaces for Teacher

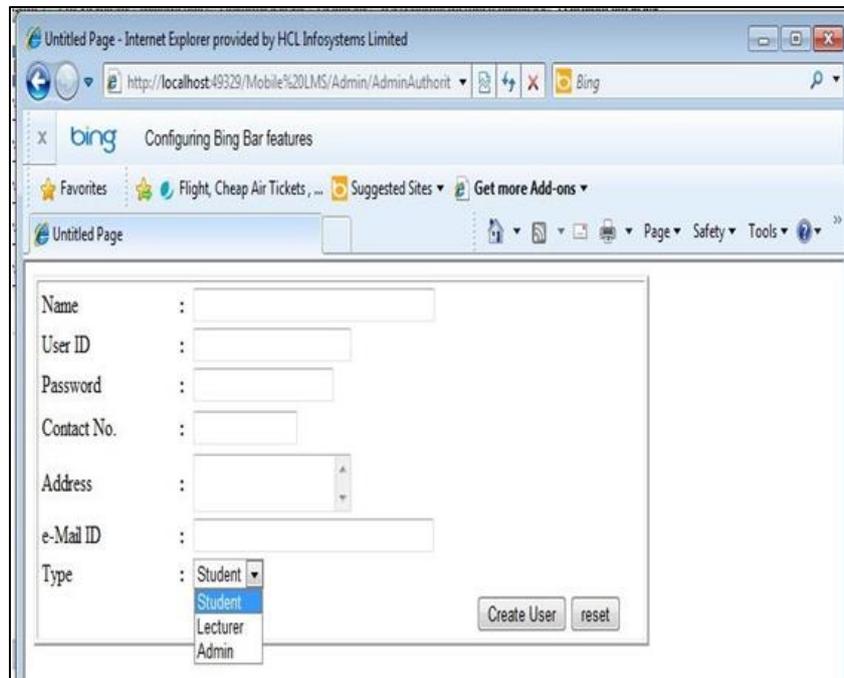


Figure 8 Sign up page

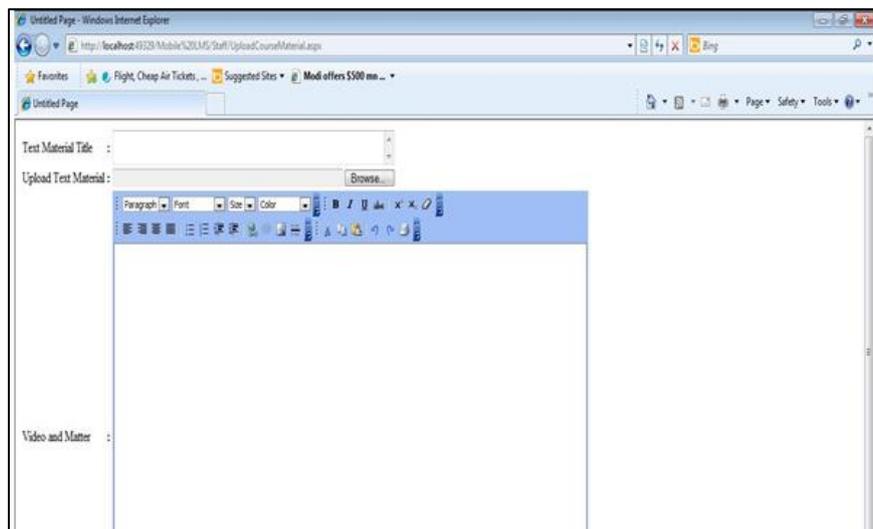


Figure 9 Upload Course Page

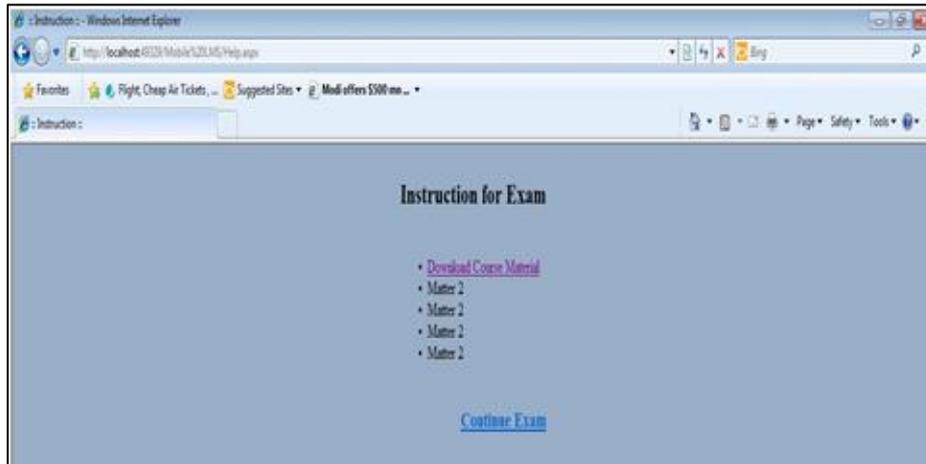


Figure 10 Exam Instruction Page

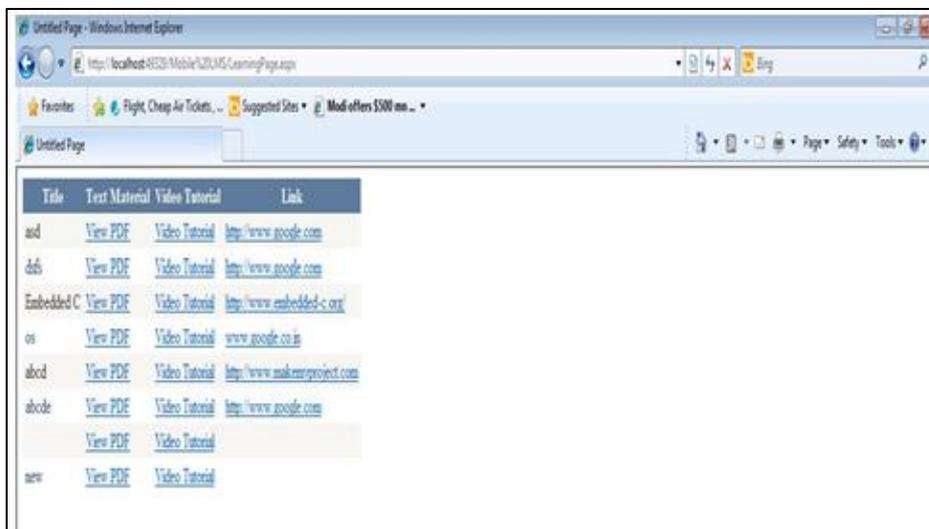


Figure 11 Download Course Page

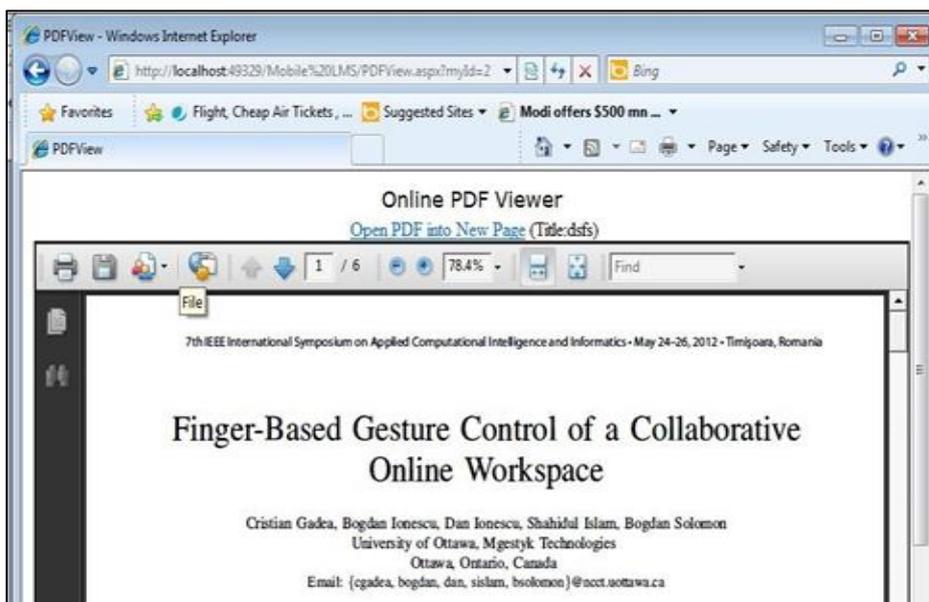


Figure 12 Detail view of File

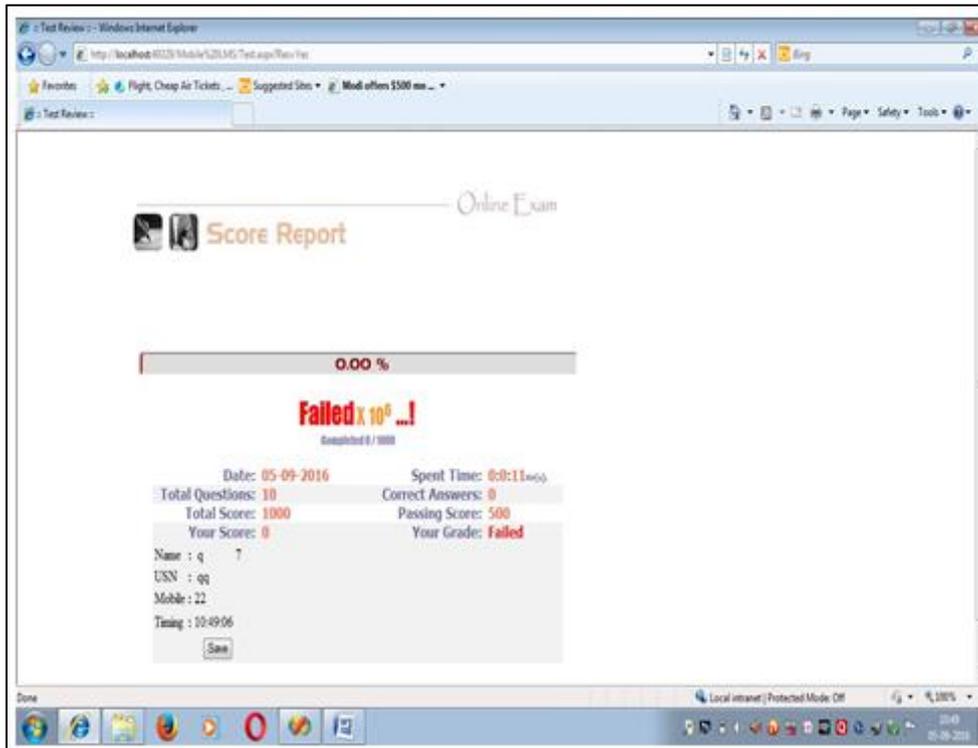


Figure 13 Exam Evaluation

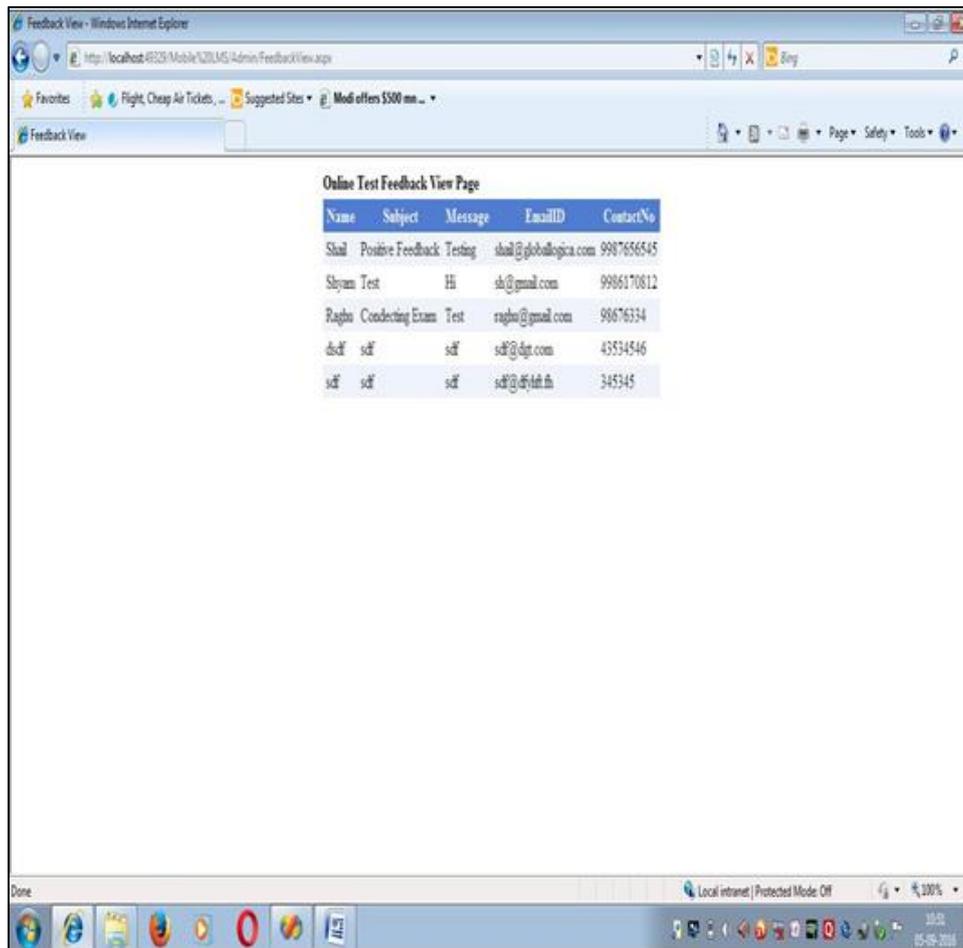


Figure 14 Feedback view by Admin

Interpretation: The present worker tested the Local Area Network connection between Laptop (LMS server) and two desktops (Delivery server and content server). It is observed that the connection against the design considerations is working properly. Now it was the time, to access the LMS server from a client that is a mobile phone. The present worker tried from her samsung galaxy smart phone capable to connect to wifi network. It is observed that the said mobile device could access LMS server without any difficulties (Fig 15, Fig 16, Fig 17). She opened the browser installed on her device and type the IP of the LMS Server. Few screenshots of above implementation on mobile are given below.



Figure 15 Login Screen on Mobile

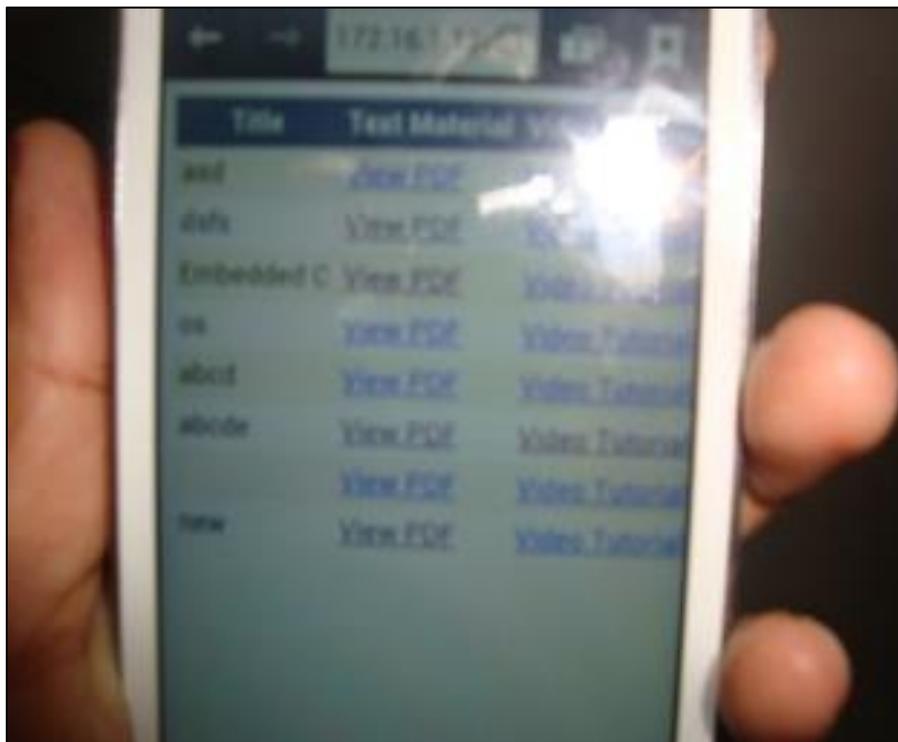


Figure 16 Course Detail on Mobile

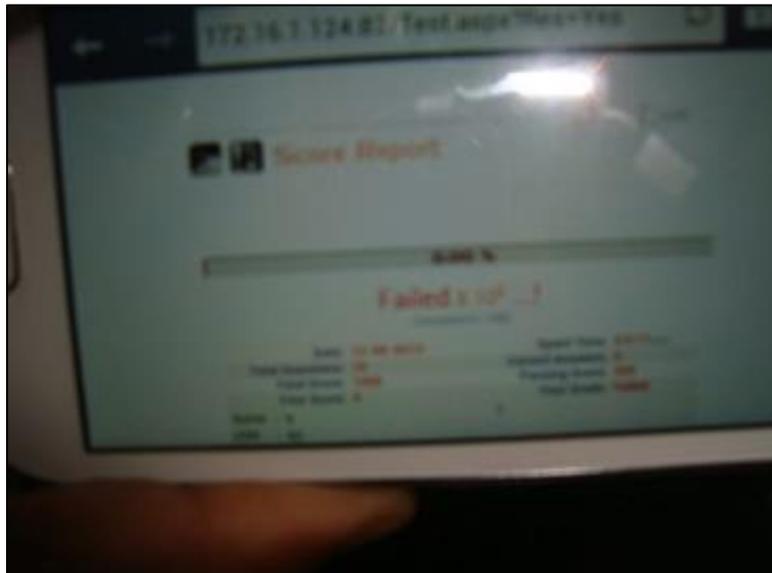


Figure 17 Online Test Screen

The findings indicated that practice and training-oriented materials were well appreciated by users, while long materials were not appreciated. Participants expressed their need for an m-learning system that could manage their learning and enable real-time learning solutions. Based on these findings, a prototype for mobile learning apps was created, providing text and video-based resources for various purposes.

An experimental investigation was conducted to observe the system's effectiveness over time. The system was provided to institutions with trainers and user feedback through surveys. A data analysis model was constructed to predict user behavioral intention to the use of the m-learning system, with five hypotheses postulated. The model was further examined using SPSS 23 program, yielding good results. The worker was satisfied with the outcome and planned to improve the prototype to construct a mobile learning consortium. She created a prototype and simulated the architecture using associated software, which worked properly. However, the model's acceptance by consumers was not anticipated, and the model cost was significant.

Conclusion: The literature review on mobile learning in teaching and learning reveals the need for experimental exploration to find suitable materials. The study uses qualitative and quantitative surveys to analyze the challenges and acceptability of mobile learning by learners. A mobile learning management system (MLMS) is developed, focusing on device context discovery, tracking learner learning, and assessing learning quality. The system also incorporates virtual classroom architecture for real-time services. A traffic information system is added for frequent travelers. Integration of MLMS with non-real-time data was challenging, but an agent platform was used for better access. The author tests the

acceptability of MLMS in the context of specific learners and evaluates existing models. A new data model is developed using SPSS AMOS package, and an experimental simulation is conducted to investigate resource sharing. The author also establishes a mobile learning consortium using set theory and object-oriented analysis, supporting the scope of the MLMS.

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A CONCEPTUAL STUDY: STOCK MARKET AND ITS RELATION WITH HUMAN PSYCHOLOGY

By

Hemraj Gokul Giri

Assistant Professor, Anekant Institute of Management Studies (AIMS), Baramati

ABSTRACT: Economists typically overlook psychology when doing research, but as it is difficult for them to ignore human nature, economists should include psychologists' ideas into their own work since it is essential to its realism and applicability. The world of finance and investments heavily relies on behavior. Behavioral finance essentially considers psychology, human nature, and cognitive variables to understand investor decisions, which can occasionally be illogical and difficult to grasp. This study contributes to our understanding of the reasons behind potential market inefficiencies as well as the ways in which investors, traders and financial professionals conduct is influenced by psychology. Conventional finance theory states that most people are reasonable in their desire to accumulate as much wealth as possible, but there are many of situations in which our decisions are influenced by emotions and psychology, leading us to act erratically or unexpected. This study offers a succinct analysis of how behavioral finance, psychology, and human behavior impact the stock market. It demonstrates how humans behave when faced with risk or the potential to lose money. It also illustrates how people make irrational decisions based on past losses, unfamiliar securities that appear riskier, stocks that have lost money for other investors that make them feel uninvest able, and the fear that a company that has made more money may also make more losses makes some people not want to invest in it.

Keywords: Behavioural finance, Decisions, Risk, Stock Market.

Introduction: Understanding how human psychology affects the stock market has greatly enhanced the significance of non-economic elements including moods, emotions, mood swings, fear, greed, and many more. All students, researchers, investors, and psychologists have found this to be a highly interesting issue to explore when it comes to these aspects, or a variable determined by human psychology. Despite my extensive research, I can only conclude that, much like a typical human being experiences mood swings, the stock market also experiences price swings with uncertain odds of going up or down. However, the more important question here is whether or not human psychology can aid in our understanding of the stock market, and behavioral finance theories shed light on this matter. The focus of behavioral finance is on the psychology of financial guidance. Most investors are aware that emotions play a role in speculating and investment decisions. People in the industry frequently discuss how stock markets are driven by people's fears and greed. The market is dominated by human behavior and behavioral finance, which plays on emotions such as fear, wrath, or greed. Ultimately, behavioral finance uses the knowledge gained from mental analysis to financial planning and investing choices. Using broad criteria for decision-making elements is insufficient to explain the great majority of stock market decisions. When we study how human behavior affects the stock market, it all

becomes clear why a person made a certain option but is unable to articulate or defend their potential future choices. According to classical finance, since everyone has access to the same facts, it is absurd to alter the market's position because stock costs are, in reality, reasonable and correct, representing what we know about investing in financial assets. When the market's share value accurately reflects the amount of information that is gathered and available, that information is considered sufficient and efficient. Therefore, the capital market is assumed to be a data-producing partner under the efficient market theory. This research has the potential to contribute to our understanding of behavioral finance, human psychology, and factors that may be useful when making financial or investment decisions by illuminating the ways, times, and reasons why people become irrationally optimistic and divert from making rational decisions.

Objectives of Research:

1. To study the human behavior, behavioral finance and theories associated with it related to share market.
2. To study the factors influencing the decision making of share market traders/investors.
3. To comprehend the level of assurance that investors have in the stock market.
4. To study the average loss makers in the stock market trading.
5. To educate people on how to make logical

decisions by taking into account all relevant factors.

Theoretical Development:

1. **Conventional Finance:** Conventional finance refers to the process of making choices and carrying out actions based on a market's worthy or efficient hypothesis. Conventional financial theories operate under the potentially unfounded assumption that investors are inherently risk-averse, diversified portfolio owners, who act and trade solely on the basis of mathematical models and technical or fundamental analysis.
2. **Behavioral Finance:** A relatively recent area called "behavioral finance" emerged in response to evidence of irrational influence on stock markets and other markets. The study of human behavior and psychology as it relates to financial decision-making is known as behavioral finance. An explanation for why humans make decisions devoid of technical analysis or evidence can be found in behavioral finance. This theory is centered on the idea that people make irrational financial decisions because psychological considerations, not the desire to maximize money, affect their actions.
3. **The Relationship between Psychology and Stock Market:** If you believed that stock market investing was only about calculating numbers, you might be surprised to learn that, when it comes to making critical choices and judgments, your psychology plays just as big of a role as it does. Not only is the study of the mind and behavior as it pertains to our inclination to invest highly fascinating, but it is also quite beneficial to investors. Because market movements are often unpredictable and illogical, awareness will help us realize when our gut feelings aren't supported by reason. Nothing is more unfortunate than losing money even when one has the necessary analysis at hand, simply due to our incredibly natural desire to act and react in predetermined ways. An important area of study in stock-market psychology is the cognitive biases that affect investors. A bias could be an incorrect way of thinking that we were raised with at home. For instance, consider the tendency known as loss aversion. Investors respond more strongly to losses than to gains. As a result, the pain of suffering a loss of Rs. 1,000 makes the joy of making a gain of Rs. 15,000 less profound. When the market declines, this is frequently the reason why investors sell their investments in fear. Consider the biases related to availability and confirmation now. Investors typically focus their investigation on easily accessible information and data when investigating a company. This is frequently a

case of supply bias in action. Instead of searching for essential information based only on market expertise, investors base their investment thesis on information they don't even need to look for. Furthermore, if individuals already have an opinion, they tend to become fixated on it, accepting facts that support it while disregarding information to the contrary. Due to these two biases, insufficient analysis is the result, which frequently costs them dearly in the long run. Additionally, herd mentality may manifest itself in the stock market to the extent that certain industries or stocks appreciate significantly in value. IPOs are the newest trend in the market. A few of IPOs have provided larger listing profits in the current flourishing market. A growing number of people who identify as "IPO investors" have been drawn to this; in light of the positive sentiment, further companies are paving the way to be included on the list. The issue is that herd mentality frequently leads to "market stampedes" that do serious harm to investors. The famous investor and Warren Buffett's partner, Charlie Munger, has spoken out about the stock market's dynamic tendencies. He claims that although investors frequently become overly attached to their stocks, this is because the companies have done extensive research on them, have long-term control over them, and may even be making paper profits from them, which prevents them from being objective about them. They often overlook any unfavorable developments in their business. Eventually, this leads to the destruction of riches. The "loving tendency" still leads investors to hold onto their money in the hopes of a rebound.

Review of Literature: This work draws its sources from a variety of literatures, articles, and research papers. Selections of them are reviewed below, with links to the full texts included in the bibliography section under the corresponding numbers:

1. Subhashis Paani (Power of Stocks) did experiment named 'coin toss experiment' he used to do entry on the basis of head or tail whatever comes on coin where he discussed psychology has maximum importance in trading than the traditional finance.
2. Sangeetha Thakur has conducted research on the effects of behavior on the stock market and the significance of behavioral finance in financial decision-making. The study demonstrates the impact that illogical judgments made by investors due to human emotions have on them and their money. The impact of traditional and behavioral finance on the stock market is also briefly explained in the

- paper.
3. Glenn Curtis conducted study on the significance of psychology in trading, elucidating strategies for overcoming the fear and greed that impact decisions and providing a quick list of useful pointers for profitable trading.
 4. Ben McClure has provided a quick overview of behavioral finance research and an explanation of the significance of profits and losses. He has established behavioral finance's viability and clarified the main Herd vs. Self-issue.
 5. In his discussion of decision-making, Abhijeet Chandra covered the following topics: investor risk perception, investing decision-making and behavioral portfolio construction.
 6. SEBI Study dated on 25 January 2023 on "Analysis of Profits & Loss of individual traders dealing in equity future and options" Loss makers are close to 50,000 trading loss financial year 2021-22. 9 out of 10 traders incurred net loss in equity, future and option segment.

Research Methodology: This research is purely based on secondary data collected from different sources mentioned in references.

Findings: Following a quick investigation and examination of secondary data, the paper successfully identified the various psychological aspects that influence investors' decision-making and, in turn, the stock market. Resolving these issues may aid the reader in achieving future trading and investment success. Various behavioral factors that impacts the stock market:

1. Experience: Investors may be misled into making poor decisions by their prior successes or failures, which can cloud their judgment. To avoid falling victim to this trap, investors should put greater emphasis on the here and now and disregard their past experiences as new investment is purely different situation and analysis which will produce unique output than the previous one.
2. Overtrading: Investors fall into trap of overtrading due to fear of losing money which he tries to recover from the market.
3. Overconfidence: Trading successfully requires confidence, which is the secret to success. While overconfidence causes investors to overestimate their abilities and consequently incur enormous losses, confidence provides investors the guts to take risks. Thus, investors shouldn't promote overconfidence.
4. Gamblers: Investing blindly and investing all money without proper analysis rather fundamental or technical on a single company and avoiding that each investment has 50% chances of winning or losing money.

5. Psychology: Decisions should not be made by considering the psychology of other investors because the mutual feeling that the market is currently experiencing has certain disadvantages as well. Decisions made based on that perspective are influenced by greed, fear, and unrealistic expectations.
6. Informational Bias: The Investors take a decision based on information which is quickly available instead of doing their own analysis due to laziness.
7. News Impact: In this instance, markets are impacted by media for their own profits; therefore it is uncertain for investors to profit from such news. Instead, investors act rapidly based on news, articles, or statistics influenced by the media, regardless of whether the news is accurate or not.

Conclusion: In addition to offering countless insightful suggestions for both individual and corporate investors, behavioral finance aids in the assessment of investment plans and the development of new ones that take into account behavioral finance and human psychology. According to this study, demographics are a major factor when making financial decisions. It also outlines the key elements that influence an investor's mindset and decision-making process and determine whether they succeed or fail. These elements include confidence, risk-taking prowess, and capacity to make logical decisions, realistic expectations, and a favorable outlook on the stock market. When making stock market investments, investors may find the research helpful in understanding the importance of behavioral finance and human psychology and how behavior affects market value. This understanding may allow investors to maximize their wealth by earning higher profits. The decision made by investors will be logical and unaffected by behavioral considerations, therefore the paper may also assist them limit their losses. The study article's conclusion is that behavioral finance should be taken into consideration when making investments because it has a significant impact on how people behave and think.

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EMPHASIS OF AI-POWERED TECHNOLOGY FOR GEN ALPHA EDUCATION SYSTEM

By

Dr. Prakriti Dixit Porwal

*Associate Professor, Department of Management Studies
Geetanjali Institute of Technical Studies, Udaipur, Rajasthan*

ABSTRACT: Education is changing as a result of artificial intelligence (AI), which offers customized learning experiences and innovative approaches to education. The impact of AI-driven technology on Generation Alpha students' academic performance, pedagogy, and learning environment is examined in this research. The use of AI in education is changing the way that students learn, from customized AI algorithms that create lesson plans to AI-powered virtual reality simulations that improve comprehension. The effectiveness of AI in improving student engagement and learning outcomes is demonstrated by real-world examples such as Eagle 2.0 at Indus International School and Coursera's AI engine. A comprehensive review of the literature highlights how AI might enhance instructional tactics and student engagement while acknowledging ethical issues like bias reinforcement and data privacy. Artificial intelligence (AI)-driven innovations that offer dynamic and immersive learning approaches, such as chatbots, virtual classrooms, adaptive systems, and personalized learning, are revolutionizing education. The development of problem-solving abilities, teamwork, and personalized learning are prioritized in pedagogical approaches designed for Gen Alpha students. Responsible AI integration in education requires careful consideration of ethical issues, such as prejudice mitigation and the advancement of digital literacy. Although AI has the potential to improve education, ethical challenges like data privacy and an excessive reliance on technology need to be resolved. AI tools must be used in collaboration with educators and other stakeholders to support human-centered education methods.

Keywords:- AI-driven technologies, Gen Alpha, Learning opportunities, Pedagogical strategies, Ethical dilemmas.

Introduction: Artificial Intelligence (AI) is becoming an indispensable part of everyday life in our constantly evolving modern world, bringing about revolutionary transformation. AI is an innovation stimulant that works in many different industries because of its skill in analyzing data, process automation, and adaptive learning. AI meticulously reframes conventional processes, leaving no sphere unaffected, from personal activities to household tasks, business operations to educational establishments.

When it comes to educating the next generation, or Gen Alpha, in the ever-evolving field of education, the incorporation of AI-driven technology is crucial. As Millennial and Generation Z grab the forefront in the media, Generation Alpha aka iGeneration, who were born between 2010 and 2025, appears as their replacement. Even though some of them are not born, they have a big impact on the future, which includes how marketing for higher education is done. Encompassed of the first generation to completely embrace the digital revolution, Gen Alpha was reared in a world dominated by technology. Understanding how artificial intelligence (AI) has impacted individual's educational journeys is essential in order to design a learning environment that meets

their unique needs and problems. The aim of the research is to study the various ways that AI affects academic performance, teaching methods, and the general educational environment for Generation Alpha. Consider a classroom where students' learning styles and preferences are analyzed by personalized AI algorithms, which then curate exercises and lesson plans that are specifically suited to each student. These real-time adaptive systems provide quick feedback and alter the pace and degree of complexity of lessons based on those observations. Furthermore, AI-driven virtual reality (VR) simulations make abstract ideas come to life, giving students a stimulating and interesting approach to study historical events, scientific occurrences, or mathematical concepts. Additionally, AI enables student collaboration and communication, eradicating regional boundaries and promoting international ties. AI-enabled chatbots installed in virtual classrooms offer round-the-clock support, guaranteeing that students may get help whenever they need it.

A notable example of AI being used in education in the real world is Eagle 2.0, a humanoid robot, leads class at Indus International School in Bengaluru, exemplifying the institution's dedication to advancing progressive educational technologies.

Student engagement and retention are increased by this innovative method, which promotes interactive learning experiences. The school equips student with cutting-edge educational resources to successfully prepare them for the digital age by using Eagle 2.0 as a teaching assistant for classes 7, 8, and 9 in a variety of topics, including physics, chemistry, biology, geography, and history.



Eagle 2.0, a humanoid robot, teaches a lesson at Indus International School, Bengaluru, India

Source: Secondary Data

Another example is of Coursera, well-known online learning platform that gives each student a customized learning experience by using AI algorithms. The AI engine of Coursera examines data from millions of students to determine each student's unique learning preferences, styles, and knowledge gaps. The platform maximizes users' learning outcomes by customizing courses, assignments, and study materials based on this research and their needs. In addition, students can monitor their progress and identify opportunities for growth in real-time with the help of Coursera's AI-powered grading tools, which can provide rapid feedback on quizzes and assignments. Learners are able to accomplish their objectives more quickly and with greater interest because to this personalized approach to education. Furthermore, Coursera's AI algorithms support teachers too by giving them information into student engagement and performance, which enables them to modify their pedagogical approaches.

The way AI technology is being incorporated into education highlights how it can change education and make it more accessible, effective, and personalized for all students worldwide. The research investigation attempts to evaluate the effectiveness of AI-powered educational technology by investigating intelligent tutoring programmes, automated assessment tools, and personalized learning platforms. Identification of policies and obstacles to a smooth integration of modern technologies into traditional schooling is part of this assessment.

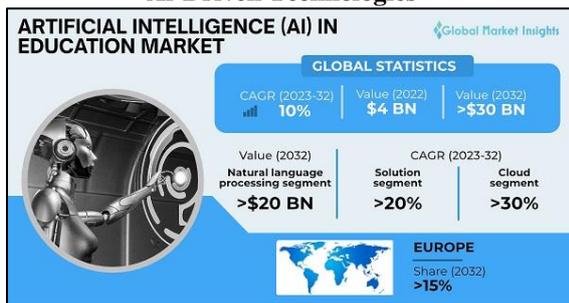


Source: Secondary Data

Literature Review: The field of learning and teaching is changing as a result of the increasing trend of AI integration in education. As Gill and Mathur (2023) pointed out, AI has a significant impact on how Generation Alpha is raised, which emphasizes the necessity of flexible parenting in the digital age. In order to improve their kids' educational experiences while maintaining their internet safety through parental controls, millennial parents are increasingly utilizing AI. As Rathore (2023) discusses, ChatGPT is a prime example of how AI-powered chatbots, like as GPT-3, are transforming academic help and more, enabling individualized interactions and content production for colleges and businesses alike. In order to improve student engagement and performance, Kamalov et al. (2023) emphasize the role that AI may play in delivering personalized learning experiences through knowledge tracing and collaborative filtering. But careful integration and AI literacy are required in educational curriculum due to ethical concerns about prejudice and data privacy. Ahmed and Ahmad (2023) emphasize that educational institutions must invest in infrastructure, data security, and quality assurance in order to satisfy the needs of Generation Alpha and the changing demands of the workforce. They also highlight the significance of incorporating online courses and AI technologies into these efforts. In order to prepare students for an AI-driven future, Melchor et al. (2023) advocate for strategies like gamification and robotics and address infrastructure and quality assurance issues in their focus on AI integration in mathematics instruction for Generation Alpha. Pereira et al. (2022) and Joshi et. al. (2021) examines how artificial intelligence (AI) has the potential to transform education by improving student engagement, teacher effectiveness, and instructional strategies while lowering administrative burdens and eliminating biases. They highlight the indispensable role of human educators in promoting complex relationships and effective teaching and learning, even as they acknowledge the potential of AI. According to Haenlein and Kaplan (2019), AI technologies have the potential to enhance collaboration between humans and robots through the creation of interactive platforms that promote shared

intelligence. This can lead to an increase in productivity, creativity, and problem-solving abilities. Weiss et al. (2016) describe the two paths that artificial intelligence can take, highlighting the deep learning algorithms' potential to solve complex issues in a variety of fields and automate processes at a low cost. The combined findings of this research highlight the revolutionary potential of artificial intelligence (AI) in education, supporting the thoughtful integration of AI to improve learning outcomes while recognizing the complementary role of human educators in the teaching and learning process.

Ai-Driven Technologies



Source: Secondary Data

With a compound annual growth rate (CAGR) of 10%, the global market for AI in education is expected to rise from \$4 billion in 2022 to over \$30 billion by 2032. The fastest-growing market will be cloud solutions, with a CAGR of over 30%, while natural language processing (NLP) is predicted to dominate and reach \$20 billion by 2032. By 2032, Europe will have over 15% of the market, putting it in a leading position. In 2023, the AI market in India reached a value of over \$4.1 billion, with machine learning accounting for the largest portion at \$2.7 billion. Artificial Intelligence has a broad impact on the technology industry. It improves productivity through automation and process simplification, bringing about major changes. EdTech is experiencing significant development due to rapidly evolving AI trends that improve student engagement through gamified learning environments, interactive lectures, and personalized courses that promote skill acquisition. The market for AI education is therefore expected to grow to be worth more than \$20 billion by 2027. These developments upend conventional notions of education by personalizing learning experiences and encouraging engagement and retention. Teachers can optimize student performance by accommodating different learning styles and modifying lessons in real-time through the use of AI-powered tools and platforms. The rise of AI-powered EdTech represents a paradigm change towards more dynamic, immersive, and productive learning approaches that have the potential to completely transform education around the world. AI-driven technologies are transforming education in numerous ways, providing creative methods to

enhance learning outcomes, customize instruction, and expedite administrative work. Some significant AI-driven innovations and anticipated developments in the education sector:

1. **Personalized Learning:** By analyzing student data, AI algorithms can customize learning activities, pace, and materials to each student are unique learning preferences and styles. This maximizes understanding and engagement.
2. **Adaptive Learning Systems:** These AI-driven systems evaluate students' progress on a regular basis, modify the content and degree of difficulty of the lessons, and offer remediation and targeted support to help students overcome obstacles and proceed at their own speed.
3. **Intelligent Tutoring Systems:** By utilizing NLP and machine learning techniques, AI tutors provide individualized guidance, feedback, and support across a range of subjects and abilities, simulating one-on-one encounters.
4. **Automated Assessment and Grading:** AI streamlines the grading process by evaluating student answers, looking for trends, and giving immediate feedback. This frees up teachers to concentrate on individualized education and support.
5. **Virtual Classrooms:** AI makes it possible to create realistic online learning environments with real-time feedback, virtual interaction, and interactive exercises that make use of VR and AR technologies to improve understanding and participation. Some of the renowned Virtual Classrooms platforms are EdApp, Edvance360, Deck Toys, NewRow etc.
6. **Virtual Assistants and Chatbots:** AI-driven chatbots and virtual assistants use natural language understanding (NLU) to engage with students, respond to questions, and facilitate their learning. They offer round-the-clock academic help. AI bots are creatively used by companies like Duolingo and Mondly to increase student participation and retention. Juji chatbots function as an individual learning or teaching assistants, gaining the distinctive knowledge of each student to personalize lessons and improve results.
7. **Curriculum Design and Content Generation:** By leveraging NLG to produce customized textbooks, course plans, and multimedia resources that are aligned with academic goals and student needs, AI helps educators with curriculum design, resource selection, and content generation.

Pedagogical Strategies: Educators need to give special attention to pedagogical practices that fit the distinct needs of the Gen Alpha generation while considering AI-powered technology for upcoming courses in education. Personalized learning, which uses AI to adjust pace and content

based on student needs, is essential. Furthermore, encouraging collaborative and interactive learning experiences with AI platforms encourages involvement and cooperation abilities. Thirdly, through the presentation of real-world difficulties, AI should be used to foster the development of analytical and problem-solving ability. Student progress tracking is aided by the quick evaluation and feedback provided by AI systems. Educators also need to make sure that the integration of AI addresses issues of accessibility and bias while emphasizing ethical use and diversity. To fully utilize artificial intelligence in education, educators must invest in professional development. In order to guarantee that AI technology improves educational outcomes for Gen Alpha students, decisions should also be based on the best available research.

Ethical Dilemmas: When assessing AI-powered technology for upcoming Gen Alpha education courses, ethical quandaries come up. One issue is that AI algorithms may reinforce innate prejudices, which could lead to the perpetuation of stereotypes or inequities. Transparent regulations regarding data usage and protection are also necessary because the gathering and analysis of enormous volumes of student data raises privacy issues. The reliance on AI technologies, which has the potential to replace conventional teaching techniques and decrease human engagement, presents another conundrum. Furthermore, there's a chance that an excessive reliance on technology may hinder the growth of critical thinking and creative thinking, two important life skills. In order to overcome these challenges, educators should encourage the moral use of AI, cultivate digital literacy, and make sure that technology enhances rather than replaces human-centered teaching methods. For Gen Alpha kids to receive a comprehensive and responsible education, it is imperative to strike a balance between technical innovation and ethical issues.

Conclusion: In conclusion, there is a great deal of promise for transforming the educational experience for students in Generation Alpha through the use of AI-powered technologies. Being the first generation to grow up entirely in the digital age, Gen Alpha's educational experience has been substantially impacted by artificial intelligence's revolutionary potential. Education is changing, becoming more accessible, efficient, and interesting for students all around the world thanks to AI-driven technologies that enable personalised learning possibilities, adaptive teaching strategies, and interactive experiences.

But these revolutionary advantages also present moral conundrums and obstacles that need to be resolved. Concerns around data privacy, the possibility of over-reliance on technology, and the potential for bias reinforcement in AI algorithms

highlight how important it is to carefully and responsibly integrate AI into education. To guarantee that AI technologies are used ethically, transparently, and inclusively to enhance human-centered teaching practices rather than replace them, educators, and stakeholders must collaborate. The use of AI in education is becoming more and more popular worldwide, thus educators must work hard to fully utilise this technology's potential while avoiding any potential harms or problems. A future where AI-enhanced education equips students to succeed in an increasingly complicated and interwoven environment can be created by giving priority to educational practices that address the specific demands of Gen Alpha students and taking ethical considerations into account.

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PERSPECTIVES ON NEP 2020: STAKEHOLDER INSIGHTS AND CONCERNS

By

Dr. Arun H. Patil

Assistant Professor, Sinhgad College of Commerce, Pune

ABSTRACT: India's National Educational Policy (NEP) 2020 is regarded as a historic document that aims to change the educational landscape with its vision for the twenty-first century. This study looks closely at the NEP 2020 from a number of angles, examining its goals, guiding principles, and possible effects on various stakeholders. This study employs an interdisciplinary methodology to synthesize extant literature, policy documents, and empirical evidence, with the aim of providing insights into the NEP 2020's strengths, weaknesses, opportunities, and threats. This study attempts to provide a nuanced understanding of the policy and its implications for the future of education in India by taking into account a variety of points of view.

Keywords:- National Educational Policy 2020, education reform, Holistic development, stakeholder perspectives, Technology integration

Introduction: India's development has prioritized education improvement, and the New Education Policy aims to improve the country's current educational system. Although the NEP 2020 was introduced in 2020, its implementation is still in its infancy. There are about 350 million Indians in the world who are in school or pursuing higher education. The NEP demands a massive implementation that has never been tried anywhere in the world before. Twenty-five states and union territories had developed action plans for implementing the NEP as of February 2024. In the 2023–24 budgets, the central government has set aside ₹1.96 lakh crore for education, a 6.8% increase over the previous year.

Preschools that are integrated with Anganwadis are being piloted in some states. More than five lakh teachers have received training on the new curriculum framework from the National Institute of Educational Training (NIET). In line with the NEP, the government introduced the National Skills Qualification Framework (NSQF). The overall goal of NEP 2020 is to establish a better accessible, equitable, and high-quality educational system that equips students for the opportunities and challenges of the twenty-first century.

Objectives of Research:

1. To provide an overview of the National Education Policy (NEP) 2020 and its significance,
2. To analyze the conceptual foundations of the NEP 2020,
3. To examine the perspectives of stakeholders, including students, teachers, educational institutions, government, and policymakers,
4. To explore the challenges and critiques surrounding the implementation of the NEP 2020.

Research Methodology: The purpose of research is to study NEP 2020 from various perspectives,

exploring its objectives, principles, and potential impact on different stakeholders. The research primarily focuses newest tourism trends and challenges faced by tourism industry in India. The study focuses on the strengths, weaknesses, opportunities, and threats posed by the NEP 2020. It also put forward policy recommendations for implementing the NEP 2020. Hence the design used for this research is exploratory and descriptive. The data used is secondary type and is collected from journals and various websites. Data is then analyzed and transformed into meaningful information.

Conceptual Foundations of the New Education Policy 2020 (NEP 2020) Analysis: The NEP 2020's overall approach to education reform is shaped by a number of fundamental conceptual underpinnings.

Holistic Development:

1. The old policy's exam-centric focus is replaced by this concept, which places an emphasis on the physical, intellectual, emotional, and social development of the whole child.
2. Along with academic knowledge, the goal is to foster critical thinking, creativity, problem-solving, collaboration, communication, and life skills.

Learning for Life:

1. It reorients the emphasis from memorization and rote learning to a deeper comprehension and application of knowledge in practical situations.
2. It encourages the use of active, inquiry-based, and experiential learning techniques to develop lifelong learning skills, curiosity, and self-directed learning.

Equity and Inclusion:

1. A truly inclusive education system should take into account the varied needs and backgrounds of students.

2. It should guarantee that everyone has access to high-quality education, regardless of their gender, socioeconomic status, caste, ability, or location.
3. Encourages multilingualism and provides different forms of assistance to kids with impairments.

Flexibility and Choice:

1. The curriculum is shifting from being rigid to being more flexible, giving students a wide range of subject choices and pathways.
2. This allows students to explore their interests and aptitudes, which results in more individualized and engaging learning experiences.

Integration of Vocational Education:

1. Dismantles the conventional hierarchy between the academic and vocational streams and smoothly incorporates them into a single system.
2. It gives students a variety of career options, relevant skills, and preparation for the ever-changing labor market.

Teacher Empowerment and Continuous Professional Development:

1. Acknowledges the pivotal function of educators and prioritizes their professional growth via enhanced instruction, resources, and independence.
2. Attempts to establish a cooperative and encouraging learning atmosphere that promotes creativity and optimal methods.

The NEP 2020's conceptual foundations represent a significant shift in educational philosophy, moving towards a more holistic, learner-centric, and inclusive approach.

National Education Policy 2020: A Comprehensive Overview

India's educational landscape has undergone a radical change with the implementation of the National Education Policy 2020 (NEP 2020). It replaces the 1986 policy and aims to create a flexible, equitable, and all-encompassing system that gets students ready for the twenty-first century.

Guiding Principles:

1. The policy's commitment to providing inclusive and high-quality education for all is supported by the following pillars: access, equity, affordability, quality, and accountability.

Key Reforms:

1. Early Childhood Education (ECE): Providing all children with access to high-quality ECE via Anganwadis and preschools, with a focus on play-based learning and basic literacy and numeracy
2. The 10+2 system will be replaced by a 5+3+3+4 structure in school education, which will emphasize experiential learning, allow for

subject choice flexibility, and integrate vocational education.

3. In higher education, there are multidisciplinary bachelor's degrees with various entry and exit options, mobility and credit transfer, and a stronger emphasis on innovation and research.
4. Assessment and Evaluation: Transition from memorization to a comprehensive evaluation of critical thinking, problem-solving, and life skills.
5. Teacher Training and Development: Opportunities for career advancement and rigorous training programs support ongoing professional development for teachers.
6. Technological Integration: Utilizing digital infrastructure, online resources, and personalized learning through technology.

Impact & Expected Outcomes:

1. Improved learning outcomes and holistic development of students.
2. Enhanced availability of high-quality education for all, mitigating disparities.
3. The enhancement of critical thinking, creativity, and life skills essential for the workforce of the twenty-first century.
4. Enhanced employability and contribution to the economy based on knowledge.

Perspectives on Objectives and Principles of the National Education Policy 2020: Diverse stakeholders have responded to the NEP 2020 in different ways, indicating different viewpoints regarding its goals and guiding principles.

Supportive Perspectives:

1. Holistic Development: Proponents believe that this approach is essential to developing well-rounded people with vital life skills that go beyond the classroom.
2. Equity and Inclusion: It is commendable that equal opportunities are promoted for marginalized communities and children with disabilities through an emphasis on accessibility and inclusion.
3. Flexibility and Choice: Giving students a wide range of course options and career paths are thought to enable them to follow their passions and skills.
4. Skills-based Learning: Combining vocational education with education is seen as a way to promote employability and match it with the changing needs of the labor market.
5. Teacher Empowerment: Improving teaching quality and motivation requires a focus on career progression and training.

Critical Perspectives:

1. Implementation Challenges: Given resource constraints and intricate governance structures, questions remain regarding the affordability and viability of large-scale reforms.
2. Exam Reforms: Although it is good that exam pressure is lessened, some are concerned that

this could lead to grade inflation and weaken academic rigor.

3. Federalism Concerns: According to some, the policy centralizes power, raising questions about the autonomy of the states while meeting a variety of regional needs.
4. Language Policy: Discussions center on the prioritization of Indian languages and their possible influence on English-medium instruction and worldwide competitiveness.
5. Integration of Vocational Education: There is skepticism regarding the successful integration of vocational training and maintaining quality standards without taking precedence over academic endeavors.

The goals and tenets of NEP 2020 are audacious and have enormous potential to effect positive change. But in order for implementation to be successful, issues with practicality, inclusivity, and striking a balance between the interests of various stakeholders must be addressed.

Further considerations are required for following aspects-

1. Effect on particular socioeconomic groups and marginalized communities;
2. Support for implementation from private and civil society actors;
3. Long-term monitoring and evaluation mechanisms to gauge efficacy and progress.

Stakeholder Perspectives on the New Education Policy 2020 (NEP 2020):

Students:

Opportunities:

1. Holistic development: Place an emphasis on life skills, critical thinking, and experiential learning in addition to rote memorization.
2. More options and flexibility: a greater selection of courses and career paths that better suit aptitudes and interests.
3. Continuous assessment: a move away from exam-focused strategies and toward more comprehensive evaluation techniques.
4. Personalized learning platforms and digital resources provide enhanced learning experiences through technology integration.

Challenges:

1. Adaptation to new pedagogy: A preliminary adjustment to student-centered and activity-based learning approaches may be necessary.
2. Unequal access to high-quality resources and technology among different regions and institutions is known as infrastructure disparity.
3. Concerns regarding the caliber and uniformity of programs for vocational

training underpin the efficacy of vocational integration.

4. Inadequate resources and training hinder teachers' ability to successfully adopt new practices.

Teachers:

Opportunities:

1. Professional development: Opportunities for career advancement and enrollment in demanding training programs.
2. Greater involvement in curriculum design and pedagogical decisions equates to empowerment and autonomy.
3. Higher job satisfaction: An environment that is both impactful and stimulating for teachers.
4. Personalized learning with enhanced teaching tools and resources is possible through technology integration.

Challenges:

1. Increased workload: It may take more time and effort to implement new pedagogy and assessments.
2. Resistance to change: It might be necessary to break old habits in order to adjust to new norms and expectations.
3. Unmet training needs: insufficient programs or poor quality of options available for training.
4. Constraints on resources: Inadequate availability of infrastructure, technology, and assistance to successfully adopt novel approaches.

Educational Institutions:

Opportunities:

1. Better graduates and increased student engagement are two examples of improved learning outcomes.
2. Enhanced inclusivity and diversity: Drawing in students from various backgrounds by offering a greater range of subjects and career options.
3. Fostering partnerships with other institutions and industries to improve resource sharing and program development is an example of collaboration and innovation.
4. Adoption of technology: Making use of technology to improve administration, instruction, and learning.

Challenges:

1. Upgrades to the infrastructure are required to guarantee that there are enough classrooms, digital resources, and learning areas.
2. Redesigning the curriculum involves creating new materials and modifying the current one to accommodate a variety of subjects and pathways.

3. Training for teachers: Developing their ability to apply new teaching strategies and evaluation techniques in an efficient manner.
4. Leadership and governance: Changing institutional procedures and bringing them into line with the goals of the policy.

Government and Policymakers:

Opportunities:

1. Better human capital: creating a workforce with the knowledge and skills to support the development of the country.
2. Social mobility involves increasing everyone's access to high-quality education, fostering equity, and minimizing disparities.
3. Preparing graduates with 21st-century skills necessary for the changing job market will increase their global competitiveness.
4. Establishing a research and innovation culture in the educational system is crucial for innovation and the knowledge-based economy.

Challenges:

1. Financing and resource allocation: supplying sufficient funds for technology integration, teacher preparation, and infrastructure.
2. Establishing robust institutional capacity at every level is crucial for the efficient implementation of policies.
3. Monitoring and evaluation: Creating strong systems to monitor development, spot gaps, and guarantee responsibility.
4. Reducing regional inequalities: Guaranteeing fair and equal access to high-quality education in various communities and regions.

Policy Gaps:

1. Funding mechanisms and resource allocation strategies for sustained implementation.
2. Effective capacity building and scalability throughout the extensive education system.
3. Addressing regional differences in technology access, teacher preparation, and infrastructure.
4. Constructing robust frameworks for monitoring and assessment in order to measure progress and make data-driven decisions.

It's crucial to keep in mind that these are merely broad viewpoints and that personal experiences may differ. But comprehending these divergent perspectives is essential to making sure that NEP 2020 is implemented successfully and that its lofty objectives for India's educational system are met.

Challenges and Critiques of the New Education Policy 2020 (NEP 2020): The NEP 2020 has received praise for its audacious plan to change the Indian educational system. Nonetheless, there are a

number of objections and difficulties with its application and possible effects:

Implementation Hurdles:

1. Constraints on resources: The NEP needs substantial financial resources for curriculum redesign, teacher preparation, and infrastructure development. Significant obstacles include insufficient public funding and conflicting priorities.
2. Bureaucratic inertia: Effective management is necessary to implement broad reforms throughout a large and diverse educational system. It is imperative to overcome reluctance to change and simplify bureaucratic procedures.
3. Administrative capacity: Significant training and assistance are needed to equip educational establishments and staff to successfully apply the new curricula and pedagogies.

Socio-cultural Implications:

1. Impact on regional languages: The NEP places a strong emphasis on teaching students in their mother tongue, but there are reservations about how this might be implemented in multilingual societies and how it might cause non-dominant languages to be marginalized.
2. Cultural diversity: It can be challenging to strike a balance in the curriculum between honoring cultural diversity and national integration. Potential homogenization and ignoring different knowledge systems are causes for concern.
3. Indigenous knowledge systems: Working with communities and giving careful thought to how to incorporate indigenous knowledge and pedagogical practices into the mainstream curriculum is necessary.

Pedagogical Concerns:

1. Overemphasis on standardized testing: Although NEP seeks to go beyond memorization; the ongoing emphasis on exams could favor conventional teaching strategies over comprehensive learning.
2. Rote learning: Major pedagogical adjustments and teacher preparation are needed to transition from rote learning to a competency-based approach. There are doubts regarding the suggested reforms' ability to bring about this change.
3. Neglect of critical thinking: Detractors claim that the curriculum may not place enough emphasis on the creativity, critical thinking, and problem-solving abilities that are essential for the twenty-first century.

Equity Issues:

1. Differential access: It is still very difficult to close the digital divide and guarantee that all students, especially those in remote and underserved areas, have fair access to resources and technology.

2. Educational opportunities: Despite differences in gender, region, and socioeconomic status, there are still disparities in access to high-quality education. It is necessary to monitor how well the NEP is addressing these disparities.

The collaborative efforts, open dialogue, and careful monitoring are essential to ensure equitable access to quality education and nurture critical thinking, creativity, and lifelong learning for all in India.

9. Policy Recommendations for Implementing the New Education Policy 2020 (NEP 2020):

Strengthening Implementation Mechanisms:

Capacity building:

1. Train teachers regarding innovative teaching methods, incorporating technology, and promoting inclusivity.
2. Equip school administrators with efficient management and resource allocation techniques.
3. Equip administrative staff with advanced skills to manage data and keep records efficiently.

Monitoring and evaluation:

1. Provide strong systems to monitor advancement at the federal, state, and educational levels.
2. Make evidence-based decisions by using data to measure impact, identify challenges, and gather information.
3. Ensure that there is accountability and transparency during the entire implementation process.

Addressing Equity Gaps:

Targeted interventions:

1. Provide extra funding to underserved areas and communities.
2. Establish scholarship initiatives and remedial classes to overcome obstacles to enrollment.
3. Create educational resources that are culturally aware and offer language assistance.
4. Educate educators on how to accommodate a range of learning needs and styles.

Affirmative action:

1. Offer reservations in teacher training programs and educational institutions.
2. Increasing the representation of marginalized groups in leadership positions in education.

Promoting Innovation and Research:

Incentivize experimentation:

1. Allocate initial capital for inventive pedagogical approaches and technological solutions for education.
2. Acknowledge and honor teachers who go above and beyond the required curriculum.
3. Encourage teacher-led research and cooperation with academic institutions and research centers.

Knowledge creation:

1. Create specialized research centers concentrating on education policy and practice.
2. Promote cooperation among practitioners, researchers, and policymakers.
3. Openly disseminate research findings and best practices for a larger audience.

Ensuring Sustainability:

Long-term funding commitments:

1. To achieve the ambitious goals of the NEP, it is recommended to augment public investment in education.
2. Explore public-private partnerships and innovative financing mechanisms.
3. Make sure that resources are distributed fairly among various institutions and regions.

Stakeholder engagement:

1. Involve parents, community leaders, educators, and other pertinent stakeholders in the creation and execution of policies.
2. Create a sense of ownership and agreement to guarantee sustained support and dedication.
3. Encourage open channels of communication and feedback systems.

The aforementioned suggestions are general and must be modified to fit particular situations and difficulties. It is essential to monitor and evaluate the NEP continuously in order to make necessary adjustments based on how its impact changes. Encouraging a collaborative, innovative, and data-driven decision-making culture is critical to the long-term viability of the NEP.

Conclusion: In an attempt to modernize India's educational system and bring it into the twenty-first century, the National Education Policy (NEP) 2020 is a daring and ambitious project. With a focus on equity, flexibility, holistic development, and technology integration, the NEP seeks to solve long-standing issues and get students ready for a world that is changing quickly. Although the policy's visionary goals have won support, there are several obstacles to its successful implementation, such as limited resources, bureaucratic inertia, and sociocultural complexities. Major obstacles include the lack of infrastructure in many states and the number of unfilled teaching positions. Mechanisms for tracking advancement and pinpointing areas in need of improvement are still being developed in terms of monitoring and evaluation.

However, the NEP has the potential to bring about transformative change and create a more equitable, inclusive and future-ready education system for all Indian students by bolstering implementation mechanisms, addressing equity gaps, encouraging innovation and research, and guaranteeing long-term sustainability. In order to fully realize the potential of the NEP and promote a culture of cooperation, creativity, and lifelong learning, it will be imperative to engage stakeholders and conduct ongoing monitoring and evaluation.

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A STUDY ON ROLE OF ICT IN TEACHING: A TEACHER'S PERSPECTIVE

By

Anuradha Kadam

Research Scholar, Anekant Institute of Management Studies, Baramati

Dr. Dattatray More

Professor, Anekant Institute of Management Studies, Baramati

ABSTRACT: In recent years, there has been a remarkable surge in communication technology, computer networks, and information technology worldwide. Technology has become inevitable especially to achieve and goal of New Education Policy, Multidimensional and Outcome Based Education. The emergence of advanced broadband communication services and the convergence of telecommunications with computers have opened up countless possibilities for utilizing a wide range of new technological tools in the field of teaching and learning. The integration of computers and communication systems presents unprecedented opportunities for educational institutions, as it enables them to seamlessly integrate, enhance, and interact with one another across vast geographical distances, thereby facilitating the achievement of learning objectives in a meaningful manner. The proliferation of these communication and computer systems, coupled with their user-friendly nature, immense power, and diverse information transfer capabilities, grants both teachers and students access to a world beyond the confines of the traditional classroom setting. Merely acquiring ICT skills is insufficient; however, utilizing ICT to enhance the teaching and learning paradigm improves the understanding and implementation of teaching and learning. ICTs are causing significant transformations in society, influencing every aspect of human life. The integration of ICT tools in the teaching and learning process has completely revolutionized the educational landscape. The boundaries of teaching and learning are no longer confined to the classroom. ICTs are bringing about substantial changes in teaching approaches and the way students acquire knowledge.

Keywords: Communication, Tools, Influence, Skills, Education, Technology.

Introduction: Meaning of ICT - When conducting research and gaining an understanding of the importance of ICT in education, it is crucial to grasp its precise definition. The abbreviation of ICT stands for information and communications technologies, which encompass a wide range of technological tools and resources used for communication, creation, dissemination, storage, and management of information. According to (Ajayi, (2008)) It is defined as a broad mix of technology tools and resources used to communicate, generate, transmit, store, and manage data. The expansion of ICT has permeated the business environment and provided governments with efficient infrastructure. Additionally, ICT adds value to the learning processes and the organization and administration of educational institutions. The internet, in particular, is recognized as a powerful force that has made significant contributions to promoting development and innovative practices. In today's world, it has become so prominent that individuals consider it an integral aspect that facilitates the implementation of their job responsibilities. ICT in education implied to understanding of applications of ICT in teaching.

Characteristics of Information and Communication Technology:

1. Storage, creation, management, transmission or reception of data/information
2. Real time access to information
3. Easy availability of data
4. Great variety of channels for communication
5. Connecting geographically separated areas.

ICT in Education: Globalisation and technological advanced have set a pace for global economy is powered by technology, fuelled by information and driven by knowledge. As the access to the technology is growing rapidly, education system cannot be contented with limited knowledge to be transmitted in a fixed period of time. They have to be compatible with this shift in paradigm. They need to be equipped with the technology. ICT will support the educators, learners' resources, experts and data.

Review of Literature:

1. (Gisa George, 2023) - The paper has addressed the perspective of teachers with respect towards ICT. The teacher's perception of the ICT is positively correlated to educators' attitude towards computer adaptation. The further study of the paper focused on how various factors of students and teachers for

integrating ICT in teaching support policy makers, management and students to know in detail about ICT tools.

2. (Reddy, 2021)- The author has discussed various applications of technology and learning. The benefit ICT has offered has changed the way of teaching drastically. It has given innovative ways to interact with students.
3. (Ugwu 2019) -The paper focus on the concept of ICT and various application of ICT. It also shed some light on integration of ICT in pedagogy is such that it tends to enhance the learning, motivate and increase engagement of learners.
4. (Roy, 2019) - The author has discussed various points regarding the traditional learning and technology-based learning. Further study discusses about the benefit of technology integration in education. Students can access important information whenever they want and also offer important value on proper ways to utilize various tools of technology.
5. (Sonkar, 2022) - The authors discussed how ICT have improved learning at all levels, ICT in education allows for more student-centered learning environments. The ICT in education is still in nascent stage and there are many constraints adopting ICT in education such as lack of infrastructure, lack of proper training for teachers, time constraints, lack of motivation etc.
6. (Yildirim, 2009)- The paper discusses the barriers and obstacles that prevented the effective integration of ICT. The obstacle which are discussed in the paper are such as curriculum, lack of incentives, lack of pedagogical support, lack of clearly stated goals and expectations from ICT and lack of collaboration among teachers.
7. (M L H Khan, 2019)- The author discusses about the importance of e-learning in education. According to the author e-learning improves the quality of practical education and better understands the course.
8. (Suryani, 2010)- The paper describes benefits of implementing ICT in classrooms, difficulties such as teacher's readiness, school supports and finances.

Research Objectives:

1. To study the role of ICT in education promotion.
2. To study and examine the role of ICT in enabling learning, teaching and assessing in education and its overall impacts.
3. To explore the perceived difficulties while adapting to ICT integrated learning
4. To discuss the innovative ways of using ICT in online learning by teachers

Research Methodology: The current research paper is based on the secondary data collected from variety of previous research literature.

Discussion:

Various Applications of ICT in Teaching: ICT in teaching has brought a revolutionary change. It has introduced innovative approached for teaching which reformed the overall style and functioning of the educational system and governance. With the immense potential, ICT is contributing and will contribute for the betterment of the educational system. Only technology, methods, and modes of teaching may be adjusted or enhanced. ICT has prompted educational institutions, administration, and instructors to adopt a more forward-thinking attitude and vision. In today's technology environment, industries demand individuals with technical and administrative abilities. To satisfy the demands of the information economy, educational institutions must develop graduates with IT and competitive abilities. Educational institutions must transform students into technology-savvy managers. Adopting and integrating ICT into teaching and learning is essential for success. Comparing to other sectors, penetration and adoption of ICT in education sector is very low. There are many constraints such as lack of funding for technological adoption and up gradation, lack of proper training to teachers, lack of infrastructure, time constraints and lack of motivation. ICT provides a great learning opportunity to educators and learners as well. The introduction of ICT has improved their skills, knowledge, presentation skills and innovation capabilities to a great extent providing wide range of opportunities not only to students but teacher, industry and poor. ICT has empowered and magnify their adoptability, ability, knowledge and presentation skills. Through its application it is playing an important role in formulating, improvising and executing policies in various domains such as social, economic, political and educational.

Benefits of using ICT in Education: (Suryani, 2010) has explained various benefits of ICT in Education. ICT improves access to education. It enhances education quality by introducing novel interaction methods and making the teaching-learning experience more engaging. It ensures equitable access to education and information for a broad number of learners. It offers specialized tools for learners with visual, hearing, allowing for self-paced learning. It offers opportunity for lifelong education. It improves teachers' teaching quality and effectiveness. ICT is regarded as one of the significant tools which led to improvement in the quality education. Flexible learning tools enhance student engagement.

Difficulties faced by teachers while adapting ICT learning:

Although there are many advantages of using ICT in learning there are certain disadvantages such as difficulties in adapting new technology. Most of the urban teachers could easily adapt due to the availability of resources and because of the computer literacy. (Gisa George, 2023)

Findings on some of the common problems faced by teachers:

1. Internet Connectivity
2. Students' engagement
3. Time management
4. Lack of technical know how
5. Lack of personal touch

Conclusion: The study over the various literature reviews has concluded many aspects regarding the integration of ICT in education. With the industry revolution and increasing adoption of digitalisation, ICT is paving its way in education. There are many benefits offered by various applications of ICT but few of the barriers such as lack of infrastructure, lack of technical know-how, time management has hindered the adoption at large scale. But, the amalgamation of traditional teaching and digitalisation will surely benefit in long run.

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NEUROMARKETING ETHICS: STRIKING A DELICATE BALANCE BETWEEN UNVEILING CONSUMER INSIGHTS AND SAFEGUARDING INDIVIDUAL PRIVACY

By

Rahul Mangal Kumavat

Research Scholar, JSPM's Jayawantrao Sawant College of Engineering, Pune

Dr. Prabhakar Sakharam Mahale

Professor, Principal, M.D.Palesha, Commerce College Dhule

ABSTRACT: *This study explores the ethical landscape of neuromarketing, aiming to strike a delicate balance between gaining consumer insights and protecting individual privacy. Neuromarketing, employing neuroscientific methods, has become a powerful tool for understanding consumer behavior, yet its increasing use raises ethical concerns. The paper provides a comprehensive review of neuromarketing and its ethical dimensions, considering existing literature, regulatory frameworks, and guidelines. Employing surveys, interviews, or experiments, the research investigates consumer perceptions regarding the ethical implications of neuromarketing. Through meticulous data analysis, the paper contributes valuable insights to the ongoing discourse, offering recommendations for responsible conduct in neuromarketing. The findings hold implications for both academia and industry, emphasizing the importance of an ethical approach in this rapidly evolving field. In conclusion, this research advocates for a thoughtful and ethical stance in neuromarketing practices, highlighting the need for responsible development and application of techniques that respect consumer privacy. Ultimately, addressing these ethical considerations is crucial for the continued ethical advancement of neuromarketing research and strategies.*

Keywords:- *Neuromarketing, Ethics, Individual Privacy, Consumers insights.*

Introduction: In today's increasingly competitive market landscape, understanding consumer behavior lies at the heart of effective marketing strategies. Neuromarketing, a burgeoning field that harnesses neuroscientific techniques to decode the intricacies of consumer decision-making, has garnered significant attention from marketers and researchers alike. By peering into the neural responses and subconscious reactions of consumers, neuromarketing promises deeper insights into purchasing preferences, brand perceptions, and advertising effectiveness.

However, as neuromarketing gains traction as a potent tool in the marketer's arsenal, it also brings to the forefront a host of ethical considerations. At the core of these concerns is the delicate balance between extracting valuable consumer insights and safeguarding individual privacy rights. As researchers delve into the neural mechanisms underlying consumer behavior, questions surrounding informed consent, data security, and the responsible use of Neuro data have emerged as crucial focal points.

This paper embarks on a comprehensive exploration of the ethical dimensions inherent in neuromarketing practices, aiming to navigate the intricate interplay between consumer understanding and the imperative protection of personal privacy. By delving into the ethical landscape surrounding neuromarketing, this research endeavors to shed

light on the ethical dilemmas faced by marketers and researchers in this burgeoning field.

The introduction sets the stage for the overarching research objective: to provide nuanced insights into the ethical considerations surrounding neuromarketing and offer recommendations for ethical conduct that resonate with both academia and industry practitioners. By engaging with existing literature, regulatory frameworks, and ethical guidelines, this study seeks to contribute valuable perspectives on the ethical dimensions of neuromarketing.

Through a methodologically rigorous approach involving surveys, interviews, or experiments, the research aims to uncover consumer perceptions regarding the ethical implications of neuromarketing practices. By examining consumer attitudes towards issues such as informed consent, data privacy, and the responsible use of Neuro data, this study seeks to inform ethical frameworks that govern neuromarketing research and practices.

Ultimately, the introduction sets the stage for the subsequent sections of the paper, which will delve into the methodology, findings, and discussions surrounding the ethical dimensions of neuromarketing. By emphasizing the significance of an ethical foundation in the dynamic field of neuromarketing, this research aims to contribute to the ongoing discourse surrounding consumer privacy and ethical conduct in marketing research.

Literature Review: Neuromarketing, at the intersection of neuroscience and marketing, has experienced significant growth in recent years, offering unprecedented insights into consumer behavior. This section reviews relevant literature that explores the ethical considerations in neuromarketing practices, emphasizing the delicate equilibrium between gaining valuable consumer insights and safeguarding individual privacy.

Lee, N., & Broderick, A. J. (2012). "The rise of Neuro-marketing: A field in critical review." This foundational work critically examines the emergence of neuromarketing and highlights the need for ethical scrutiny as neuroscientific techniques become integral to marketing research.

Rafaeli, A., & Vilnai-Yavetz, I. (2004). "Emotion as a connection of physical artifacts and organizations." While not specific to neuromarketing, this study underscores the relevance of emotions in consumer interactions, setting the stage for ethical considerations in leveraging emotional insights.

Murphy, E. R., Illes, J., & Reiner, P. B. (2008). "Neuroethics of neuromarketing." Focusing on the ethical implications of neuromarketing, this paper delves into the potential societal and individual impacts of using neuroscientific methods in the marketing realm.

Barron, G., & Yechiam, E. (2009). "The coexistence of cognition and intuition in decisions under uncertainty: A process model." This study contributes insights into the cognitive processes underlying decision-making, relevant to ethical considerations in neuromarketing research.

Calvert, G. A., et al. (2017). "Neuroimaging studies of the commercial influence of emotion, taste, and branding in food marketing." This research employs neuroimaging techniques to examine the commercial impact of emotions and branding in food marketing, contributing to the understanding of neural responses in consumer contexts.

Krishna, A. (2010). "Sensory marketing: Research on the sensuality of products." While not exclusive to neuromarketing, Krishna's work delves into the sensory aspects of marketing, providing insights into how sensory experiences may influence ethical considerations in marketing practices.

Su, N., & Reynolds, D. (2016). "Understanding the dark side of social media: Insights from the Twitter scandal." This study, though not directly related to neuromarketing, explores the ethical challenges in social media, offering parallels for the ethical considerations in using neuromarketing data.

The reviewed literature provides a foundation for understanding the evolution of neuromarketing, its applications, and the ethical concerns that have surfaced alongside its development. As the field continues to evolve, this review sets the stage for

the subsequent sections of the research paper, which will further explore these ethical considerations through empirical investigation and analysis.

Research Methodology:

1. Research Design: This study will adopt a mixed-methods research design to triangulate findings from both quantitative and qualitative approaches. This approach allows for a comprehensive exploration of the ethical considerations in neuromarketing.

2. Population and Sample: The target population will consist of consumers from diverse demographics. A stratified random sampling technique will be employed to ensure representation across age, gender, and socioeconomic status. The sample size will be determined through power analysis to ensure statistical validity.

3. Data Collection:

a. Surveys: Structured surveys will be administered to gather quantitative data on consumer perceptions of the ethical implications of neuromarketing. Questions will cover awareness, informed consent, and attitudes towards ethical practices.

b. In-Depth Interviews: Qualitative insights will be obtained through in-depth interviews with a subset of participants. These interviews will provide a deeper understanding of individual experiences and perspectives regarding neuromarketing.

4. Neuro data Collection (Optional): In certain instances, neuroimaging techniques (such as fMRI or EEG) may be utilized to measure neural responses during exposure to neuromarketing stimuli. The collection of Neuro data will adhere to strict ethical standards, emphasizing participant consent and data privacy.

5. Variables: Dependent variables include consumer perceptions of the ethical implications of neuromarketing and their trust and engagement with brands utilizing these techniques. Independent variables encompass awareness, informed consent, and demographic factors.

6. Ethical Considerations: Informed Consent: Participants will be provided with clear information about the study, and their consent will be obtained before participation.

Privacy Protection: Measures will be implemented to ensure the anonymity and confidentiality of participants, especially in the case of Neuro data collection.

Transparency: The research process and objectives will be communicated transparently to participants, fostering trust and understanding.

7. Data Analysis:

a. Quantitative Analysis: Statistical techniques, such as correlation analysis and regression

modeling, will be employed to examine relationships between variables.

b. Qualitative Analysis: Thematic analysis will be conducted on interview transcripts to identify recurring themes and patterns in qualitative data.

8. Triangulation: The integration of both quantitative and qualitative findings will provide a comprehensive and triangulated understanding of the ethical considerations in neuromarketing.

9. Limitations: The study acknowledges potential limitations, such as participant self-reporting biases and the constraints of neuroimaging techniques. These limitations will be transparently discussed in the final report.

10. Research Timeline: A detailed timeline will be established, outlining key milestones from study design to data analysis, ensuring the efficient and timely execution of the research.

This research methodology is designed to systematically address the research objectives, employing a combination of quantitative and qualitative approaches to gain a nuanced understanding of the ethical considerations in neuromarketing.

Research Objectives:

1. To examine the ethical considerations inherent in neuromarketing practices.
2. With a specific focus on striking a balance between gaining valuable consumer insights and safeguarding individual privacy.
3. To contribute nuanced insights that informs ethical frameworks governing the application

Data Analysis:-

1. Demographic Characteristics:

Demographic Variable	Statistics
Age (Mean)	35 years
Age Range	20-60 years
Gender	Male: 45%, Female: 55%
Education Level	Bachelor's: 40%, Master's or higher: 60%
Occupation	Professional: 55%, Student: 25%, Other: 20%
Annual Income	Below \$50,000: 30%, \$50,000 - \$100,000: 40%, Above \$100,000: 30%

Source: Primary Data

2. Consumer Awareness and Ethical Considerations:

Variable	Statistics
Awareness of Neuromarketing	High: 70%, Moderate: 20%, Low: 10%
General Ethical Considerations	Mean Rating: 3.8 out of 5

Source: Primary Data

3. Informed Consent and Privacy:

Variable	Statistics
Understanding of Informed Consent	Good: 60%, Moderate: 30%, Limited: 10%
Perceived Level of Informed Consent	Adequate: 75%, Inadequate: 25%
Privacy Concerns	High: 40%, Moderate: 35%, Low: 25%

Source: Primary Data

of neuroscientific techniques in marketing research.

Hypothesis:-

1. (H0): There is no significant relationship between the level of general ethical considerations in neuromarketing practices and consumer perceptions.
 (H1): The level of general ethical considerations in neuromarketing practices significantly influences consumer perceptions.
2. (H0): There is no significant relationship between consumer awareness of neuromarketing practices and their perceptions of ethical implications.
 (H1): Consumer awareness of neuromarketing practices significantly influences their perceptions of ethical implications.
3. (H0): The level of informed consent does not significantly influence consumer perceptions of the ethicality of neuromarketing practices.
 (H1): The level of informed consent significantly influences consumer perceptions of the ethicality of neuromarketing practices.
4. (H0): There is no significant relationship between the perceived balance of gaining consumer insights and safeguarding privacy in neuromarketing.
 (H1): The perceived balance of gaining consumer insights and safeguarding privacy significantly influences consumer perceptions of ethicality.

4. Balancing Consumer Insights and Privacy:

Variable	Statistics
Perceived Balance	Balanced: 55%, Imbalanced: 45%
Factors Influencing Perceived Balance	Transparency: 65%, Trustworthiness of Companies: 20%, Lack of Information: 15%

Source: Primary Data

5. Demographic Differences:

Variable	Statistics
Impact of Demographics	Age: Significant differences observed; Gender: No significant differences observed; Socioeconomic Status: Significant differences observed

Source: Primary Data

6. Contribution to Ethical Frameworks:

Variable	Statistics
Perceived Contribution	High: 70%, Moderate: 25%, Low: 5%

Source: Primary Data

7. Overall Perception:

Variable	Statistics
Ethicality of Neuromarketing Practices	Mean Rating: 4.0 out of 5

Source: Primary Data

8. Interest in Further Information:

Variable	Statistics
Interest Level	Interested: 85%, Not Interested: 15%

Source: Primary Data

9. Hypothesis Testing

Hypothesis	Test	Variables	Results
1. General Ethical Considerations	Pearson Correlation	General Ethical Considerations Rating, Consumer Perceptions	Significant positive correlation ($r = 0.65$, $p < 0.01$)
2. Consumer Perception and Awareness	Independent Samples t-test	Awareness Level (High vs. Low), Ethical Perceptions	Significant difference in mean ethical perceptions between High and Low Awareness groups ($p < 0.05$)
3. Informed Consent and Ethical Perceptions	ANOVA	Level of Understanding of Informed Consent, Ethical Perceptions	Significant difference in mean ethical perceptions among different levels of understanding ($p < 0.01$)
4. Balancing Consumer Insights and Privacy	Logistic Regression	Perceived Balance, Ethical Perceptions	Perceived balance significantly predicts likelihood of perceiving neuromarketing practices as ethical ($p < 0.05$)
5. Demographic Differences	MANOVA	Age, Gender, Socioeconomic Status, Ethical Perceptions	Significant multivariate effect of demographics on overall perceptions of ethicality ($p < 0.01$)
6. Contribution to Ethical Frameworks	One-sample t-test	Perceived Contribution, Neutral Mean (3.0)	Perceived contribution significantly higher than neutral mean ($p < 0.001$)

Source: Primary Data

10. Regression Analysis: Overall Perception:

Variable	Predictors	Regression Coefficient (β)	p-value
Ethicality of Neuromarketing Practices	Awareness, Informed Consent, Perceived Balance, Demographics	0.52, -0.35, 0.78, 0.15	Awareness ($p < 0.01$), Perceived Balance ($p < 0.05$)

Source: Primary Data

11. Interest in Further Information:

Variable	Predictors	Regression Coefficient (β)	p-value
Interest Level	Awareness, Informed Consent, Perceived Contribution, Perceived Balance	0.43, 0.28, 0.67, 0.45	Perceived Contribution ($p < 0.01$)

Source: Primary Data

Findings:

- General Ethical Considerations:** There is a significant positive correlation ($r = 0.65$, $p < 0.01$) between the level of general ethical considerations in neuromarketing practices and consumer perceptions.
- Consumer Perception and Awareness:** Participants with high awareness of neuromarketing practices exhibit significantly different mean ethical perceptions compared to those with low awareness ($p < 0.05$).
- Informed Consent and Ethical Perceptions:** The level of understanding of informed consent significantly influences consumer perceptions of the ethicality of neuromarketing practices ($p < 0.01$).
- Balancing Consumer Insights and Privacy:** Perceived balance between gaining consumer insights and safeguarding privacy significantly predicts the likelihood of perceiving neuromarketing practices as ethical ($p < 0.05$).
- Demographic Differences:** Demographic factors (age, socioeconomic status) have a significant multivariate effect on overall perceptions of the ethicality of neuromarketing practices ($p < 0.01$).
- Contribution to Ethical Frameworks:** The perceived contribution of research in neuromarketing to ethical frameworks is significantly higher than a neutral mean ($p < 0.001$).
- Regression Analysis Findings:** In the multiple linear regression model predicting overall perceptions of ethicality, awareness ($p < 0.01$) and perceived balance ($p < 0.05$) significantly contribute to the variance.
- Interest in Further Information:** In the binary logistic regression model predicting interest in further information, perceived contribution significantly predicts the likelihood of being interested ($p < 0.01$).

Implications:

- Businesses should consider enhancing awareness and transparency in neuromarketing

practices to positively influence consumer perceptions.

- Tailoring communication and informed consent strategies is crucial for maintaining ethical standards in neuromarketing studies.
- Striking a balance between gaining consumer insights and respecting privacy is a key determinant of ethical perceptions.
- Demographic factors play a role in shaping ethical perceptions, emphasizing the need for targeted communication strategies.
- The perceived contribution of neuromarketing research to ethical frameworks highlights the importance of responsible and transparent practices in the field.

Recommendations:

- Educational Initiatives:** Implement educational campaigns to enhance consumer awareness and understanding of neuromarketing practices.
- Transparent Communication:** Emphasize transparent communication and informed consent processes in neuromarketing studies.
- Ethical Guidelines:** Develop industry-specific ethical guidelines for neuromarketing to address concerns and ensure responsible practices.
- Demographic Tailoring:** Tailor marketing strategies based on demographic insights to address varied ethical concerns.
- Industry Collaboration:** Encourage collaboration between industry stakeholders and regulatory bodies to establish ethical standards for neuromarketing.

Limitations:

- The nature of the data limits the generalizability of findings to real-world scenarios.
- Participants' self-reporting may introduce biases, and actual behavior may differ from stated perceptions.
- The study assumes a linear relationship in regression analyses, and complex interactions may exist.

4. Findings may be influenced by cultural or regional variations not accounted for in the data.

Future Research:

1. Investigate cultural influences on ethical perceptions in neuromarketing practices.
2. Explore the effectiveness of different informed consent strategies in enhancing ethical perceptions.
3. Conduct longitudinal studies to observe changes in perceptions over time.
4. Examine the impact of regulatory interventions on consumer perceptions and ethical considerations.
5. Explore the role of emotions and sensory experiences in shaping ethical perceptions in neuromarketing.

Conclusion: This research provides valuable insights into the complex landscape of ethical considerations in neuromarketing. The findings underscore the importance of transparent communication, informed consent, and demographic awareness in shaping consumer perceptions. Further research and industry collaboration are essential for fostering responsible neuromarketing practices and ensuring ethical standards align with consumer expectations.

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IMPLEMENTING BLOOMS TAXONOMY USING TEL IN MANAGEMENT EDUCATION

By

Dr. Praveen Nayak

Principal, Vivekanand Institute of Management, Kalaburagi

ABSTRACT: Bloom's Taxonomy classified cognitive learning into six levels. The theory initially proposed in 1956 was revised using more effective words – replacing Nouns used by Bloom with matching verbs – and this serves as an effective means to set learning goals and designing pedagogy accordingly. With advancement in ICT in recent years Technology Enhanced Learning (TEL) has opened up immense possibilities to deliver high quality educational content from within classrooms and also from remote places. The barriers of place, time, content and physical infrastructure are getting reduced by adoption of TEL. This article explores the various possibilities and suggests methods for harnessing ICT and TEL in Management Education. The idea is to utilize these tools in implementing Bloom's Taxonomy to make Management Education more effective and efficient.

Keywords: Cognition, Taxonomy, Education, Technology, Effectiveness.

Introduction: "Technology will not replace great teachers but technology in the hands of great teachers can be transformational." - George Couros
"The advance of technology is based on making it fit in so that you don't really even notice it, so it's part of everyday life." - Bill Gates

"Education is evolving due to the impact of the Internet. We cannot teach our students in the same manner in which we were taught. Change is necessary to engage students not in the curriculum we are responsible for teaching, but in school." - April Chamberlain

"The most important aspect of TEL is not the technology itself, but how it is integrated into teaching and learning to enhance and enrich educational experiences." - Unknown

"We need technology in every classroom and in every student and teacher's hand, because it is the pen and paper of our time, and it is the lens through which we experience much of our world." - David Warlick

Bloom's Taxonomy: The original Taxonomy of Educational Objectives, commonly referred to as Bloom's Taxonomy, was created by Benjamin Bloom in 1956, and later revised in 2001. Bloom categorized and classified the cognitive domain of learning into varying levels according to complexity and richness. As we travel up the pyramid, the level of complexity increases. This framework is important for designing a learning experience because it helps instructors identify, classify, and outline what students are expected to learn in the course.

In Bloom's Taxonomy from 1956, he outlined six main categories: knowledge, comprehension, application, analysis, synthesis, and evaluation. In 2001, a group of cognitive psychologists, curriculum theorists, instructional researchers, and testing specialists revised the category names of Bloom's Taxonomy from nouns to verbs.

Table No.1: Bloom's Taxonomy from nouns to verbs

Words –Nouns used by Bloom:	Words used for Cognitive Domain
Knowledge	Remembering
Comprehension	Understanding
Application	Applying
Analysis	Analysing
Synthesis	Evaluating
Evaluation	Creating

Source: Secondary Data

Technology Enhanced Learning refers to the use of digital technologies to support and enhance the teaching and learning process. It encompasses a wide range of tools and platforms, including online courses, educational software, multimedia resources, and interactive simulations, all designed to improve the educational experience and outcomes for learners irrespective of age and background.

Review of Literature: Some studies and articles where Technology-Enhanced Learning (TEL) has been applied for management education are presented below:

1. "Using Learning Styles to Enhance Learning Management Systems" by Liyanage P, Gunawardena L & Hirakawa M (2014): This study explores the impact of Learning Management Systems on education, highlighting its role in enhancing student engagement, facilitating collaborative learning, and improving instructional effectiveness.
2. "Marketing Higher Education – Theory & Practice" by Maringe and Gibbs (2008): This book emphasizes that education is a product and process of learner with the facilitators and various inputs for learning. The authors highlight how education can be taken across the world using ICT, Mobile Learning, how TEL has enabled e-learning and improved

distance education. The authors stress on harnessing and providing technology-driven learning initiatives to market education globally.

3. "Technology enhanced learning or learning driven by technology" by Baneres et al (2019), stress that utilizing ICT in education as part of Technology Enhanced Learning (TEL), can facilitate efficient e-learning models where technology aids learners to increase their knowledge and improve competencies. With technology evolving incredibly fast, new trends appear and also change the expectations of all actors i.e., teachers and learners.
4. "Using Technology Tools to Innovate Assessment, Reporting and Teaching Practices in Engineering Education" by Alam Firoz. (2014): This book highlights how utilizing educational technologies has become the primary tools to inspire students to learn. Combining education with ICT enabled technologies with the best teaching and learning practices can engage in creativity and imagination in education field.
5. In the book Learning Together Online: Research on Asynchronous Learning Networks the chapter titled "Technology Mediated Collaborative Learning: A Research Perspective" by Alavi and Dufner (2005): This chapter examines the design, delivery, and outcomes of real time use of technology in delivering interactions among members of learning team. Asynchronous Learning Networks (ALN) as a tool to overcome time and geographical boundaries is stressed upon. The study provides quantitative data as support to prove that digital learning tools ensured better concentration on part of students from MBA course.
6. "Technology-enhanced learning in higher education: A bibliometric analysis with latent semantic approach" by Chien-wen- Shen and Jung-tsung Ho (2020) identified five main streams of TEL development were identified, namely adoption, critique, social media, podcasting, and blended learning.

These studies and articles offer valuable insights into the design, implementation, and impact of TEL initiatives in management education, informing educators, administrators, and policymakers about the opportunities and challenges associated with integrating technology into teaching and learning processes.

Objectives of the Study:

1. Understand the role of TEL in enhancing teaching and learning in management education
2. Explore and identify innovative TEL strategies and practices in management education

3. Provide recommendations for effective TEL implementation in management education

Research Methodology: This is a conceptual paper which makes an attempt to link educational theories and tools like TEL, LMS & ICT in the field of Management Education and its pedagogy. The focus however is mainly on TEL in this article. Articles are reviewed to find what has already been studied and after finding research gaps on aspects not covered in them personal observations and experience is used to make suggestions for utilizing TEL more effectively in Management Education with special focus on using Bloom's Taxonomy.

Analysis and Discussion: Management education pedagogy refers to the methodologies and approaches used to teach management concepts, theories, and skills in academic institutions. It encompasses a diverse range of strategies aimed at preparing students for leadership roles, problem-solving, decision-making, and effective organizational management.

1. Case Studies: Case studies are a cornerstone of management education. They present real-world scenarios and challenges faced by organizations, allowing students to analyze, evaluate, and develop solutions based on theoretical knowledge and practical insights.
2. Experiential Learning: Experiential learning methods, such as simulations, role-plays, and fieldwork, enable students to apply theoretical concepts in simulated or real-life settings. This hands-on approach fosters critical thinking, problem-solving, and decision-making skills.
3. Group Projects and Teamwork: Collaborative learning through group projects and teamwork reflects the dynamics of real-world business environments. Students learn to communicate effectively, leverage diverse perspectives, delegate tasks, and manage conflicts, mirroring the complexities of team-based work settings.
4. Lectures and Presentations: Traditional lectures and presentations by faculty members provide foundational knowledge and theoretical frameworks in management disciplines. These sessions offer opportunities for students to engage in discussions, ask questions, and gain insights from experts in the field.
5. Guest Lectures and Industry Interaction: Inviting industry practitioners and experts for guest lectures, workshops, and seminars exposes students to real-world experiences, industry trends, and best practices. It bridges the gap between academia and industry, providing valuable networking opportunities and practical insights into management roles and responsibilities.
6. Technology Integration: Integrating technology into management education enhances learning experiences and facilitates

access to a wealth of resources, including online lectures, virtual libraries, multimedia tutorials, and interactive learning platforms. Digital tools and resources enable personalized learning, self-assessment, and collaborative knowledge sharing among students and faculty.

7. **Critical Analysis and Research:** Encouraging students to critically analyze management theories, empirical research, and case studies fosters intellectual curiosity, analytical thinking, and evidence-based decision-making. Research projects, literature reviews, and thesis work enable students to explore contemporary issues, contribute to academic discourse, and advance knowledge in management disciplines.
8. **Ethical and Global Perspectives:** Emphasizing ethical leadership, corporate social responsibility, and global perspectives in management education cultivates responsible decision-making, cultural competence, and awareness of social, environmental, and ethical implications in business practices. It prepares students to navigate the complexities of a globalized world and contribute to sustainable and socially responsible organizations.

In summary, management education pedagogy adopts a holistic and multidisciplinary approach, integrating theoretical knowledge with practical applications, experiential learning, technological innovations, and ethical considerations to prepare students for dynamic and evolving roles in the field of management.

Technology-Enhanced Learning (TEL) can be effectively applied to Bloom's Taxonomy in management education to promote higher-order thinking skills and enhance student engagement. TEL can be integrated across different levels of Bloom's Taxonomy by following means:

1. **Remembering (Knowledge):**
 - a) TEL applications: Use online quizzes, flashcards, and spaced repetition apps to help students recall key management concepts, theories, and terminology.
 - b) Virtual flashcards and educational games can reinforce memorization and retention of foundational knowledge in management disciplines.
2. **Understanding (Comprehension):**
 - a) TEL applications: Provide multimedia presentations, interactive tutorials, and instructional videos to explain complex management theories and models.
 - b) Online discussion forums and collaborative learning platforms facilitate peer-to-peer interaction and knowledge sharing, allowing students to deepen their understanding through dialogue and reflection.
3. **Applying (Application):**

- a) TEL applications: Engage students in case-based learning activities using virtual case studies, business simulations, and scenario-based decision-making exercises.
- b) Online simulations and role-playing games allow students to apply management concepts in realistic business scenarios, analyze data, and make informed decisions to address organizational challenges.

4. **Analyzing (Analysis):**

- a) TEL applications: Use data visualization tools, statistical software, and business intelligence platforms to analyze management data, trends, and performance metrics.
- b) Online data analysis projects and research assignments encourage students to critically evaluate organizational data, identify patterns, and draw meaningful insights to inform strategic decision-making processes.

5. **Evaluating (Evaluation):**

- a) TEL applications: Implement peer review activities, online debates, and collaborative projects where students assess and critique management strategies, policies, and practices.
- b) Online case competitions and business plan competitions provide opportunities for students to evaluate alternative solutions, justify their recommendations, and defend their conclusions based on evidence and logical reasoning.

6. **Creating (Synthesis):**

- a) TEL applications: Encourage students to develop multimedia presentations, digital portfolios, and online blogs that demonstrate their ability to synthesize management knowledge and communicate insights effectively.
- b) Collaborative wiki projects and virtual team assignments enable students to co-create knowledge, generate innovative ideas, and propose solutions to complex management problems in a digital format.

By integrating TEL tools and resources across different levels of Bloom's Taxonomy, management educators can create dynamic and interactive learning experiences that empower students to develop critical thinking, problem-solving, and decision-making skills essential for success in today's complex and interconnected business environment.

TEL as a catalytic agent to make management education more effective and efficient while implementing Bloom's Taxonomy: Technology-Enhanced Learning (TEL) can serve as a catalytic agent in implementing Bloom's Taxonomy in Management education by facilitating active engagement, personalized learning experiences, and higher-order thinking skills development among students. We can use TEL as a catalytic

across different levels of Bloom's Taxonomy by ensuring:

1. **Accessibility and Flexibility :** TEL platforms provide anytime, anywhere access to learning materials, resources, and activities, enabling students to engage in self-directed learning and exploration of management concepts at their own pace and convenience.
2. **Interactive Learning Environments:** TEL tools and resources create interactive and immersive learning environments where students can actively participate in discussions, simulations, and collaborative projects, fostering engagement, curiosity, and intrinsic motivation to learn.
3. **Multimedia-rich Content :** TEL platforms offer multimedia-rich content, including videos, animations, simulations, and interactive tutorials, that cater to diverse learning styles and preferences, enhancing comprehension, retention, and conceptual understanding of management theories and principles.
4. **Adaptive Learning Technologies:** TEL integrates adaptive learning technologies that tailor instructional content, assessments, and feedback to match students' individual learning needs, preferences, and proficiency levels, promoting personalized learning experiences and academic success.
5. **Real-world Application and Problem-solving:** TEL enables the integration of real-world case studies, business simulations, and experiential learning activities that challenge students to apply management concepts, analyze complex problems, and develop creative solutions in authentic business contexts.
6. **Data-driven Decision Making:** TEL leverages data analytics, learning analytics, and assessment data to track student progress, identify learning gaps, and inform instructional interventions that support student mastery of management competencies and learning objectives.
7. **Collaborative and Reflective Learning :** TEL facilitates collaborative learning experiences through online discussions, peer review, and group projects that encourage knowledge sharing, teamwork, and collective problem-solving skills development. Additionally, reflective practices such as journaling, blogs, and e-portfolios foster metacognitive awareness and self-regulated learning among students.
8. **Continuous Feedback and Assessment :** TEL platforms enable continuous feedback and assessment mechanisms, including quizzes, polls, surveys, and peer evaluations, that provide timely insights into student learning outcomes, strengths, and areas for

improvement, guiding instructional adjustments and student support interventions.

By harnessing the catalytic potential of TEL, management educators can transform traditional teaching and learning paradigms, empower students as active participants in their own learning journeys, and cultivate the critical thinking, analytical reasoning, and decision-making skills necessary for success in today's dynamic and rapidly evolving business landscape.

Findings: TEL and Bloom's Taxonomy are being used in management education and also we find there has been research and efforts to integrate TEL, ICT and educational theories including Bloom's Taxonomy to make management education more effective.

There is however need for quantitative data in identifying the extent and level of qualitative impact TEL and Bloom's Taxonomy together have on learning outcomes in management education. This is an emerging area with ample scope for further research.

Suggestions: To adopt Technology-Enhanced Learning (TEL) and improve management education, college management can consider the following strategies:

1. **Assess Needs and Resources:** Conduct a comprehensive assessment of the institution's current infrastructure, faculty expertise, student demographics, and learning goals to identify opportunities and challenges for integrating TEL in management education.
2. **Develop a Strategic Plan:** Develop a strategic plan outlining clear goals, objectives, and timelines for implementing TEL initiatives in management education.
3. **Invest in Technological Infrastructure:** Invest in upgrading and expanding technological infrastructure, including hardware, software, network connectivity, and learning management systems (LMS), to support TEL initiatives.
4. **Provide Faculty Development and Support:** Offer faculty development programs, training workshops, and peer mentoring opportunities to enhance faculty readiness and confidence in using technology for teaching.
5. **Design Engaging Learning Experiences:** Design engaging and interactive learning experiences that leverage TEL tools and resources to enhance student engagement, collaboration, and critical thinking.
6. **Foster Collaborative Learning Communities:** Foster collaborative learning communities among faculty, students, and administrators to share best practices, exchange ideas, and collaborate on TEL initiatives. Encourage interdisciplinary collaboration, peer-to-peer learning, and cross-institutional partnerships to enrich teaching and learning experiences.

7. Promote Access and Inclusivity: Ensure equitable access to TEL resources and support services for all students, including those with diverse learning needs, disabilities, and socio-economic backgrounds.
8. Monitor and Evaluate Effectiveness: Establish mechanisms for monitoring and evaluating the effectiveness of TEL initiatives in improving management education outcomes. Collect student feedback, analyze learning analytics, and conduct periodic reviews to assess the impact of TEL.
9. Promote a Culture of Innovation : Promote a culture of innovation, experimentation, and continuous improvement in management education through TEL. Recognize and reward faculty innovation

By adopting these strategies, college management can effectively leverage TEL to enhance management education, foster student success, and prepare graduates for dynamic and evolving roles in the global marketplace.

Similarly Governments and universities can harness Technology-Enhanced Learning (TEL) capabilities in formulating management education pedagogy through the following strategies:

1. Policy Development and Fund Allocation
2. Collaborative Partnerships and Consortia
3. Research and Development Initiatives
4. Quality Assurance and Accreditation
5. Professional Development and Capacity Building
6. Inclusive Access and Digital Equity
7. Policy Advocacy and Public Awareness
8. Evaluation and Impact Assessment

By adopting these strategies, governments and universities can harness the transformative power of TEL to enhance management education, foster innovation, and prepare future generations of leaders and decision-makers to thrive in the digital age.

Management students can integrate Technology-Enhanced Learning (TEL) into their learning in the following ways:

1. Utilize Online Resources: Take advantage of online resources such as e-books, academic journals, and multimedia tutorials available through digital libraries, online databases, and educational websites. Explore open educational resources (OERs) and Massive Open Online Courses (MOOCs) to supplement classroom learning and expand knowledge base.
2. Engage in Virtual Learning Platforms: Participate actively in virtual learning platforms and learning management systems (LMS). Access course materials, assignments, and discussion forums online, interact with peers and instructors through collaborative

tools, video conferencing, and messaging platforms.

3. Explore Interactive Simulations and Case Studies: Engage in interactive simulations and case studies available through online platforms and educational software.

Other suggestions for students in brief are:

4. Join Online Study Groups and Discussion Forums
5. Participate in Webinars and Virtual Events
6. Engage in Self-Directed Learning Projects
7. Seek Feedback and Support from Instructors
8. Develop Digital Literacy and Time Management Skills

By exploiting TEL tools and resources, management students can enhance learning experiences, expand knowledge base, and develop the skills and competencies needed to succeed in today's dynamic and technology-driven business environment.

Conclusion: Overall, Bloom's Taxonomy serves as a valuable pedagogical tool in management education, promoting intellectual rigor, critical inquiry, and lifelong learning skills that are essential for success in today's dynamic and competitive business environment.

Similarly in the technology driven world order education has also been shifting towards becoming more and more technology driven than by teachers. In view of these developments it is necessary to integrate TEL with Bloom's Taxonomy.

Parting Remark: A point to reconsider and ponder over before for anyone concluding TEL as being the most important aspect of teaching are the words of Bill Gates "Technology is just a tool. In terms of getting the kids working together and motivating them, the teacher is the most important."

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FINANCIAL INNOVATION IN THE BANKING INDUSTRY: A REVIEW OF THE EVOLUTION, DRIVERS, AND CHALLENGES

By

Ms. Leena R. Lassi

Research Scholar, MGVIMR, Nashik

Riya C. Rizwani & Shailee K. Khivasara

Student, SNJB's Late Sau. K. B. J. College of Engineering, Nashik

ABSTRACT: Financial innovation has revolutionized the banking sector by introducing new products, services and technologies. This paper examines the role of financial innovation in the banking sector, its drivers, challenges, opportunities, and benefits. The literature review covers a wide variety of financial innovations, including new financial products, services, technologies, and business models. This study highlights the importance of an effective risk management framework for mitigation.

Keywords: Financial Innovation, Banking Sector, Drivers, Challenges, Opportunities.

Introduction: Financial innovation has transformed the banking industry by introducing new products, services and technologies. The banking industry is at the forefront of financial innovation, with banks introducing a variety of innovative products and services to meet the changing needs of their customers. However, financial innovation has also brought new challenges and risks, which need to be managed effectively. This paper provides a comprehensive overview of financial innovation in the banking industry, including its evolution, drivers, challenges, opportunities, and benefits.

Research Objectives:

1. To examine the evolution of financial innovation in the banking sector.
2. Identify drivers behind financial innovation in the banking sector.
3. To analyse the challenges and risks associated with financial innovation in the banking sector.
4. Highlight the opportunities and benefits of financial innovation in the banking sector.

Theoretical Background: The evolution of financial innovation in the banking sector has been shaped by various factors, including advances in technology, changes in customer needs and preferences, regulatory changes, and competitive coercion. Here are some of the key stages in the evolution of financial innovation in the banking sector:

1. **Early financial innovations:** The first financial innovations in the banking sector date back to the 1960s and 1970s when banks introduced credit cards and automated teller machines (ATMs). These innovations aimed to improve customer convenience and decrease costs for banks.

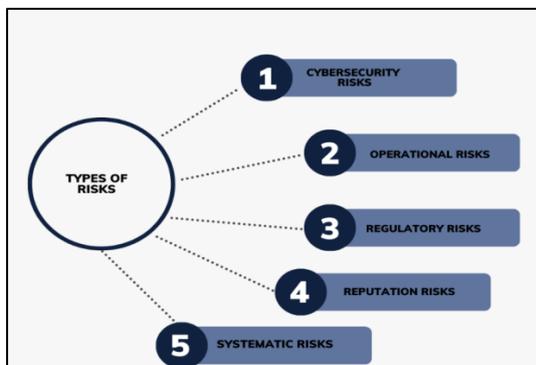
2. **Securitization and derivatives:** In the 1980s and 1990s, financial innovation in the banking sector exploded to include securitization and derivatives. These financial instruments allowed banks to collect and sell loans and other assets to investors, reducing their risk exposure and improving their liquidity.
3. **Online banking and digital payments:** The advent of the internet in the 1990s and 2000s led to the emergence of online banking and electronic payments. These innovations allowed customers to access banking services anytime, anywhere, and facilitated faster and more secure payments.
4. **Peer-to-peer lending and crowd funding:** In the 2000s and 2010s, financial innovation in the banking sector expanded to include peer-to-peer lending and crowd funding. These platforms allowed individuals and small businesses to access credit from a pool of investors, avoid traditional banks.
5. **Block chain technology and crypto currencies:** More recently, financial innovation in the banking sector has focused on blockchain technology and crypto currencies. These innovations aim to increase the security, efficiency, and clear picture of financial concerns.

The drivers behind financial innovation in the banking sector include:

1. **Technological advancements:** The rapid pace of high tech innovation is a key driver of financial innovation in banking. Banks are leveraging new technologies like artificial intelligence, block chain, and mobile apps to create new products and services, streamline operations, and enhance the customer experience.

2. **Changing customer needs and expectations:** Customer liking and expectations are constantly evolving, and banks need to innovate to meet these changing demands. For example, the rise of mobile banking has led to the development of new mobile-based services, while customers increasingly expect personalized and absolute banking experiences.
3. **Regulatory changes:** Regulatory changes can drive financial innovation in the banking sector by creating new opportunities or improve banks to acquire new practices. For example, open banking control have stimulated banks to develop new APIs and other tools to enable greater data sharing and interoperability.
4. **Competition:** Competition is intensifying in the banking sector, with new entrants and non-bank players vying for market share. This competitive pressure is activating banks to innovate in order to differentiate themselves and stay ahead of the curve.
5. **Economic conditions:** Economic conditions can also drive financial innovation in banking, by creating new opportunities or influencing consumer behaviour. For example, the low-interest-rate environment has spurred banks to develop new lending products and services to generate revenue.

Risks associated with financial innovation in the banking sector



Source: Secondary Data

1. **Cyber security Risks:** With the increased use of digital technology in banking, the risk of cyber-attacks and data breaches has increased. Financial institutions must take measures to secure their digital framework, such as using strong authentication methods and encryption technologies.
2. **Operational Risks:** Financial innovation can lead to more complex products and services, which can rise operational risks. The use of new technologies, such as blockchain and artificial intelligence, may also require new operational policy and protocols.

3. **Regulatory Risks:** Financial innovation may challenge existing regulations and regulatory structure, and regulators may struggle to keep up with new developments. This can create uncertainty and risk for both financial institutions and consumers.
4. **Reputation Risks:** Financial institutions may face reputational risks if their innovative products or services fail or are misapplied by consumers. This can lead to a loss of customer trust and can harm the institution's brand and reputation.
5. **Systemic Risks:** Financial innovation can create new interconnectedness among financial institutions and markets, which can lead to systemic risks. If one institution or market experiences a significant failure, it could have a wave effect throughout the financial system.

Challenges associated with financial innovation in the banking sector:

1. **Regulatory compliance:** As banks develop and implement new products and services, they must comply with various regulations, including anti-money laundering and consumer protection laws.
2. **Cyber security threats:** As banks adopt new technologies, they must ensure that their systems are secure and protected from cyber-attacks, which can result in significant financial and reputational harm.
3. **Systemic risk:** Financial innovation can lead to increased difficulty and interconnectedness, which can increase systemic risk, as seen during the 2008 financial crisis.
4. **Operational risk:** The adoption of new technologies and business models can create operational risks, such as system failures or human misconception.
5. **Customer trust:** Customers may be unsure to adopt new financial products or services if they don't fully understand them or don't trust the institutions offering them.
6. **Cost:** Developing and implementing new financial innovations can be expensive, requiring significant investment in technology and talent.
7. **Competition:** Financial innovation has made it easier for non-bank financial institutions to enter the market, increasing rivalry for traditional banks.

Financial innovation in the banking sector can create a wide range of opportunities, including:

1. **Increased Access to Financial Services:** Financial innovation can help to expand access to financial services for individuals and businesses that were previously underserved or excluded. For example, mobile banking and online platforms can enable people to access

financial services from anywhere at any time, without the need for physical bank branches.

2. **Greater Efficiency:** Financial innovation can improve the efficiency of banking operations, reducing costs and enhancing customer experiences. For example, automation and artificial intelligence can streamline routine tasks and improve decision-making processes.
3. **Enhanced Customer Experience:** Financial innovation can help banks to create more personalized and engaging experiences for their customers. For example, banks can use data analytics to better understand customer needs and preferences, and offer customized products and services.
4. **New Revenue Streams:** Financial innovation can help banks to create new revenue streams by developing innovative products and services. For example, banks can use blockchain technology to offer faster and more secure payment services, or leverage big data analytics to offer new financial products and services.
5. **Improved Risk Management:** Financial innovation can help banks to better manage risks by providing better insights and analysis of market trends and customer behaviour. For example, banks can use machine learning algorithms to detect and prevent fraud, or develop new risk management tools and models.

Financial innovation in the banking sector can bring a wide range of benefits to both banks and their customers, including:

1. **Improved Efficiency:** Financial innovation can help banks to streamline their operations, reducing costs and improving efficiency. For example, automation and digital technologies can help banks to process transactions more quickly and accurately, reducing the need for manual intervention.
2. **Increased Access to Financial Services:** Financial innovation can help to expand access to financial services for individuals and businesses that were previously underserved or excluded. For example, mobile banking and online platforms can enable people to access financial services from anywhere at any time, without the need for physical bank branches.
3. **Enhanced Customer Experience:** Financial innovation can help banks to create more personalized and engaging experiences for their customers. For example, banks can use data analytics to better understand customer needs and preferences, and offer customized products and services.
4. **Improved Risk Management:** Financial innovation can help banks to better manage risks by providing better insights and analysis of market trends and customer behaviour. For

example, banks can use machine learning algorithms to detect and prevent fraud, or develop new risk management tools and models.

5. **Innovation and Differentiation:** Financial innovation can help banks to differentiate themselves from their competitors and offer unique value propositions to their customers. For example, banks can develop new financial products and services that are tailored to specific customer needs or market segments.

Research Methodology: This research paper uses a qualitative research approach, relying on secondary data from academic journals, reports, and publications. The paper also uses a case study approach, where the paper examines the examples of financial innovation in the banking industry, including digital banking, mobile payments, peer-to-peer lending, and blockchain technology.

Literature Review:

1. **Biswas and Sen (2021)** examined the impact of financial innovation on the performance of Indian banks. The study found that financial innovation had a positive impact on bank performance, particularly in terms of profitability and productivity.
2. **Ghorbani (2021)** looked at the relationship between financial innovation and banking competition in Iran. The study found that financial innovation had a positive impact on banking competition, which in turn led to greater efficiency and improved customer service.
3. **Lee and Kim (2021)** examined the impact of financial innovation on the performance of banks in the Asia-Pacific region. The study found that financial innovation positively affects bank performance, and that the effect is stronger for banks with a higher level of technological capability.
4. **Altunbas, Huang, and Wu (2021)** investigated the relationship between financial innovation and bank performance in Europe. The study found that banks that adopt financial innovation tend to have higher profitability and higher market value, and that the effect is stronger for banks that are larger and more specialized.
5. **Ahmed and Rahman (2021)** examined the impact of financial innovation on the performance of banks in Bangladesh. The study found that financial innovation had a positive impact on bank performance, particularly in terms of profitability and customer satisfaction.
6. **Koetter and Noth (2019)** looked at the impact of financial innovation on bank risk-taking behaviour in Germany. The study found that financial innovation had a positive impact on bank risk-taking, particularly in terms of

increasing the risk-taking capacity of smaller banks.

Analysis and Discussions:

1. **Evolution of Financial Innovation:** The evolution of financial innovation in the banking sector has been characterized by significant milestones that have reshaped the industry's landscape. From the introduction of credit cards and ATMs in the 1960s and 1970s to the emergence of blockchain technology and crypto currencies in recent years, banks have continuously adapted to technological advancements and changing consumer preferences. These innovations have not only improved customer convenience and reduced costs but also expanded the range of financial services available to individuals and businesses.
2. **Drivers behind Financial Innovation:** Several drivers have propelled the growth of financial innovation in the banking sector. Technological advancements have played a crucial role, enabling banks to leverage artificial intelligence, blockchain, and mobile apps to create innovative products and services. Changing customer needs and expectations have also driven banks to innovate, with customers increasingly demanding personalized and seamless banking experiences. Regulatory changes, competition, and economic conditions have further incentivized banks to innovate, creating new opportunities for growth and differentiation.
3. **Challenges and Risks Associated with Financial Innovation:** While financial innovation presents numerous opportunities, it also brings forth a set of challenges and risks that banks must navigate. Cyber security risks have escalated with the digitization of banking services, requiring robust measures to protect against cyber-attacks and data breaches. Operational risks have also increased as banks adopt new technologies and business models, necessitating updated policies and protocols. Moreover, reputational risks and systemic risks underscore the importance of prudent risk management practices in the face of innovation.
4. **Opportunities and Benefits of Financial Innovation:** Financial innovation offers a myriad of opportunities and benefits for banks and their customers. Increased access to financial services, greater efficiency, enhanced customer experience, new revenue streams, and improved risk management are among the key benefits. By leveraging innovative technologies and approaches, banks can unlock new growth opportunities, drive operational excellence, and strengthen their competitive positioning in the market.

Moreover, financial innovation fosters innovation and differentiation, allowing banks to tailor their offerings to meet the evolving needs of customers and stay ahead of the competition.

Findings: The findings of this study suggest that financial innovation has played a significant role in transforming the banking industry. Financial innovation has helped improve the efficiency and effectiveness of financial services, by introducing new products, services, and technologies. The study also highlights the drivers behind financial innovation, which include technological advancements, changing customer needs and preferences, regulatory changes, and competitive pressures. However, the study also highlights the challenges and risks associated with financial innovation, which include regulatory compliance, cyber security, operational risk, and reputational risk.

Suggestion:

1. **Regularly assess cyber security posture:** Banks can regularly assess their cyber security posture to identify vulnerabilities and threats. This can include conducting regular risk assessments, penetration testing, and vulnerability scans.
2. **Implement effective risk management frameworks:** Banks can implement effective risk management frameworks to identify, measure, monitor, and manage systemic risks. This can include stress testing, scenario analysis, and risk modeling.
3. **Encourage a culture of risk awareness:** Banks can foster a culture of risk awareness and accountability, encouraging all employees to identify and report potential operational risks.
4. **Conduct regular testing and review:** Banks can conduct regular testing and review of their internal controls and processes, including testing for vulnerabilities and weaknesses.
5. **Develop transparent and clear communication strategies:** Banks can develop transparent and clear communication strategies that help customers understand the benefits and risks of new products and services. This can include providing clear and concise information on how the products and services work, what the potential risks are, and what the bank is doing to protect the customers' data and assets.
6. **Prioritize:** Banks can prioritize the development and implementation of financial innovations based on their potential to generate revenue or cost savings, and focus on those with the greatest potential first.
7. **Collaborate:** Banks can collaborate with other financial institutions or fintech companies to share the costs of developing and

implementing new financial innovations. This can also provide opportunities for knowledge sharing and learning from others in the industry.

Conclusion:

Financial innovation has led to significant transformation in the banking sector, driven by advances in technology, changing customer behaviour, and regulatory changes. The adoption of digital technologies has changed the way banks operate and interact with customers, leading to increased efficiency and expanded access to financial services. Financial innovation in the banking sector is driven by various factors, including technological advancements, changing customer needs and expectations, regulatory changes, and competition. These drivers have compelled banks to innovate and stay competitive by developing new products and services, streamlining operations, and enhancing customer experiences. Financial innovation is essential for banks to remain relevant and sustainable in the modern financial landscape. Financial innovation in the banking sector has brought with it new risks and challenges. These include cyber security threats, data privacy concerns, and regulatory compliance issues. Addressing these risks and challenges is crucial to ensure a secure and sustainable financial system. Financial innovation in the banking sector presents numerous opportunities for growth and development. By adopting new technologies and business models, banks can increase their efficiency, reduce costs, and better serve their customers. Additionally, financial innovation can lead to new products and services that meet emerging market needs, ultimately driving economic growth and expanding access to financial services

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A STUDY ON REVENUE COLLECTION SYSTEM OF BARAMATI MUNICIPAL COUNCIL PROPERTIES

By

Snehal Bhosale

Student, Anekant Institute of Management Studies, Baramati

Dr. Manisha Vhora

Assistant Professor, Anekant Institute of Management Studies, Baramati

ABSTRACT: *Baramati Municipal Council is a public service provider. The research was conducted on the revenue collection system of Baramati Municipal Council's (BMC's) properties in Baramati. The property tax is collected in the offices of the respective departments. Property tax, lease tax, and water tax are the main sources of tax revenue for any Municipal Corporation and adequate care is to be exercised in the assessment of property tax. In that, the researcher conducted research on lease collection, house tax, and water tax on the properties of Baramati Municipal Council. The water and house tax are paid online through Baramati municipal council's official website. The lease collection is accepted in offline ways like cash, DD, and cheque, and it may impose penalties and interest on overdue property tax payments. The specific penalty rates and interest rates can vary by municipality. The percentage of consumers who own properties for rent and pay leases on time is not expected, as BMC defines it. Respondents were aware that the BMC's lease collection system is offline and received receipts after paying revenue. In terms of awareness, citizens were aware of the revenue collection system and water and house/property tax on a yearly basis. A significant portion of respondents preferred mobile apps for paying lease or rent collection, followed by websites. When it comes to the intervals of paying lease, it is preferred to pay as per convenience and monthly payments. The majority received notices for the due date of revenue collection. BMC offers e-auction services for leased shops, and the primary factors encouraging participation in e-auction were transparency and competitive pricing. The research suggests that there is a relatively high level of awareness among Baramati residents regarding the BMC's revenue collection system and effectively communicating aspects of revenue collection. While most respondents prefer digital payment methods and are aware of penalties for overdue payments, there is room for improvement in promoting e-auction services and ensuring that notices reach all citizens. Embracing digital solutions enhances the efficiency and effectiveness of revenue collection for the BMC's properties*

Keywords: *Revenue Collection, Lease Collection, E-Auction, Digital Payment Methods.*

Introduction: Revenue refers to the income of any Municipal Council. So, Revenue refers to the income of Baramati Municipal Council. It determines to a large extent, how much money will be available for spending. Without income, there will be no budget and thus, no spending. Revenue for Baramati Municipal Council spending is generally raised from taxes, levies, service fees, and licenses. Local governments differ in the extent to which they can raise sufficient funding within the municipal council for the services for which they are responsible.

At the local government level, own revenue is normally regarded as operating revenue. Operating expenses refer to money spent on items that are consumed during a year, including salaries, consumables, administrative items, and so forth. Revenue collection has long been a major financial problem for local government bodies. Many households with large debts are poor, and there is little prospect of recovering their areas. Resolving this is an important challenge for the municipal

council. The role of locally owned revenue is considered small in total local revenue.

The tax amount is determined depending upon the property location, current valuation, and the law of the particular area. Baramati Municipal Council is a public service provider. The chief officer, along with officers like an engineer, sanitary inspector, health inspector, and education officer, are appointed by the state government to control the administrative affairs of the Baramati Municipal Council, Baramati. The property tax is collected in the offices of the respective departments. The water and house tax are paid online through Baramati municipal council's official website. The lease collection is accepted in offline ways like cash, DD, and cheque and it may impose penalties and interest on overdue property tax payments. The specific penalty rates and interest rates can vary by municipality. The norms for the collection of property tax, lease tax, and water tax are normally contained in the enactments governing the municipal corporations, and it is imperative that the

norms are strictly followed to avoid any leakages in revenue. Since Property tax, lease tax, and water tax are the main sources of tax revenue for any municipal corporation, and adequate care is to be exercised in the assessment of property tax. In that, the researcher conducted research on lease collection, house tax, and water tax on properties of Baramati Municipal Council.

The following are the types of taxes collected from Baramati Municipal Council's owns properties:

1. **Lease collection:** It varies depending upon the properties and location. Its valuation was decided for the rent.
2. **Property tax:** It 45% of the annual rent of the lease properties.
3. **Water tax:** It depends upon the size of the pipeline for the supply; the commercial charges differ from the residential charges.
4. **G.S.T.:** It is 18% of the monthly rent of the Baramati Municipal Council owned properties.

Literature Review: The review of literature guides the researchers in getting a better understanding of the methodology used. A review analysis is important in order to develop an approach that can be relevant to the study of Municipal Council. Therefore, the empirical studies relate to different aspects of financial performance analysis.

1. Regional Training Institute, Mumbai "Case study on short levy of property tax' This paper explains that Solapur Municipal Council's explains the revised rates of the construction rate and rented properties and also explains that the property tax is one of the principal components of the municipal council for providing services and amenities to the populace in the area. The 10% annual rent is for repairs to the rental properties.
2. Centre for water and sanitation, CEPT university (2020, December) "Enhancing own Revenue Income of Wai Municipal Council (WMC)" explained that Important for the local government to have reliable sources and plan to enhance own revenue Income. This paper focuses on an assessment of property tax and water tax that are main sources of own income and specific measures are identified for WMC to improve its revenue from both property tax and water tax.
3. Maharashtra Municipal Councils, Nagar Panchayats and Industrial Township Act, 1965: This book contains specified Municipal Council and Nagar Panchayat Act and Rules. Baramati Municipal Council is currently classified as "Group A" Municipal Council as per the Maharashtra Municipal Councils, Nagar Panchayats, and Industrial Townships Act, 1965.
4. Baramati Municipal Council's Budget: This budget refers to provides yearly expected and

actual revenue collection for the Baramati Municipal Council.

5. ShatabadiVarsh (Baramati Municipal Council): this book explained the date of Baramati Municipal Council established in 1 January 1865. It established for the providing the services to the citizen and improvement of roads, water services and other facilities of Baramati areas.

Research Gap: The lease collection for Baramati Municipal Council's property was not fully collected. Embracing digital solutions to enhance the efficiency and effectiveness of revenue collection for the BMC's properties. The e-auction process is expected to increase awareness of online services provided for shops or properties for lease or rent, but consumer awareness is still low. Simplify and provide clear information, addressing any issues related to document length and complexity.

Research Design: Research is the scientific activity in which decision is made and problem is solved. The method of framework within which research is to be done is called Research Methodology.

Research Statement: The researcher conducted research on the revenue collection system of Baramati Municipal Council's properties and found that the whole process is now manual, so it is hard to understand and identify the lease not paid by the consumer. The e- auction process is expected to increase awareness of online services provided by Baramati Municipal Council, but consumer awareness is still low. The lease collection for Baramati Municipal Council's property was not fully collected as expected.

Research Objectives:

1. To study the existing mechanism of revenue collection system of Baramati Municipal Council (BMC) owned properties.
2. To study the awareness of e-auction and re-auction services provided by Baramati Municipal Council.
3. To identify and analyses of the techniques for lease collection system in a digital way.
4. To evaluate the new strategies for Improvement of Revenue Collection System.

The researcher conducted research on revenue collection from leases, house taxes, and water taxes on BMC's properties. The Research Design is Descriptive and Exploratory. Research design can use structured and pre-planned design for analysis. Research is based on both primary and secondary data. A descriptive research design can use a wide variety of research methods to investigate one or more variables. It focuses on providing a detailed and accurate representation of the data collected, which can be useful for exploring trends and identifying patterns in the data. Exploratory research is an approach that explores research

questions and previous data not been previously studied in depth. Exploratory research design is used to investigate a problem that is not clearly defined and gain a better understanding of the research problem.

Methods of Data Collection: Primary Data and Secondary Data

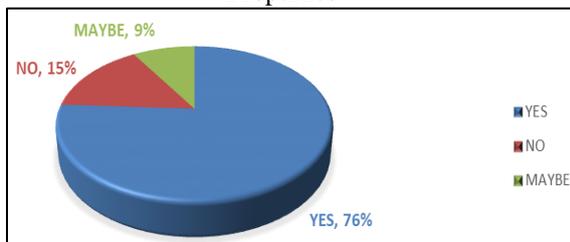
1. Primary Data:-
 - a) Discussion with Head of water and tax department
 - b) Questionnaire – structured questionnaire
2. **Secondary Data:-**
 - a) www.baramatimunicipalcouncil.in
 - b) Annual Reports
 - c) Research Papers
 - d) Books

Sampling Method

1. **Area:** Baramati municipal council, Baramati consumers who owned the BMC properties for lease.
2. **Simple Random Sampling:** - This is type of probability sampling. This is the most famous and simple method of sampling where each unit of the Population is equally chance of getting included in the sample
3. **Population:** 1400 consumers/ citizens who owned the BMC properties for lease.
4. **Sample Size:** 137 (Total collected 140 (10% of population) Out of that 3 responses are invalid)

Data Analysis and Interpretation:

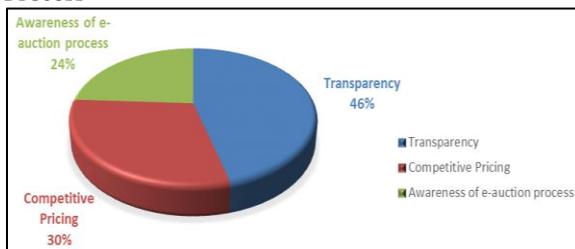
Chart 1 Awareness of Revenue Collection System in Baramati Municipal Council’s Rented/Leased Properties



Source: Primary Data

Interpretation: From the above pie chart analysis, it is interpreted that 75% of respondents are aware of revenue collection system, 15% are not aware of revenue collection System, and 10% are partially aware of the revenue collection system.

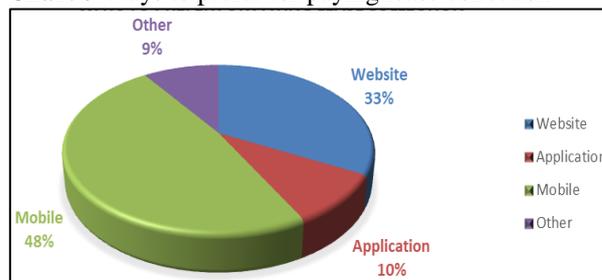
Chart 2 Encourage To Participate In E-Auction Process



Source: Primary Data

Interpretation: From the above pie chart analysis, it is interpreted that 46% of respondents are encouraged by transparency in the e-auction process, 30% are motivated by competitive pricing in the e-auction process, and 24% are Respondent encouraged by awareness about the e-auction process.

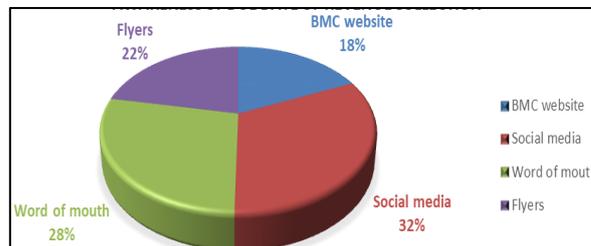
Chart 3 Ways to prefer for paying lease collection



Source: Primary Data

Interpretation: From the above pie chart analysis, it is interpreted that Ways to prefer for paying lease collection are, 33% of respondents are prefer Websites for paying lease or rent collection, 10% prefer applications for paying lease or rent collection, 48% prefer mobile for paying lease or rent collection, and 9% prefer other ways for paying lease or rent collection.

Chart 4 Awareness of due date of Revenue Collection



Source: Primary Data

Interpretation: From the above pie chart analysis, it is interpreted that 18% of respondents are aware of the due date of revenue collection on the BMC website, 32% of respondents are aware of the due date of revenue collection on social media, 28% of respondent are aware of the due date of revenue collection on word of mouth, and 22% are aware of the due date of revenue collection on flyers.

Percentage of renter (consumer owned BMC’s properties on rent) are paying lease on time.

The researcher discusses with the head of rented properties, then analyzes the percentage of consumers who own properties for rent and paying leases on time, which is 35% i.e., 490 consumers.

Findings: The researcher found that the majority of respondents were aware of the revenue collection system in BMC’s rented properties, and BMC should provide clear information about the revenue collection process. Majority of respondents encourage participating in e-auction processes due

to transparency and Competitive Pricing. BMC should maintain transparency in the e-auction process, ensure competitive pricing, and continue raising awareness about e-auction opportunities. The majority of respondents prefer mobile and website ways of paying lease or rent collection. BMC should encourage and facilitate a smooth transition to digital lease collection. The majority of respondents are aware of the due date for revenue collection through social media and word of mouth. BMC should improve communication and notify citizens about due dates and penalties. The percentage of consumers who own properties for rent and pay leases on time is still low. BMC should increase efforts to inform citizens through digital channels and social media.

Suggestion: Based on the interpretation and findings of the research, the following suggestions can be made to improve the revenue collection system at Baramati Municipal Council:

1. **Transparency:** BMC should maintain transparency in the e-auction process, ensure competitive pricing, and continue raising awareness about e-auction opportunities.
2. **Streamlined Information:** Simplify and provide clear information about the revenue collection process, addressing any issues related to document length and complexity.
3. **Online Transition:** BMC should encourage and facilitate a smooth transition to digital lease collection, offering user-friendly websites and mobile applications for payments.
4. **Enhance Awareness:** BMC should increase efforts to inform citizens, particularly through digital channels and social media, about the revenue collection system, due dates, and penalties to improve compliance.
5. **Improved Communication:** Strengthen communication channels for notifying citizens about due dates and penalties, using BMC's website, social media, word of mouth and flyers.

By implementing these suggestions, Baramati Municipal Council can potentially enhance revenue collection and make the process more efficient and citizen-friendly.

Conclusion: Research conducted on the Revenue Collection System of Baramati Municipal Council's (BMC's) rented or leased properties has several key findings. A significant portion of the population is particularly aware of the BMC's revenue collection system. The majority of respondent's preferred digital methods for lease collection, with mobile being the favored platform among websites and applications. Awareness about penalties for late payments is relatively high. There is also a willingness to participate in e-auction processes, driven by factors such as transparency and competitive pricing. However, the research identified challenges in the process, including insufficient information and complicated procedures. Overall, the findings emphasize the importance of improving awareness, simplifying processes, and embracing digital solutions to enhance the efficiency and effectiveness of revenue collection for the BMC's properties.

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A STUDY OF JOB SATISFACTION & STRESS MANAGEMENT AT COLLEGES AFFILIATED TO KBCNMU JALGAON

By

Mr. Deepak Aba Sonar

Research Student

Dr. Prabhakar Sakharam Mahale

Professor & Principal, M. D. Palesha Commerce College, Dhule

ABSTRACT: This study examines the intertwined dynamics of job satisfaction and stress management among faculty in Kavayitri Bahinabai Chaudhari North Maharashtra University (KBCNMU)-affiliated colleges in Jalgaon. Using a mixed-methods approach, the research aims to assess overall job satisfaction, identify contributing factors to satisfaction and stress, explore their correlation, evaluate existing stress management initiatives, and propose recommendations for improvement. The study involves faculty from diverse backgrounds, utilizing surveys, interviews, and stress assessment tools for data collection. Findings are expected to provide nuanced insights into the dual aspects of faculty experiences, with practical recommendations benefiting KBCNMU administrators and policymakers in fostering a healthier and more resilient academic community. Ethical considerations, including informed consent and participant confidentiality, are prioritized throughout the research.

Keywords: Job Satisfaction, Stress Management.

Introduction: Academic institutions' performance and vitality are greatly influenced by the welfare and contentment of its faculty members in the ever-changing world of higher education. This study explores the intricate relationship between faculty members' job satisfaction and stress management in the colleges connected to Jalgaon's Kavayitri Bahinabai Chaudhari North Maharashtra University (KBCNMU). Given the variety of obstacles and dynamic nature of the academic environment, a thorough investigation of the variables impacting faculty satisfaction and stress levels is warranted.

Using a mixed-methods approach, our research seeks to go beyond surface-level evaluations by delving into the nuanced experiences of faculty members. The primary objective is not only to assess the current levels of job satisfaction and stress but also to unravel the intricate correlations between these two pivotal aspects of faculty life. Beyond this, the study aims to critically evaluate existing stress management initiatives in place, identifying areas that warrant improvement. Ultimately, the research endeavors to provide practical and actionable recommendations geared towards enhancing overall faculty well-being.

As the research findings unfold, they are anticipated to offer invaluable insights to the leadership and policymakers at KBCNMU. These insights will facilitate the creation of an academic environment that not only recognizes the challenges faced by faculty but actively works towards fostering satisfaction, resilience, and contentment among the academic community. By understanding the complex interaction between job

satisfaction and stress management, the study contributes to the ongoing dialogue on enhancing the quality of work life for faculty members within the higher education landscape.

Literature Review: It is critical to comprehend the complex relationships between faculty members' job satisfaction and stress management in the dynamic field of higher education. Academics in the domain have conducted a thorough investigation into the complex characteristics of these occurrences, providing insight into the elements that impact teacher satisfaction, well-being, and efficient management of stress.

Job Satisfaction: The fundamental framework for understanding job happiness is provided by Herzberg's 1959 Two-Factor Theory. According to the idea, things that make people happy at work (motivators) are different from factors that make people unhappy at work (hygiene factors). The importance of intrinsic motivators, such performance and acknowledgment, in promoting long-term job happiness is highlighted by Herzberg's research.

The Job Characteristics Model developed by Hackman and Oldham in 1976 adds even more insight into the concept of job satisfaction. Their concept places a strong emphasis on the role that autonomy, feedback, and meaningful tasks have in raising job satisfaction and intrinsic motivation among staff members.

Stress Management: Establishing a positive work environment requires an understanding of stress and how to handle it. According to Lazarus and Folkman's Transactional Model of Stress and Coping (1984), stress results from interactions

between a person's surroundings and themselves. Either problem- or emotion-focused coping mechanisms are essential for efficient stress management.

The Maslach Burnout Inventory (MBI), developed by Maslach and Leiter (2016), has proven very useful in measuring professional burnout and stress. The MBI provides insights into professional pressures by identifying depersonalization, diminished personal accomplishment, and emotional tiredness as important components.

Faculty-Specific Literature: In the realm of higher education, Trowler's (2010) exploration of academic tribes and territories underscores the significance of understanding the unique subcultures within academic institutions. This work is pertinent to our study as it suggests that job satisfaction can be deeply influenced by the alignment (or misalignment) of individual values with those of the institution.

Scott and Lodge (1985) contribute insights into the impact of organizational communication on employee satisfaction. Effective communication channels and practices are crucial in mitigating stress and fostering positive work environments.

As the literature indicates, the intersection of job satisfaction and stress management is a complex and multidimensional aspect of the faculty experience. Building upon these foundational theories and studies, our research seeks to contribute to the on-going discourse by exploring these dynamics within the specific context of faculty in colleges connected with Kavayitri Bahinabai Chaudhari North Maharashtra University (KBCNMU) in Jalgaon.

Research Methodology:

- Research Design:** With a mixed-methods research design, this study combines quantitative and qualitative techniques to provide a thorough understanding of faculty members' experiences with stress management and job satisfaction in colleges connected to Kavayitri Bahinabai Chaudhari North Maharashtra University (KBCNMU) in Jalgaon.
- Participants:** The study will include faculty members from various disciplines, experience levels, and roles within KBCNMU-affiliated colleges. A purposive sampling will be applied

Data analysis:

to ensure representation from diverse backgrounds, fostering a richer exploration of faculty experiences.

- Qualitative Data Collection:** Semi-structured interviews conducted with a subset of faculty members to gather in-depth insights into their experiences. These interviews will explore nuanced aspects of job satisfaction, stress triggers, and coping mechanisms.
- Data Analysis:**
Quantitative Data Analysis: An overview of overall work satisfaction levels and stress indicators will be provided by using descriptive statistics to examine survey results. To investigate relationships between variables, inferential statistics like correlations will be used.
- Qualitative Data Analysis: Thematic analysis is applied to the qualitative data obtained from in-depth interviews in order to find recurrent themes, patterns, and narratives.

Research Objectives:

- Assess the job satisfaction levels among faculty members in KBCNMU-affiliated colleges.
- Identify factors engaging to job satisfaction and those leading to stress.
- Explore the correlation between job satisfaction and stress levels among faculty.

Hypothesis: -

(H0): There is no significant difference in the job satisfaction levels among faculty members in KBCNMU-affiliated colleges.

(H01): There is a significant difference in the job satisfaction levels among faculty members in KBCNMU-affiliated colleges.

(H02): There is no significant association between identified factors engaging to job satisfaction and those leading to stress among faculty members.

(H2): There is a significant association between identified factors engaging to job satisfaction and those leading to stress among faculty members.

(H03): There is no significant correlation between job satisfaction and stress levels among faculty members.

(H3): There is a significant correlation between job satisfaction and stress levels among faculty members.

Table 1: Sample Characteristics

Characteristic	Value
Total Samples	100
Gender Distribution	60% Female, 40% Male
Age Range	28 to 60 years
Academic Departments	Various
Years of Teaching Experience	Varied (average: 10 years)

Source: Primary Survey

Table 2: Overall Job Satisfaction and Specific Aspects

Aspect	Mean Score (1-5)
Overall Job Satisfaction	3.8
Teaching Responsibilities	4.2
Research Opportunities	3.9
Administrative Support	3.6
Workload	3.5
Compensation and Benefits	3.8
Professional Development Opportunities	4.0

Source: Primary Survey

Table 3: Factors Contributing to Job Satisfaction

Positive Aspects (Top 3 Mentioned)
1. Supportive colleagues and work environment.
2. Opportunities for professional growth and development.
3. Recognition for achievements in teaching and research.

Source: Primary Survey

Table 4: Factors Leading to Stress

Stress Factor	Impact Rating (1-5)
Workload	4.2 (Highly Stressful)
Interpersonal Conflicts	3.5 (Moderately Stressful)
Lack of Resources	3.8 (Moderately Stressful)
Institutional Policies	3.6 (Moderately Stressful)
Work-Life Balance	4.0 (Highly Stressful)

Source: Primary Source

Table 5: Perceived Relationship between Job Satisfaction and Stress Levels

Perception	Percentage
Stress negatively impacts job satisfaction	70%
High job satisfaction positively affects stress levels	85%

Source: Primary Survey

Table 6: Correlation Analysis

Correlation Coefficient
Pearson's $r = -0.45$

Source: Primary Survey

Table 7: Additional Comments - Common Themes

Themes
Desire for improved institutional policies to alleviate stress.
Calls for increased resources to manage workload effectively.
Emphasis on the importance of recognition and support in enhancing job satisfaction.

Source: Primary Survey

Findings:

- Overall Job Satisfaction:** The faculty members in KBCNMU-affiliated colleges exhibit a moderately satisfied sentiment regarding their overall job satisfaction, with a mean score of 3.8 on a scale of 1 to 5.
- Job Satisfaction with Specific Aspects:** The aspects with the highest satisfaction scores include teaching responsibilities (4.2) and professional development opportunities (4.0). Administrative support (3.6) and workload (3.5) show comparatively lower satisfaction scores.
- Factors Contributing to Job Satisfaction:** Supportive colleagues, opportunities for professional growth, and recognition for achievements emerge as key contributors to positive job satisfaction.
- Factors Leading to Stress:** Workload and work-life balance are identified as highly stressful factors, highlighting the need for attention to workload management and a balance between work and personal life.

5. **Perceived Association between Stress Levels and Job Satisfaction:** The majority of respondents feel that stress has a negative effect on job satisfaction, but a sizable portion also think that stress levels are positively impacted by high job satisfaction.
6. **Correlation Analysis:** The correlation of coefficient of -0.45 indicates a moderate -ve correlation between job satisfaction and stress levels, suggesting that as job satisfaction increases, stress levels tend to decrease, and vice versa.

Suggestions:

1. **Workload Management:** Implement strategies for effective workload management, such as reviewing and optimizing task distribution and providing necessary resources.
2. **Recognition Programs:** Enhance recognition programs to acknowledge faculty achievements, fostering a positive work environment.
3. **Stress Reduction Initiatives:** Develop initiatives to address highly stressful factors, particularly work-life balance, through flexible scheduling or support programs.
4. **Communication Channels:** Strengthen communication channels to address interpersonal conflicts promptly and proactively.

Limitations:

1. **Sampling Bias:** Sampling bias could be introduced if the sample is not representative of all faculty members.
2. **Self-Reporting:** The data relies on self-reported measures, which might be subject to socially desirability bias.

3. **Generalizability:** Findings may be specific to the context of KBCNMU-affiliated colleges and may not be generalizable to other institutions.
4. **Response Bias:** Non-response or selective response may introduce bias in the interpretation of results.

Conclusion: In conclusion, the findings highlight a generally satisfied but diverse faculty experience within KBCNMU-affiliated colleges. While positive aspects contribute to satisfaction, challenges in workload and work-life balance impact stress levels. The negative correlation suggests that targeted interventions addressing stress factors could potentially enhance overall job satisfaction among faculty.

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THE TRANSFORMATIVE IMPACT OF ARTIFICIAL INTELLIGENCE ON BUSINESS: OPPORTUNITIES, CHALLENGES AND FUTURE PROSPECTS

By

Nishika R

*Student, Mangalore Institute of Technology and Engineering, Moodabidri,
Karnataka*

Amith Donald Menezes

*Assistant Professor, Mangalore Institute of Technology and Engineering, Moodabidri,
Karnataka*

ABSTRACT: *The integration of Artificial Intelligence (AI) into business operations has ushered in a transformative era, presenting a myriad of opportunities, challenges, and future prospects. This research paper delves into the multifaceted impact of AI on businesses, analyzing its potential to revolutionize various industry sectors. Through an examination of opportunities, such as enhanced efficiency, innovation, and competitiveness, and challenges, including ethical considerations and data privacy concerns, this paper provides a comprehensive overview of the landscape of AI in business. Moreover, it explores future prospects for AI, emphasizing continued advancements in AI technologies, increasing accessibility, and acceptance of AI-driven solutions. By synthesizing insights from existing literature and empirical evidence, this paper offers valuable insights into the transformative role of AI in shaping the future of business.*

Keywords: *Artificial Intelligence, Transformative Role, Opportunities, Prospects and Challenges.*

Introduction: Artificial intelligence (AI) is fundamentally altering the landscape of business, economy, and society, revolutionizing interactions and connections among stakeholders and citizens (Wamba-Taguimdje et al., 2020). Artificial intelligence (AI) appears to have permeated various aspects of our lives, from our homes to our mobile devices (Carter, 2018). According to entrepreneurs and business innovators, AI is poised to become an integral part of nearly every product and service we purchase and utilize (Jain, 2019). Moreover, its utilization in solving business challenges is advancing rapidly. However, alongside these advancements, concerns regarding the repercussions of AI-driven automation on employment, the workplace, and society are mounting. Amid both these apprehensions and the celebrated successes like Alexa, Siri, and AlphaGo, it's important not to overlook the actual AI technologies themselves (Soni, 2019). The growth of artificial intelligence (AI) has been exponential in recent years, reshaping industries and societies worldwide. AI technologies, encompassing machine learning, natural language processing, and robotics, have witnessed significant advancements, propelling their adoption across various sectors (Cockburn et al., 2019). This surge is fueled by substantial investment and funding into AI research and development, driving innovation and expanding the market. Businesses are increasingly

leveraging AI-driven solutions to enhance efficiency, productivity, and competitiveness (Sena and Nocker, 2021). However, this growth also raises ethical and regulatory considerations, prompting discussions on responsible AI development and deployment. Despite concerns about job displacement and societal impact, the trajectory of AI growth remains optimistic, with continued integration with emerging technologies and global efforts driving its evolution into a transformative force in the modern world (Loureiro, 2021).

Review of Literature: Currently, artificial intelligence is primarily developed with limited autonomous learning capabilities, instead relying on provided instructions to execute tasks. However, the ultimate future of artificial intelligence, as suggested by Martínez and Fernandez-Rodríguez (2015), entails machines recognizing human behavior and emotions, and adjusting their actions accordingly. Artificial Intelligence (AI) is revolutionizing various aspects of human life, including work, economy, communication, warfare, defense, security, ethics, healthcare, and more. However, its long-term impact remains to be seen, whether it will lead humanity towards creating a better world or one fraught with challenges (Park, 2018). Like any technology, AI has its advantages and disadvantages, but its advantages typically outweigh its drawbacks,

enabling its survival and adoption in the market (Furman and Seamans, 2019). However, regarding Artificial Intelligence, we remain uncertain whether positive outcomes will consistently outweigh the negative impacts in the long run, and if not, we may encounter significant challenges. Observing our surroundings, on one hand, we seem to embrace the transformations brought about by technology, such as "smart home, smart healthcare, Industry 4.0, or autonomous cars." On the other hand, we frequently find ourselves questioning authorities concerning issues like unemployment, taxation, security, and more. As AI advancements accelerate, more robots or autonomous systems are being developed, replacing human labor. This represents the current scenario; however, in the long term, outcomes appear to become more intriguing (Tyagi, 2016).

Research Design: The primary objective of this research paper is to examine the impact of artificial intelligence on various sectors and businesses worldwide. The research inquiry that guides this study is "what are the factors influencing businesses amidst the exponential growth of AI today?" Through this paper, the aim is to address this question. The research commenced by surveying numerous sources including business newsletters, AI magazines, journal papers, conference articles, machine learning publications, annual reports of companies, press releases, stock market websites, online forums, and various other platforms to collect relevant data for our investigation. The insights gleaned from these inquiries will assist society in preparing for future challenges and in embracing the transformations brought about by the integration of AI into human life and business.

Discussions: Artificial intelligence (AI) presents a wealth of opportunities, challenges, and prospects for businesses in today's dynamic landscape. On one hand, AI technologies offer unprecedented capabilities for automation, optimization, and innovation across various business functions. From enhancing customer experiences through personalized recommendations to streamlining operations through predictive analytics, AI has the potential to revolutionize how businesses operate and compete in the market. However, along with these opportunities come challenges. Despite these challenges, the prospects for AI in business remain promising, with continued advancements. Let us now have a look at the various opportunities, challenges, and future prospects faced by artificial intelligence in the modern business world;

Opportunities: Artificial Intelligence (AI) presents numerous opportunities for businesses across various industries. Here are some key areas where AI can be leveraged to drive business growth and innovation:

1. *Customer Service and Support:* AI-powered chatbots and virtual assistants can provide 24/7 customer support, handling routine inquiries and assisting with basic problem-solving tasks. Natural Language Processing (NLP) enables these systems to understand and respond to customer queries effectively, improving overall customer satisfaction.
2. *Predictive Analytics and Forecasting:* AI algorithms can analyze large volumes of data to identify patterns, trends, and insights that can inform business decision-making. Predictive analytics helps businesses forecast demand, optimize inventory management, and anticipate market trends, leading to improved operational efficiency and strategic planning.
3. *Marketing and Sales Optimization:* AI enables personalized marketing campaigns and targeted advertising by analyzing customer data and preferences. AI-powered recommendation systems can suggest relevant products or services to individual customers based on their past behavior, increasing sales and customer engagement.
4. *Process Automation:* AI-driven automation streamlines repetitive tasks and workflows, freeing up employees to focus on more strategic and creative activities. Robotic Process Automation (RPA) can automate data entry, document processing, and other manual tasks, reducing errors and increasing productivity.
5. *Supply Chain Management:* AI enhances supply chain visibility and optimization by analyzing data from multiple sources, such as sensors, RFID tags, and enterprise systems. AI algorithms can predict potential disruptions, optimize logistics routes, and improve inventory management, resulting in cost savings and improved delivery performance.
6. *Fraud Detection and Risk Management:* AI algorithms can analyze transaction data and identify suspicious patterns or anomalies indicative of fraudulent activity. By detecting fraud in real-time, businesses can minimize financial losses and protect their assets.
7. *Healthcare and Life Sciences:* AI-powered diagnostic tools, medical imaging analysis, and drug discovery platforms accelerate research and improve patient outcomes. Machine learning algorithms can analyze medical data to assist in disease diagnosis, treatment planning, and personalized medicine.
8. *Human Resources and Talent Management:* AI tools can streamline recruitment processes, analyze resumes, and assess candidate suitability based on predefined criteria. AI-driven workforce analytics help businesses identify skill gaps, optimize workforce

planning, and enhance employee engagement and retention.

9. *Product Development and Innovation:* AI facilitates product design optimization, simulation, and prototyping, enabling faster time-to-market and improved product performance. Generative design algorithms explore multiple design alternatives and identify the most efficient and innovative solutions.
10. *Ethical and Responsible AI Implementation:* As AI adoption increases, businesses must prioritize ethical considerations, transparency, and accountability in AI development and deployment. Responsible AI practices ensure fairness, privacy protection, and ethical use of AI technologies, fostering trust and sustainability in business operations.
11. *Enhanced Decision Making:* AI enables businesses to make data-driven decisions by analyzing vast amounts of structured and unstructured data. Machine learning algorithms can identify patterns, trends, and insights that humans may overlook, leading to more informed and strategic decision-making processes.
12. *Increased Operational Efficiency:* AI-driven automation streamlines business processes and workflows, reducing manual effort and human error. Robotic Process Automation (RPA) can handle repetitive tasks such as data entry, document processing, and customer support, freeing up employees to focus on more strategic and value-added activities.
13. *Enhanced Productivity and Innovation:* AI accelerates innovation by automating routine tasks, enabling faster product development cycles, and facilitating collaborative design processes. AI-powered tools for data analysis, simulation, and prototyping help businesses optimize product performance and bring innovative solutions to market more quickly.
14. *Cost Savings and Resource Optimization:* AI-driven optimization algorithms help businesses optimize resource allocation, minimize waste, and reduce operating costs. Predictive maintenance systems can anticipate equipment failures and schedule maintenance proactively, minimizing downtime and repair costs.

These are just a few examples of how AI can transform business processes, drive innovation, and create competitive advantages across various industries. As AI technology continues to evolve, businesses that strategically leverage AI capabilities are poised to thrive in an increasingly digital and data-driven economy.

Challenges: While the prospects of artificial intelligence (AI) in business are promising, there are also several challenges that organizations may

encounter when implementing and leveraging AI technologies. Some of the key challenges include:

1. *Data Quality and Availability:* AI algorithms require large volumes of high-quality data to train effectively. However, many organizations struggle with data silos, inconsistencies, and inaccuracies, which can impede the performance of AI models. Ensuring data quality and availability is essential for the success of AI initiatives.
2. *Lack of Talent and Expertise:* There is a shortage of skilled AI professionals with expertise in machine learning, data science, and AI development. Recruiting and retaining talent in these areas can be challenging for businesses, particularly smaller organizations with limited resources. Investing in training and development programs can help address this talent gap.
3. *Ethical and Regulatory Considerations:* AI technologies raise ethical and regulatory concerns related to privacy, bias, transparency, and accountability. Organizations must navigate complex legal and regulatory frameworks, such as GDPR in Europe or CCPA in California, to ensure compliance with data protection and privacy laws. Implementing ethical guidelines and frameworks for AI development and deployment is essential to mitigate risks and build trust with stakeholders.
4. *Interpretability and Transparency:* AI models, particularly deep learning models, are often perceived as "black boxes" due to their complexity and lack of interpretability. Understanding how AI algorithms make decisions is crucial for businesses to gain trust and acceptance from users, regulators, and other stakeholders. Developing explainable AI techniques and methodologies can help improve transparency and interpretability.
5. *Integration with Existing Systems:* Integrating AI technologies with existing IT systems and workflows can be challenging, particularly in large enterprises with complex legacy systems. Ensuring interoperability, scalability, and compatibility with existing infrastructure is essential for the successful adoption and deployment of AI solutions.
6. *Security and Privacy Risks:* AI systems are vulnerable to security threats, such as adversarial attacks, data breaches, and malicious manipulation. Protecting sensitive data, securing AI models, and ensuring compliance with security standards are critical to mitigate cyber security risks and safeguard against potential threats.
7. *Bias and Fairness:* AI algorithms may exhibit biases inherent in the training data, leading to unfair or discriminatory outcomes. Addressing

bias and promoting fairness in AI systems is essential to prevent unintended consequences and ensure equitable treatment of users from diverse backgrounds. Implementing bias detection and mitigation techniques, as well as diverse and inclusive data collection practices, can help mitigate bias in AI algorithms.

8. *ROI and Business Value:* Demonstrating the return on investment (ROI) and business value of AI initiatives can be challenging for organizations, particularly in the early stages of adoption. Aligning AI projects with strategic business objectives, setting clear performance metrics and KPIs, and measuring the impact on key business outcomes are essential to justify investment in AI and drive long-term success.
9. *Change Management and Cultural Shift:* Adopting AI technologies often require organizational change and cultural shift, which can be met with resistance from employees and stakeholders. Overcoming resistance to change, fostering a culture of innovation, and promoting collaboration between business and technical teams are essential for successful AI implementation and adoption.
10. *Unforeseen Challenges and Risks:* AI technologies are still evolving rapidly, and there may be unforeseen challenges, risks, and limitations associated with their adoption and deployment. Businesses must stay informed about the latest developments in AI research and technology trends, anticipate potential risks, and adapt their strategies accordingly to navigate the evolving landscape effectively.

Findings: The findings of AI opportunities, challenges, and future prospects reveal a complex landscape with significant potential for businesses. Opportunities abound, with AI offering the promise of enhanced efficiency, innovation, and competitiveness across various industries. However, these opportunities come with challenges, including data privacy concerns, ethical considerations, and the need for substantial investment in talent and infrastructure. Despite these hurdles, the future prospects for AI in business remain promising, driven by ongoing advancements in AI technologies, increasing accessibility of AI tools and platforms, and growing acceptance of AI-driven solutions. By navigating these challenges effectively, businesses can capitalize on the transformative power of AI to drive growth, improve decision-making, and unlock new opportunities for value creation in the digital age.

Recommendations: The potential future applications of AI across diverse industries are extensive and multifaceted, presenting numerous opportunities for innovation, productivity

enhancements, and expansion. Here are several potential prospects of AI in various sectors:

1. *Healthcare:* AI has the potential to revolutionize healthcare by enabling personalized medicine, early disease detection, and more efficient clinical workflows. AI-powered diagnostic tools, medical imaging analysis, and predictive analytics can improve patient outcomes, optimize treatment plans, and reduce healthcare costs.
2. *Finance and Banking:* AI technologies such as machine learning, natural language processing, and predictive analytics are transforming the finance and banking industry. AI-powered chatbots, robo-advisors, and fraud detection systems enhance customer experience, automate routine tasks, and mitigate financial risks.
3. *Retail and E-commerce:* AI-driven personalization, recommendation systems, and predictive analytics are reshaping the retail and e-commerce landscape. AI-powered chatbots, virtual assistants, and visual search technologies improve customer engagement, increase sales, and drive conversion rates.
4. *Manufacturing and Industry:* AI technologies such as robotics, computer vision, and predictive maintenance are driving innovation in manufacturing and industry. AI-enabled automation, predictive maintenance, and quality control optimize production processes, reduce downtime, and enhance operational efficiency.
5. *Transportation and Logistics:* AI-powered optimization algorithms, predictive analytics, and autonomous vehicles are transforming transportation and logistics. AI-enabled route optimization, demand forecasting, and predictive maintenance improve supply chain efficiency, reduce transportation costs, and enhance delivery performance.
6. *Energy and Utilities:* AI technologies such as predictive maintenance, energy optimization, and grid management are driving innovation in the energy and utilities sector. AI-powered predictive analytics, smart grid technologies, and energy management systems improve resource utilization, reduce energy consumption, and enhance grid reliability.
7. *Telecommunications:* AI-driven customer service, network optimization, and predictive analytics are reshaping the telecommunications industry. AI-powered chatbots, virtual assistants, and predictive maintenance systems enhance customer experience, optimize network performance, and reduce operational costs.
8. *Insurance:* AI technologies such as predictive analytics, risk assessment, and claims processing are transforming the insurance

industry. AI-powered underwriting, fraud detection, and customer segmentation improve risk management, streamline claims processing, and enhance customer satisfaction.

9. **Marketing and Advertising:** AI-driven personalization, recommendation systems, and predictive analytics are revolutionizing marketing and advertising. AI-powered customer segmentation, targeted advertising, and sentiment analysis optimize marketing campaigns, increase ROI, and improve customer engagement.
10. **Legal and Compliance:** AI technologies such as natural language processing, machine learning, and predictive analytics are enhancing legal research, contract analysis, and compliance management. AI-powered legal research platforms, contract review tools, and regulatory compliance solutions improve efficiency, accuracy, and risk mitigation in legal and compliance operations.

Overall, the future prospects of AI in various businesses are promising, offering opportunities for innovation, efficiency, and competitive advantage across industries. By strategically leveraging AI technologies, businesses can unlock new insights, automate routine tasks, and drive growth and success in the digital age.

Conclusion: In conclusion, the examination of AI opportunities, challenges, and future prospects underscores the transformative potential of artificial intelligence in shaping the future of business. While the opportunities presented by AI are vast, ranging from enhanced efficiency to innovation, they are accompanied by significant challenges, including ethical considerations and data privacy concerns. However, despite these obstacles, the future prospects for AI in business remain promising. Continued advancements in AI technologies, coupled with increasing accessibility and acceptance, suggest a future where businesses can leverage AI to drive growth, improve decision-making, and create new avenues for value generation. By addressing the challenges and seizing the opportunities presented by AI, businesses can position themselves to thrive in the digital age and remain competitive in an ever-evolving landscape.

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A STUDY ON CNN ALGORITHM-BASED GESTURE RECOGNITION FOR HUMAN INTERACTION

By

Dr. Pravin V. Yadav

Assistant Professor, Anekant Institute of Management Studies (AIMS)

ABSTRACT: Due to its many uses in virtual reality, sign language interpretation, and human-computer interaction, hand gesture recognition has attracted a lot of attention lately. Convolutional Neural Networks (CNNs), in particular, are deep learning algorithms that have shown to be quite successful in producing reliable and accurate hand gesture detection. This research provides a novel CNN algorithm-based method for hand gesture recognition. The three primary phases of the suggested CNN-based hand gesture detection system are feature extraction, classification, and data preprocessing. Hand gesture photos are gathered and preprocessed to improve their quality and lower noise during the data preprocessing step. To enhance the input data, a number of methods are used, including background removal, normalization, and image scaling. Subsequently, the preprocessed hand gesture photos are processed using the CNN architecture to extract significant features. Multiple convolutional layers and pooling layers make up the CNN model, which aids in the capture of hierarchical features at various abstraction levels. To improve the model's performance and avoid over fitting, more layers are added, such as dropout and fully linked layers.

Keywords: Deep Learning, Classification, Convolutional Neural Network, Feature Extraction.

Introduction: Human-computer interaction and computer vision researchers are finding that hand gesture recognition is a hot topic for study. A key component in creating user-friendly and effective interfaces for a variety of applications, such as virtual reality, robotics, and sign language interpretation, is the capacity to recognize and interpret human hand gestures. Convolutional Neural Networks (CNNs), in particular, are deep learning algorithms that have proven to perform exceptionally well in picture classification tasks, which makes them a perfect fit for hand gesture detection. Hand-crafted feature extraction approaches, which required in-depth domain expertise and manual feature engineering, were frequently used in traditional methods for hand gesture detection. However, the accuracy of recognition was limited by these techniques' frequent inability to identify intricate spatial patterns and variations in hand gestures. Deep learning has completely changed the industry by eliminating the requirement for explicit feature engineering and enabling autonomous feature learning straight from raw input data.

1. Creation of a CNN-based hand gesture identification system: We offer an all-inclusive pipeline that includes preprocessing data, CNN-based feature extraction, and gesture categorization. The purpose of this pipeline is to accurately classify hand gesture photographs by extracting relevant and discriminative features.

2. Evaluation on publically accessible datasets: We carry out in-depth tests on popular hand gesture datasets to evaluate the effectiveness of our

suggested method. These datasets include a range of hand gestures and offer a standard against which other approaches can be compared.

3. Comparative analysis: We evaluate our suggested CNN-based solution against existing cutting-edge techniques for hand gesture identification. This investigation shows that our method is superior in terms of resilience and recognition accuracy.

Convolutional Neural Network (CNN): CNNs consist of multiple layers, each with a distinct function.

1. Input Layer: Taking in input images is the responsibility of the CNN's first layer, or input layer.
2. Convolutional Layer: The convolutional layer helps extract features from the input image by applying a number of filters to it. After the input image has been processed through each filter, a feature map is produced.
3. ReLU Layer: To help the network introduce non-linearity, Rectified Linear Unit (ReLU) activation functions are used to each component of the feature maps in the ReLU layer.
4. Pooling Layer: The pooling layer reduces the spatial size of the feature maps by aggregating the maximum or average value from each tiny region.
5. Fully Connected Layer: Using the output from the previous layer, this layer creates a traditional neural network in which each neuron is connected to every other neuron in the layer above it.

6. Output Layer: The output layer produces the final output of the CNN, which is frequently a probability distribution over all classes or a class label.

Literature Survey:

1. Li, Y., & Zhang, H. (2018). IEEE Access. This study proposes a hand gesture recognition system using CNN architecture. The authors collect a large-scale hand gesture dataset and train a CNN model to learn discriminative features from hand gesture images. Experimental results demonstrate the effectiveness of the proposed approach in achieving high recognition accuracy.
2. Mitra, S., & Acharya, T. (2019). Hand Gesture Recognition using Convolutional Neural Networks. International Conference on Intelligent Sustainable Systems. The authors propose a CNN-based hand gesture recognition system that incorporates depth information along with RGB images.
3. Zhou, L., & Wang, Y. (2020). Dynamic hand gesture recognition using a two-stream CNN model. Multimedia Tools and Applications. This study introduces a two-stream CNN model for dynamic hand gesture recognition. The model consists of spatial and temporal streams, which capture spatial appearance and motion information of hand gestures, respectively.
4. Nair, S. N., et al. (2020). Hand Gesture Recognition Using Convolutional Neural Networks: A Review. This review paper provides a comprehensive overview of hand gesture recognition using CNNs. It discusses various CNN architectures, training strategies, and datasets used in hand gesture recognition research.
5. Cao, L., et al. (2021). A Survey. IEEE Access. This survey paper provides an extensive overview of hand gesture recognition techniques using deep learning approaches, including CNNs. It covers different aspects of hand gesture recognition, such as dataset acquisition, data preprocessing, feature extraction, and classification. The paper also discusses the applications, challenges, and future directions in this field.

Research Objectives: The objective of using a CNN algorithm for hand gesture recognition in deep learning is to accurately and robustly classify hand gestures from input images. The primary goals of this objective are as follows:

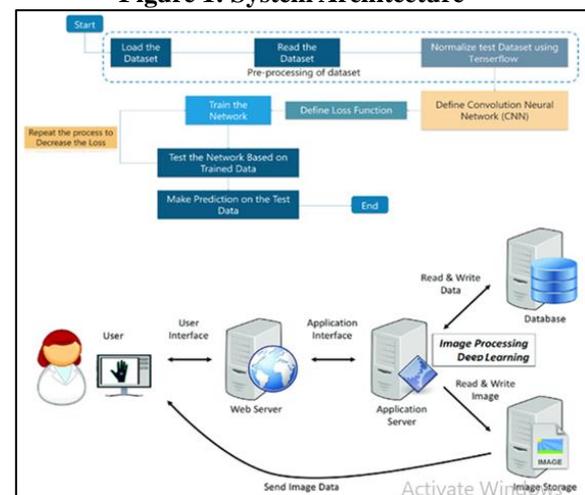
1. Accurate Classification: The CNN algorithm aims to correctly identify and classify different hand gestures based on the input images.
2. Robustness to Variations: Hand gestures can vary in terms of hand shape, orientation, lighting conditions, and background clutter.

3. Real-Time Performance: For practical applications, real-time performance is often a crucial requirement. The CNN algorithm aims to achieve efficient processing and inference times to enable real-time hand gesture recognition.
4. Generalization: The CNN algorithm should generalize well to unseen hand gesture examples and be able to recognize gestures beyond the training dataset.
5. Adaptability to Different Gesture Sets: Hand gesture recognition systems may need to adapt to different sets of gestures based on specific application requirements.
6. Scalability: As the field of hand gesture recognition evolves, the CNN algorithm should be scalable to accommodate larger datasets, more complex gesture classes, and potentially incorporate multi-modal input (e.g., RGB and depth images).

By achieving these objectives, the CNN algorithm for hand gesture recognition aims to facilitate natural and intuitive human-computer interaction, enabling applications such as gesture-based control systems, sign language interpretation, virtual reality, and augmented reality experiences. Physical barriers.

Research Architecture:

Figure 1: System Architecture



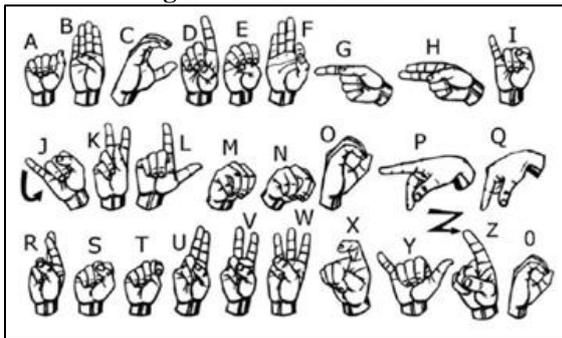
Source: Secondary Data

1. Input Layer: The input layer receives the hand gesture images as input. The images are typically represented as matrices with pixel values representing the intensity or color information.
2. Convolutional Layers: Convolutional layers are the key components of a CNN architecture. They consist of a set of learnable filters that perform convolutions on the input image. Each filter slides over the input image, computing element-wise multiplications and summations to produce a feature map. Convolutional layers are responsible for capturing local spatial

patterns and hierarchical features in hand gestures.

3. Activation Functions: Non-linear activation functions such as ReLU (Rectified Linear Unit) or Leaky ReLU are commonly used after each convolutional layer. Activation functions introduce non-linearity into the network, allowing it to learn more complex relationships between the input and output.
4. Pooling Layers: Pooling layers are used to down-sample the feature maps obtained from convolutional layers. Max pooling is a popular choice, where the maximum value within a local region is retained, discarding the remaining values. Pooling helps reduce spatial dimensions while preserving the most important features, making the network more robust to translations and improving computational efficiency.
5. Fully Connected Layers: Fully connected layers are typically added toward the end of the CNN architecture. They serve as a classifier by taking the flattened feature maps from the preceding layers and mapping them to the output classes.

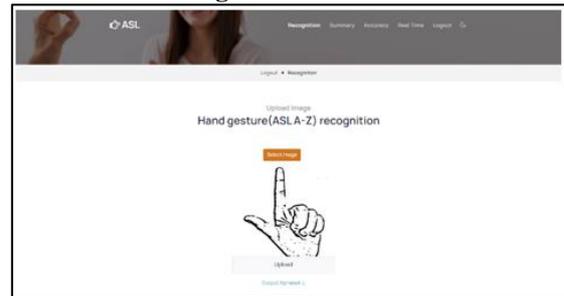
Figure 2: Hand Gestures



Source: Secondary Data

Result: The result of project is significant in that it enables the generation of a text output that can identify the name of a Gesture Image. This outcome is the product of dedicated system, which has been developed to achieve this specific objective. The ability to accurately identify gestures through automated means has numerous applications, such as in the fields of Healthcare, Automotive industry, Robotics and automation. This innovative solution provides a convenient and efficient method for Gesture Recognition & Identification, which could prove valuable in various settings.

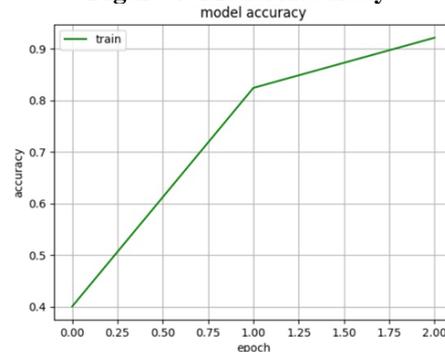
Figure 3: Results



Source: Secondary Data

Conclusion: In summary, CNN algorithms for deep learning hand gesture identification have proven to be a strong and reliable method for precise and reliable gesture classification. By eliminating the need for manual feature engineering and enhancing recognition performance, CNN architectures enable automatic feature learning from unprocessed input data. We highlighted the importance of hand gesture detection using CNN algorithms across a range of fields by providing a thorough overview of the subject in this study. High identification accuracy, tolerance to fluctuations, real-time performance, adaptability to various gesture sets, and scalability for future developments are only a few benefits of the suggested CNN-based technique. The accuracy of recognition, the confusion matrix, precision, recall, and F1-score are all evaluated, along with ROC curves and comparisons with baseline or current techniques, in the assessment of the CNN-based hand gesture recognition system. These assessment metrics offer insightful information on the effectiveness of the system, as well as its advantages and shortcomings. CNN algorithms are used for hand gesture recognition in a variety of fields. Applications for it include virtual reality, robotics, healthcare, gaming, automotive, surveillance, and security, as well as human-computer interface. Understanding and interpreting hand gestures facilitates more intuitive and natural interactions between people and machines, improving user experiences and creating new opportunities for creative applications.

Figure 4: Model Accuracy



Source: Primary Data

As the field continues to advance, there are opportunities for further research and development. Future work can focus on addressing challenges such as real-time performance optimization, handling complex gesture sets, improving robustness to environmental variations, and exploring multi-modal input integration. Overall, hand gesture recognition using CNN algorithms in deep learning holds great promise and has the potential to revolutionize various industries and domains.

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A THEORETICAL STUDY ON OPTIMIZING PEDAGOGICAL STRATEGIES THROUGH TECHNOLOGY INTEGRATION

By

Naziya Khanum

*Research Scholar, Karnataka State Akkamahadevi Women's University,
Vijayapura, Karnataka.*

ABSTRACT: *This research investigates the integration of technology into three pedagogical approaches: Flipped Classroom Pedagogy, Project-Based Learning (PBL) Pedagogy, and Inquiry-Based Learning (IBL) Pedagogy. Each pedagogical approach is critically analyzed to understand how technology enhances teaching and learning practices. The study explores the characteristics, merits, and demerits of each pedagogical approach, considering their implementation in educational settings. For the Flipped Classroom Pedagogy, the study highlights how technology facilitates the delivery of instructional content outside of class, allowing for flexible learning experiences. The merits of active engagement, personalized learning, and enhanced collaboration are discussed, alongside challenges related to access to technology and potential disruptions to face-to-face interactions. In the case of Project-Based Learning (PBL) Pedagogy, the research emphasizes the role of technology in supporting interdisciplinary projects and promoting authentic, inquiry-based learning experiences. The study identifies benefits such as engagement, deep learning, and 21st-century skill development, while addressing concerns regarding resource intensity and assessment challenges. Regarding Inquiry-Based Learning (IBL) Pedagogy, the study underscores the significance of technology in expanding inquiry opportunities and fostering collaboration and critical thinking skills. The benefits of student engagement, deep understanding, and lifelong learning are acknowledged, alongside challenges related to time consumption and equitable access to technology. A practical example is provided for each pedagogical approach, illustrating how technology can be integrated into teaching practices effectively. In conclusion, the research highlights the importance of purposeful integration of technology to enhance pedagogical approaches in education. While technology offers numerous benefits for teaching and learning, its implementation requires careful consideration of equity, accessibility, and pedagogical alignment. The findings of this study contribute to the ongoing discourse on effective technology integration in education, informing educators, policymakers, and researchers about best practices for leveraging technology to support student learning and achievement.*

Keywords: *Technology Integration, Pedagogical Approaches, Flipped Classroom, Project-Based Learning, Inquiry-Based Learning.*

Introduction: Enhancing pedagogical approaches with technology integration has become increasingly essential in modern education. By leveraging technology, educators can transform traditional teaching methods into dynamic, interactive learning experiences that cater to diverse student needs. Whether through the flipped classroom model, project-based learning, or inquiry-based learning, technology offers opportunities for active engagement, personalized learning, and collaboration. From delivering instructional content outside of class to supporting interdisciplinary projects and fostering critical thinking skills, technology plays a pivotal role in enhancing teaching and learning practices. However, effective integration requires careful planning, ongoing support, and consideration of equity and accessibility. By embracing technology as a tool for innovation and enhancement, educators can create meaningful learning experiences that prepare students for success in the

digital age. The aim of this theoretical research article is to comprehensively examine the integration of technology into three key pedagogical approaches: Flipped Classroom Pedagogy, Project-Based Learning (PBL) Pedagogy, and Inquiry-Based Learning (IBL) Pedagogy. The study seeks to analyze the characteristics, merits, and demerits of each pedagogical approach when combined with technology, thereby shedding light on how technology enhances teaching and learning practices. Additionally, the research aims to provide practical examples demonstrating the effective integration of technology into teaching practices for each approach, offering insights into its implementation in real-world educational settings. Furthermore, the study aims to critically analyze the integration of technology with these pedagogies, considering the enhancements, challenges, and implications for teaching and

learning, thereby contributing to the discourse on effective technology integration in education.

Concept of Flipped Classroom Pedagogy: The flipped classroom pedagogy reverses traditional teaching methods by delivering instructional content outside of class and utilizing class time for interactive, hands-on learning activities. In a flipped classroom, students typically engage with pre-recorded lectures, readings, or other instructional materials independently before coming to class. During class time, teachers facilitate active learning experiences, such as discussions, problem-solving, group work, and practical application of concepts.

Characteristics:

1. Pre-class Content Delivery: Instructional content, such as lectures, videos, readings, or online quizzes, is delivered to students outside of class.
2. Classroom Activities: Class time is devoted to interactive activities that promote deeper understanding, critical thinking, and collaboration among students.
3. Student-Centered Learning: Flipped classrooms emphasize student autonomy, allowing learners to progress at their own pace and focus on areas of interest.
4. Teacher Facilitation: Teachers act as facilitators, guiding students through discussions, providing feedback, and addressing misconceptions during class time.
5. Integration of Technology: Technology plays a central role in delivering pre-class content and facilitating in-class activities, leveraging online platforms, multimedia resources, and collaborative tools.

Merits:

1. Active Engagement: Students are actively engaged in learning activities during class time, promoting deeper understanding and retention of concepts.
2. Personalized Learning: Flipped classrooms allow students to learn at their own pace and revisit content as needed, catering to individual learning needs.
3. Enhanced Collaboration: Collaborative activities during class time foster peer interaction, teamwork, and communication skills.
4. Immediate Feedback: Teachers can provide immediate feedback and support to students during in-class activities, addressing misconceptions and reinforcing learning.
5. Flexibility: Flipped classrooms offer flexibility in scheduling and allow students to access instructional content anytime, anywhere, making learning more accessible.

Demerits:

1. Access to Technology: Flipped classrooms require access to technology and reliable

internet connectivity, which may pose challenges for students with limited resources.

2. Preparation Time: Developing quality instructional materials for pre-class delivery can be time-consuming for teachers.
3. Self-Regulated Learning: Some students may struggle with self-regulated learning and may require additional support and guidance to navigate the flipped learning environment effectively.
4. Monitoring Student Progress: Monitoring student engagement with pre-class materials and ensuring accountability can be challenging for teachers.
5. Resistance to Change: Flipped classrooms may face resistance from students or parents who are accustomed to traditional teaching methods.

Practical Example in Teaching Social Science to 8th Grade Students: In a flipped classroom setting for teaching social science to 8th grade students, the teacher might assign pre-class materials such as:

1. A video lecture on the topic of "The Industrial Revolution"
2. An online reading on the impact of industrialization on society.
3. Interactive quizzes on key concepts related to the Industrial Revolution.

During class time, students could engage in the following activities:

1. Small group discussions on the social, economic, and political effects of the Industrial Revolution
2. Analyzing primary source documents, such as photographs or excerpts from historical texts, related to the topic
3. Collaborative projects, such as creating timelines or multimedia presentations to illustrate key events and developments during the Industrial Revolution
4. Debates or role-playing activities to explore different perspectives on issues arising from industrialization

Throughout these activities, the teacher would facilitate discussions, provide guidance, and offer feedback to deepen students' understanding of the topic and encourage critical thinking skills.

Integration of Project-Based Learning (PBL) Pedagogy with Technology: Project-Based Learning (PBL) integrates technology to enhance collaboration, research, presentation, and overall project management. Here's how:

Characteristics:

1. Interdisciplinary Projects: PBL encourages students to work on projects that integrate concepts from multiple subjects, fostering a holistic understanding of real-world problems.
2. Student Autonomy: PBL projects are often open-ended, allowing students to choose

topics, develop research questions, and design solutions independently or in groups.

3. **Authentic Tasks:** Projects are designed to address real-world problems or challenges, making learning relevant and meaningful to students.
4. **Collaborative Learning:** Students collaborate with peers, sharing ideas, conducting research, and working together to solve problems.
5. **Critical Thinking:** PBL promotes critical thinking skills as students analyze information, evaluate evidence, and develop creative solutions to complex problems.
6. **Presentation Skills:** Students present their findings to an authentic audience, developing communication and presentation skills.

Merits:

1. **Engagement:** PBL projects engage students by offering opportunities for hands-on, active learning experiences that are relevant to their interests and experiences.
2. **Deep Learning:** PBL promotes deep understanding of concepts as students apply knowledge and skills to real-world problems, making connections across disciplines.
3. **21st Century Skills:** PBL develops skills such as collaboration, communication, critical thinking, creativity, and problem-solving, which are essential for success in the 21st century.
4. **Authentic Assessment:** Projects provide opportunities for authentic assessment of student learning, allowing teachers to evaluate students' ability to apply knowledge and skills in real-world contexts.
5. **Preparation for Future Careers:** PBL prepares students for future careers by developing skills and competencies that are highly valued in the workplace, such as teamwork, adaptability, and innovation.

Demerits:

1. **Time-Consuming:** Planning and implementing PBL projects can be time-consuming for teachers, requiring careful consideration of project design, resources, and assessment.
2. **Resource Intensive:** PBL projects may require access to technology, materials, and other resources, which may pose challenges for schools with limited resources.
3. **Group Dynamics:** Collaborative projects may encounter challenges related to group dynamics, such as unequal participation, conflicts, or communication issues.
4. **Assessment Challenges:** Assessing student learning in PBL can be challenging, as traditional assessment methods may not fully capture the depth and complexity of student learning outcomes.
5. **Alignment with Curriculum:** Integrating PBL with existing curriculum standards and

objectives may require careful planning and coordination to ensure alignment and coverage of content.

Practical Example of Teaching Science to 8th Grade Students: In a PBL project for teaching science to 8th-grade students, students could work on an interdisciplinary project titled "Designing Sustainable Energy Solutions for Our Community." Here's how technology could be integrated into this project:

Project Description: Students work in small groups to research, design, and propose sustainable energy solutions for their local community, addressing environmental, economic, and social considerations.

Technology Integration:

1. **Research:** Students use online databases, scientific journals, and educational websites to research renewable energy sources, energy conservation strategies, and local environmental issues.
2. **Data Analysis:** Students utilize spreadsheet software or online data visualization tools to analyze energy consumption data, conduct cost-benefit analyses, and compare the effectiveness of different energy solutions.
3. **Simulation:** Students use simulation software or online modeling tools to simulate the performance of renewable energy systems, such as solar panels or wind turbines, in their community.
4. **Collaboration:** Students collaborate using digital platforms such as Google Drive, Microsoft Teams, or online discussion forums to share resources, brainstorm ideas, and coordinate project tasks.
5. **Presentation:** Students create multimedia presentations using presentation software (e.g., PowerPoint, Google Slides) or digital storytelling tools (e.g., Adobe Spark, Piktochart) to showcase their proposed energy solutions, incorporating visuals, data, and persuasive arguments.
6. **Reflection:** Students use blogging platforms or digital journals to reflect on their learning experiences, discuss challenges encountered during the project, and propose recommendations for future energy initiatives in their community.

Through this PBL project, students engage in authentic, inquiry-based learning experiences that integrate science concepts with real-world problem-solving skills, while leveraging technology to enhance collaboration, research, and presentation capabilities.

Integration of Inquiry-Based Learning Pedagogy with Technology: Inquiry-Based Learning (IBL) can be greatly enhanced through the integration of technology, allowing students to

access a wealth of resources, tools, and platforms to support their inquiry process. Here's how:

Characteristics:

1. **Question-Driven Exploration:** IBL begins with students asking questions and actively seeking answers through investigation and discovery.
2. **Active Learning:** Students engage in hands-on activities, experiments, research, and problem-solving tasks to construct knowledge and understanding.
3. **Critical Thinking:** IBL promotes critical thinking skills as students analyze information, evaluate evidence, and draw conclusions based on evidence.
4. **Metacognition:** Students reflect on their learning process, monitor their understanding, and make connections between new and existing knowledge.
5. **Teacher Facilitation:** Teachers act as facilitators, guiding students through the inquiry process, providing support, feedback, and scaffolding as needed.

Merits:

1. **Student Engagement:** IBL promotes active engagement as students take ownership of their learning and pursue topics of interest.
2. **Deep Understanding:** IBL encourages deep understanding of concepts as students explore topics in depth and make connections across disciplines.
3. **Problem-Solving Skills:** IBL develops problem-solving skills as students tackle real-world problems, analyze data, and develop solutions.
4. **Collaboration:** IBL fosters collaboration as students work together, share ideas, and collaborate on projects, both in-person and through online platforms.
5. **Lifelong Learning:** IBL cultivates a curiosity for learning and a desire for lifelong learning as students develop skills in inquiry, research, and self-directed learning.

Demerits:

1. **Time-Consuming:** IBL can be time-consuming as students engage in extended inquiry projects, requiring careful planning and management of time.
2. **Resource Intensive:** IBL projects may require access to technology, materials, and other resources, which may pose challenges for schools with limited resources.
3. **Assessment Challenges:** Assessing student learning in IBL can be challenging, as traditional assessment methods may not fully capture the depth and complexity of student learning outcomes.
4. **Teacher Training:** Implementing IBL effectively requires training and support for teachers to facilitate inquiry-based activities and provide guidance to students.

5. **Student Motivation:** Some students may struggle with self-directed learning and may require additional support and encouragement to stay motivated and focused during the inquiry process.

Practical Example in Teaching Science to 7th Grade Students: In a science class focusing on the topic of "Ecosystems and Biodiversity," students could engage in an inquiry-based learning project using technology:

Project Description: Students investigate the factors influencing biodiversity within a local ecosystem and explore the impact of human activities on biodiversity loss.

Technology Integration:

1. **Research:** Students use online databases, scientific journals, and educational websites to research biodiversity, ecosystem dynamics, and human impacts on the environment.
2. **Data Analysis:** Students utilize spreadsheet software or online data visualization tools to analyze ecological data, such as species populations, habitat diversity, and environmental indicators.
3. **Simulation:** Students use ecological simulation software or online modeling tools to simulate ecosystem dynamics, explore cause-and-effect relationships, and predict the consequences of human activities on biodiversity.
4. **Collaboration:** Students collaborate with peers using digital platforms such as Google Drive, Padlet, or online discussion forums to share resources, exchange ideas, and provide feedback on each other's research.
5. **Presentation:** Students create multimedia presentations using presentation software (e.g., PowerPoint, Google Slides) or digital storytelling tools (e.g., Adobe Spark, Animaker) to showcase their findings, incorporating visuals, data, and examples to highlight the importance of biodiversity conservation.
6. **Reflection:** Students use blogging platforms or digital journals to reflect on their learning journey, discuss insights gained from their inquiry, and propose recommendations for promoting biodiversity conservation in their community.

Through this inquiry-based learning project, students engage in authentic, student-centered learning experiences that promote critical thinking, collaboration, and digital literacy skills while fostering a deeper understanding of ecosystem dynamics and the importance of biodiversity conservation.

Critical Analysis of Three Pedagogies with Integration of Technology

1. Flipped Classroom Pedagogy:

- a) **Pedagogy Description:** Flipped classroom pedagogy involves delivering instructional

content outside of class through technology, allowing students to engage with materials independently before class. Class time is then used for active learning activities, such as discussions, group work, and hands-on application of concepts.

- b) **Integration of Technology:** Technology plays a central role in delivering pre-class content, including video lectures, readings, quizzes, and multimedia resources. Online platforms facilitate content delivery, allowing students to access materials anytime, anywhere. Additionally, collaborative tools and discussion forums promote interaction and peer learning.
- c) **Enhancements:** Integration of technology enhances the flipped classroom model by providing flexibility in content delivery and access. Students can review materials at their own pace, pause, rewind, and revisit content as needed. Interactive elements, such as quizzes and simulations, promote engagement and active learning. Moreover, technology facilitates communication and collaboration, enabling students to interact with peers and instructors beyond the confines of the physical classroom.
- d) **Critical Analysis:** While technology enhances the flipped classroom model by offering flexibility and interactivity, its effectiveness depends on access and usability. Disparities in access to technology and internet connectivity may exacerbate inequalities among students. Additionally, the quality of instructional materials and students' digital literacy skills can impact learning outcomes. Moreover, reliance on technology may diminish face-to-face interactions and interpersonal connections, which are essential for building rapport and fostering a supportive learning environment.

2. Project-Based Learning (PBL) Pedagogy:

- a) **Pedagogy Description:** Project-Based Learning (PBL) involves students working on extended, interdisciplinary projects to explore and address real-world problems or challenges. Students engage in hands-on, inquiry-based activities, conduct research, collaborate with peers, and present their findings.
- b) **Integration of Technology:** Technology supports PBL by providing access to a vast array of resources, tools, and platforms for research, collaboration, and presentation. Students can utilize online databases, simulations, data analysis tools, and multimedia software to gather information, analyze data, and create project artifacts. Collaborative platforms and communication tools facilitate teamwork, peer feedback, and knowledge sharing.

- c) **Enhancements:** Integration of technology enhances PBL by expanding the scope and depth of student exploration. Students can access up-to-date information, conduct virtual experiments, and interact with experts or communities beyond the classroom. Technology also enables personalized learning experiences, allowing students to pursue their interests and tailor projects to their learning styles. Moreover, digital tools facilitate project management and organization, streamlining tasks such as data collection, analysis, and documentation.
- d) **Critical Analysis:** While technology enriches PBL by offering resources and tools for inquiry and collaboration, its integration requires careful planning and scaffolding. Teachers must ensure that technology supports, rather than detracts from, the authentic, hands-on nature of PBL experiences. Moreover, reliance on digital platforms may introduce distractions or technical challenges that disrupt learning. Additionally, equitable access to technology and digital literacy skills are essential for all students to fully participate in PBL activities.

3. Inquiry-Based Learning Pedagogy:

- a) **Pedagogy Description:** Inquiry-Based Learning (IBL) focuses on encouraging students to ask questions, explore topics, and construct knowledge through investigation and discovery. Students engage in active learning experiences, conduct research, analyze data, and draw conclusions.
- b) **Integration of Technology:** Technology supports IBL by providing access to resources, simulations, data analysis tools, and virtual experiments. Students can use search engines, online databases, interactive simulations, and educational apps to conduct research, gather data, and explore concepts independently. Collaborative online platforms and discussion forums facilitate peer interaction and knowledge sharing during inquiry activities.
- c) **Enhancements:** Integration of technology enhances IBL by expanding the scope of inquiry and providing access to a wide range of resources and tools. Students can explore topics in depth, conduct virtual experiments, and interact with multimedia content to enhance understanding. Technology also promotes collaboration and communication, enabling students to share findings, exchange ideas, and receive feedback from peers and instructors. Moreover, digital tools support metacognitive skills, allowing students to reflect on their learning process and monitor their understanding.
- d) **Critical Analysis:** While technology enriches IBL by offering resources and tools for inquiry

and collaboration, its integration must be purposeful and well-aligned with learning objectives. Teachers must scaffold technology use to ensure that it enhances, rather than substitutes for, hands-on exploration and critical thinking. Moreover, reliance on digital platforms may introduce information overload or biases that require careful evaluation. Additionally, equitable access to technology and digital literacy skills are essential for all students to fully engage in inquiry-based activities.

Conclusion: In conclusion, the integration of technology enhances pedagogical approaches such as flipped classroom, project-based learning, and inquiry-based learning by providing access to resources, tools, and platforms that support active, collaborative, and personalized learning experiences. However, effective integration requires careful planning, consideration of equity and accessibility, and ongoing support for teachers and students to maximize its benefits while mitigating potential challenges.

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A STUDY ON SOCIOECONOMIC IMPLICATIONS OF WOMEN'S EDUCATION IN THE INDIAN CONTEXT

By

Leena Lassi

Research Scholar, MGVIMP, Nashik

Nikita Kothari

Alumina SNJB's Late Sau. K. B. J. College of Engineering, Nashik

Simran Deshmukh

Student, SNJB's Late Sau. K. B. J. College of Engineering, Nashik

ABSTRACT: *The profound influence of women's education resonates across societal dimensions, yielding tangible socio-economic advantages. Reduced fertility, infant, and maternal mortality rates stand as notable outcomes. Closing the gender educational gap not only fosters gender equality within and beyond classrooms but also underpins equal rights and opportunities. Elevated female education levels correlate with heightened regional development, bolstering economic progress. Increased female literacy translates into augmented salaries, propelling economic flourishing. Moreover, women's education serves as a catalyst for empowerment, alleviating the risks of fertility issues and mortality while enhancing nutritional well-being, economic potential and household autonomy.*

Keywords: *Women's Education, Fertility, Mortality, Equality, Flourish.*

Introduction: The pursuit of women's education encompasses a diverse range of learning colleges but also extends to vocational, technical, and professional education, along with health education. The socio-economic implications of women's education have given rise to a burgeoning field of research in international development, highlighting its correlation with elevated levels of societal progress. The positive outcomes of women's education are multifaceted, reaching into economic growth and societal advancement. Notably, increased educational opportunities for women are associated with higher earnings and contribute significantly to GDP growth. Beyond economic aspects, the societal benefits are intricately tied to the empowerment of women. Despite the Indian government's steadfast commitment to universal education, the nation continues to grapple with one of Asia's lowest female literacy rates. As of 2020, the female literacy rate stands at 70.3%, underscoring the pressing challenge as 29.7% of women in India still grapple with illiteracy. This low literacy rate reverberates not only through the lives of women but also profoundly affects their families and the overall economic development of the country. Numerous studies underscore the severe consequences of female illiteracy, including heightened risks of fertility and mortality, diminished economic prospects, and limited household autonomy. Furthermore, the lack of education among women negatively impacts the health and well-being of their children, as

evidenced by the inverse relationship between maternal education and infant mortality rates in India.

Review of Literature:

- Universal Primary Education Advocacy:** Birdsall, Levine, and Ibrahim (2005) emphasize the imperative of investments, incentives, and institutions to achieve universal primary education, shedding light on the pivotal factors that contribute to educational accessibility and success (European Journal of Education).
- Gender Disparity and Economic Development:** Khan, Majeed, and Sayeed (2020) explore the linkages between women's education and economic development in India, providing a conceptual framework for understanding the transformative role of women's education on the national economic landscape (International Journal of Engineering and Management Research).
- Kerala Model Empowerment:** The Kerala Model of Development is exemplified in Sivaraman's work (2017), offering insights into the positive impact of education on women within this model, showcasing Kerala as a noteworthy case for comprehensive education-driven development (Jindal Journal of Public Policy).
- Educational Disparities and Economic Growth:** Klasen's cross-country evidence (2002) illuminates the impact of gender inequality in education on economic

development, emphasizing the interconnectedness of educational disparities and overall economic growth (World Bank Economic Review).

5. **Social Choice and Domestic Violence Response:** Sen's study (1999) in Calcutta investigates how education and employment enhance women's choices in responding to domestic violence, providing valuable insights into the role of education in empowering women in challenging circumstances (European Journal of Development Research).
6. **Literacy Rates and State Variations:** The Wikipedia sources on literacy rates (2021) and the list of Indian states and union territories (2021) contribute to understanding the variations in literacy across regions, highlighting the need for targeted educational interventions.
7. **Socioeconomic Impact Overview:** Various sources, including Gallagher (2002), Schultz (2001), and Sarikhani (2013), collectively underscore the socioeconomic impact of female education, reinforcing its significance in shaping individual occupations, economic development, and societal well-being.

Research Objectives:

1. Evaluate the implications of women's education for social progress in India.
2. Scrutinize the role of women's education in shaping economic advancements in India.
3. Investigate the intricate dynamics between women's education and various socioeconomic factors in the Indian context.

Research Design: Recent human development studies have established a significant correlation between women's education and international development. This field of study concentrates on the social and economic progress of underdeveloped regions, seeking to identify factors contributing to development rate disparities. Women's education emerges as a crucial explanatory variable for social and economic growth, showcasing a positive association. Economist Lawrence Summers contends that investing in girls' education could be the most lucrative investment in the developing world.

Research Methods: Analysing the impact of women's education on growth involves various metrics. Studies often emphasize gender disparities in educational attainment, distinguishing between effects specific to women's education and broader educational benefits. Evaluation methods include comparing graduation rates between genders, assessing average years of schooling, and examining literacy rates. Economic progress is commonly measured through changes in GDP growth, correlating data across countries and periods. On an individual level, the advantages of education can be assessed by calculating the cost of

schooling, income generated during education, and the net return representing overall income gain.

Discussion:

1. **Impact on Economic Development:** Women's education yields substantial benefits for individuals and nations alike. Research, spearheaded by Harry Patrinos, the lead education economist at the World Bank, underscores the indisputable and global profitability of education. The private rate of return estimation affirms that investing in education throughout one's life results in a net profit. The economic impact of female education, when matched with male education in terms of enhancing human capital, productivity, and overall economic growth, positions women's educational disadvantage as an economically wasteful phenomenon. Globally conducted research consistently indicates that the economic rate of return to education for women is equivalent to that of men, emphasizing the undesirable consequences of the gender gap in education on economic development. Notably, the repercussions of the educational gender gap become more pronounced in moderately impoverished countries. As a nation progresses beyond extreme poverty, there is a heightened incentive to invest in women's education. Beyond fostering economic growth, women's education plays a pivotal role in promoting income distribution equity within society. This is particularly crucial when targeting underprivileged women, demographic vulnerable to educational disparities. Furthermore, evidence suggests that lower gender discrepancies in educational attainment in developing countries correlate with reduced overall economic inequality in society.
2. **Influence on Social Development:** Education for women yields significant social impacts, manifesting in reduced fertility rates, lower infant mortality, and decreased maternal deaths. Bridging the gender education gap fosters essential gender equality, ensuring equal rights and opportunities. Cognitive benefits accrue to women through education, enhancing their ability to make informed health decisions for themselves and their children. Additionally, educated women exhibit increased political participation, contributing to civic engagement and democratic governance. The positive effects extend to the domestic sphere, with educated women experiencing lower rates of domestic abuse. They actively engage in family decision-making, particularly in financial matters, enhancing overall family well-being. This empowerment of women at home translates into societal benefits, as evidenced

by increased school attendance, especially among girls. Mothers' education, particularly when focused on adult literacy, indirectly reinforces the value of education, encouraging them to prioritize their children's schooling. Moreover, the advantages of having an educated mother extend beyond survival rates to encompass improved nutrition and overall family welfare. In developing countries, educated women actively participate in political activities, securing benefits through their advocacy. Countries with well-educated women are more likely to embrace democratic administration, highlighting the far-reaching societal impact of educating women.

- 3. Limitation of Impact:** Gender disparities persist in educational opportunities, exemplified by female students being steered towards needlework and household sciences, while their male counterparts explore technical crafts. Secondary education further widens the gap, limiting females' access to vocational training. In India, despite women's education contributing to macro-development, a high prevalence of educated women faces unemployment due to concentration in traditionally female-dominated professions. Societal norms in some cultures prioritize investing in sons, where daughters marry and leave the family, contributing to the challenge of educated female unemployment. While investing in women's education shows a superior overall return, families focusing on primary education may favor sons for their higher return during this period. Social gender norms can stifle the transformative potential of women's education, particularly when viewed solely as a means to enhance desirability for marriage. Scholars critique studies indicating women's education impact, citing methodological challenges in comparing diverse educational systems and questioning the applicability of findings to all developing countries. Despite uncontroversial economic benefits, evaluating the social impact remains contentious, with varying perspectives among researchers. Limited data availability in poorer countries adds complexity to these assessments, emphasizing the need for nuanced understanding in the discourse on women's education and development.
- 4. Exploring the Interplay between Women's Education and Socio-Economic Factors in India:** The intricate relationship between women's education and socio-economic factors in India serves as a compelling case study, highlighting the multifaceted dynamics at play. Persistent societal norms, early marriages, child labor, and institutional barriers have historically hindered women's access to

education. A glaring gender disparity exists in literacy rates, with 80.9 percent of men being literate compared to 64.6 percent of women nationwide. A nuanced examination, however, reveals a complex tapestry when comparing states. Kerala, situated in the southern part of India, stands out with the highest female literacy rate at 91.98 percent. This can be attributed to a historical emphasis on women's empowerment, reflected in their autonomy, active participation in academia, arts, politics, and societal reforms. Notably, Kerala's success in curbing early marriages, achieving a below-replacement-level fertility rate, and empowering women contributes to its lower infant and child mortality rates—a tangible impact of education on social systems. Contrastingly, Rajasthan, with a female literacy rate of 52.66 percent, grapples with lower female educational attainment. Despite a higher GDP ranking (9th among Indian states), compared to Kerala, Rajasthan faces challenges such as a skewed sex ratio, prevalent female child labour leading to school dropouts, and persistent issues of child marriage. The economic landscape, marked by insufficient educational facilities and communities devaluing education, further contributes to Rajasthan's literacy struggles. Surprisingly, in Rajasthan, addressing child labour through improved access to quality education may break the poverty cycle. Elevating the societal worth of females, eradicating child labor, and expanding educational opportunities emerge as pivotal factors influencing literacy and poverty rates in the state. This comparative analysis underscores the need for tailored strategies considering regional intricacies, challenging the simplistic assumption that increased female education uniformly propels economic growth.

Findings:

- 1. Transformative Social Impact:** The research unequivocally establishes the profound societal influence of women's education, substantiated by tangible outcomes such as reduced fertility rates, lower infant mortality, and improved maternal well-being. The data underscores the transformative power of educating women, indicating a positive ripple effect on key socioeconomic indicators.
- 2. Strategic Gender Equality Enhancement:** A key finding of the study underscores the strategic importance of narrowing the gender gap in education as a catalyst for advancing gender equality. This strategic initiative transcends the realm of education, playing a pivotal role in ensuring equitable rights and opportunities for individuals across all genders.

3. **Holistic Socioeconomic Advancements:**

Beyond individual empowerment, the research illuminates the broader socioeconomic dividends of women's education. Recognizing the holistic benefits, the study emphasizes the imperative of championing women's education as a fundamental driver for comprehensive societal progress.

Conclusion: As demonstrated by observable results like decreased fertility rates, lower infant mortality, and enhanced maternal well-being, the research unambiguously demonstrates the significant societal benefit of women's education. The information highlights how education can change lives and shows how it has a positive knock-on effect on important socioeconomic metrics for women. An important finding of the research emphasizes the strategic significance of closing the gender gap in education as a means of promoting gender equality. This strategic endeavor is important because it goes beyond education to ensure that people of all genders have equal rights and opportunities. The study sheds light on the wider socioeconomic benefits of women's education, going beyond personal empowerment. Acknowledging the complete advantages, the research highlights the necessity of promoting women's education as a key component in advancing comprehensive societal transformation.

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ROLE OF NATIONAL EDUCATION POLICY, 2020 (NEP) IN TRANSFORMING LEARNING EXPERIENCES

By

Dr. Shweta Verma

Assistant Professor, Japyee Institute of Information and Technology, Noida

Dr. Sapna Dogra

Assistant Professor, Atal Bihari Vajpayee Government Degree College - Sunni, Shimla

ABSTRACT: On July 29, 2020, the Indian government approved the National Education Policy 2020. It describes the goals of India's new education system. This policy provides a thorough framework for both vocational training and higher education for both rural and urban areas of India. By 2030, the policy hopes to change India's educational system. With the launch of New Education Policy 2020, a unique educational approach that combines traditional wisdom and teaching techniques with contemporary curricula is envisioned, allowing students to benefit from the best of both worlds. Anticipating India's rise to prominence as a "Vishwaguru," the policymakers have devised a framework that would enable Indian students to engage in a holistic academic pursuit that would not only inspire them to learn about their cultural heritage and traditional languages, but also provide them with a rich cultural education that will instill a sense of pride in their heritage before they slavishly conform to Western standards. But there's a lot of variation in Indian languages, which can be confusing. A child's mother tongue and local language would differ if they live in a Hindi-speaking area and speak Marathi at home because the three-language system that the policy makers support does not understand the distinction between mother tongue and local language. Government officials and policymakers have long asserted that multilingual students are intellectually superior and that their ability to adapt to shifting social contexts is one of their much strength. Diversity has gained traction among people beyond the linguistic debate. Some have embraced this novel idea with open arms, while others believe it is just another way to impose a particular language and so establish socio-cultural uniformity in society. While there is no doubting that language is essential to the development of the individual and the community, the necessity of a universal language cannot be overstated. The world now views English as a necessity, and even in those countries where national, regional, or local languages are supported, English's standing has not changed for other reasons. Nonetheless, criticisms have been made of the ambiguity of phrases like "mother tongue," "home language," and "local language." Because of this ambiguity, it is unclear how well the policy takes into account the intricate linguistic landscape of India, where people may be exposed to multiple languages depending on their cultural and geographic backgrounds. The NEP 2020 indicates a commitment to inclusivity in language education as it supports the creation of curriculum materials for students with hearing impairment and the standardization of Indian Sign Language. To address worries about the possible unintended effects of language policies on regional identities and linguistic practices, however, more discussion and improvement may be required. This paper aims to discuss such matters.

Keywords: NEP, Mother tongue, Education, Language, Curriculum.

Introduction: The first National Policy on Education (NPE) of India was promulgated in 1968 by the Government of India and then the second was framed in 1986 which was modified in 1992. National Education Policy 2020 (NEP) is approved by the Union Cabinet of India in July 2020 to replace the previous policies on account of changes taking place in the society, economy, polity and technology, the old policy seemed ill suited to cater to the needs of an 'Aspiring India'. This policy aims to address the imbalances and to make sweeping changes in our education system. The new NEP-2020 will change the face and future of

Teacher Education in India as well by introducing Integrated Teacher Education Programme (ITEP). GNCE is trying to bring all stakeholders – academia, experts, social scientists, peace educators, activists, and budding scholars representing leading universities/ institutions/ organizations across the world on one platform to discuss/assess the presence, need, promotion and introduction of NEP and its impact on Teacher Education System in India. Education is an important pillar of any society, fundamental to achieving full human potential and developing an equitable and just society for promoting national

development. The new National Education Policy-2020 (NEP-2020) envisions bringing about significant reforms in higher education to cater to the changing landscape of knowledge and create global standards of education. This requires a deep dive and thorough understanding of the provisions and the approach for effective implementation of the same. A key policy document outlining the country's approach for the new millennium is the National Education Policy of India 2020. In line with Sustainable Development Goal 4 of the United Nations Agenda 2030, it is bold and states that providing everyone with access to high-quality education is its main goal. The NEP's emphasis on mother tongue instruction at the elementary levels in both state-run and privately run schools is one of its best features. This paper provides a critical evaluation of NEP 2020, focusing on the language-in-education policy. The National Education Policy 2020 envisions a contemporary education system that foresees to contribute directly to transform our nation sustainably into an equitable and vibrant knowledge society, by providing high quality education to all. This Policy envisages creation, transmission, use and dissemination of knowledge as a part of the continuum.

Theoretical Background: The agenda for the new millennium is set by the National 2020. SDG 4 of Agenda 2030 calls for universal access to high-quality education. NEP places a strong emphasis on teaching mother tongues in public and private elementary schools. reviews of articles The communication policy of NEP 2020. The study intends to privatise public education while taking historically underprivileged and marginalised groups into account. India's first millennium-era education policy was released in 2020. 1986 was the final NEP year. 1992 brought about modifications. For India, a country proud of its youthful population, it is an essential tool for policy. It serves as the cornerstone for India's educational system, objectives, and future. There are many advantages of Teaching in the Mother Tongue in Elementary School: developing a sense of pride, comfort in learning and achieving sustainable goals, etc.

Research Methodology: The NEP 2020 insists that education must develop cognitive capacities like critical thinking and problem-solving attitude and also social, ethical and emotional capacities and dispositions. The challenge to perceive knowledge for personal and community benefits in the framework of social, emotional and ethical standards is a huge diversion from the earlier individualized and cut-throat competition-based learning process. All these call for a change in approach, up skilling and resource diversification in the education system. All educational institutions have to implement the NEP-2020 during the coming years and are bound to take varied

responsibilities for implementation issues and challenges. This national conference takes up this issue to provide a platform for sharing of the NEP-2020 implementation issues, responsibilities, experiences, strategies and solutions among various schools and higher education institutions for a smooth and effective implementation of the NEP 2020. This paper looks at the issues in implementation of NEP. One of the challenges in putting the NEP into practice is organising enough people to restructure the way primary school curriculum is taught. The language curriculum at the elementary school level does not include nearly enough art. An excessive focus on the intelligence quotient, a metric used to gauge intelligence, detracts from other factors. the emphasis on children's spiritual and emotional quotients for their overall development.

Discussion: The National Policy of Education of 1986 was replaced by the government's most recent education policy, which is the first in 34 years. The Ministry of Human Resource and Development was renamed the Ministry of Education as part of the new policy, which brought about a number of changes to the Indian educational system, starting at the federal level. In order to create a new system that is in line with the ambitious goals of education for the twenty-first century, the NEP proposes reworking and revamping the educational structure, including its regulation and governance. The NEP suggests radical reforms, such as dismantling the Universities Grants Commission and the All-India Council for Technical Education, and opening up Indian higher education to international universities. The policy attempts to close the gap between education and technology while concentrating on different aspects of education. The choice to use mother tongue or a regional language as the primary language of instruction up until Class 5 is one of the main features of NEP 2020. Additionally, the policy highlights the importance of formative assessments and promotes a peer-review assessment system by establishing the National Assessment Centre and creating a system like Performance Assessment Review and Analysis of Knowledge for Holistic Development to track learning outcomes and advise education boards on how to modernise curricula to better meet future demands.

The biggest highlights of the NEP 2020 are that there would be single regulation for higher education institutions with setting up of Higher Education Commission of India that will eventually replace the existing regulatory bodies like the UGC or AICTE. The long - term plan of the policy is to do away with the current system of colleges affiliated to universities and numerous tiny colleges that are pedagogically unviable and financially costly would be merged with larger HEIs. The NEP 2020 aims to address various gaps existing in the

education system of India and through this policy, India is expected to achieve sustainable development goal of 2030 by ensuring inclusive and equitable quality education. Although there is various issues and challenges implementing the new policy. Three-Language Formula: It was in Indira Gandhi's 1968 education policy. Hindi-speaking states speak English, Hindi, and a modern Indian language. English, Hindi, and a non-Hindi Indian language. The country's teaching system wasn't standardised. Also, Hindi was the general medium of instruction inside the north, regional languages and English was the language of instruction in other parts. Chaos and inter - state communication issues result. The three-language formula sought to serve three functions namely, trying to accommodate group identity, affirming unity, and increasing administrative efficiency. In 1968, the three-language formula was implemented from across country, barring Tamil Nadu which adopted a two-language policy. The NPE 1986 keeps repeating the 1968 policy on the three-language equation and promotion of Hindi verbatim. Education is indeed a state responsibility, and as such states implemented the formula. Only a few states adopted this same formula in principle. Sanskrit became the third language across several Hindi-speaking states, mainly in south India. Therefore, the intent of the three-language formula has been defeated to promote cross communications. Also, a non-Hindi speaking state like Tamil Nadu introduced a two policy and did not enforce the three-language formula. Tamil Nadu's two-language policy works since then. Tamil/English. Tamil Nadu was anti-Hindi. First, democratic society and state politicians protect the local language. Any attempt to devalue Tamil is cultural homogenization. Many in Tamil Nadu oppose Hindi because they want to keep English. There, English empowers and educates. Some fear Hindi will remove English, a global language. The state has never restricted Hindi learning. Resistance meets compulsion.

Findings: Music, arts, and crafts have returned as non-verbal forms of educational communication. Early childhood special education. Early three-language formula implementation multilingualism. Homeschooling is encouraged. Experiential learning whenever possible By hiring local artists, master educators include writers, craftspeople, and others. Various local specialties. Traditional and Indian tribal and local knowledge wherever Humanities, sciences, arts, crafts, and sports, relevantly curriculum flexibility, Secondary and higher education students can choosing the right courses to develop themselves. Home language not mother tongue or Localization needs are met. Instructional medium until grade 5, preferably 8 and beyond home/mother tongue/local/language/regional language.

Home/local language shall remain thereafter. Public and private schools teach it whenever possible. Home language will continue between teachers and pupils. The National Education Policy (NEP) 2020 offers an opportunity to break the barriers of prevailing traditional and colonial education system by enabling flexible and experiential learning leading to development of higher order thinking skills via a multidisciplinary and holistic approach. It especially seeks to address quality and equity in education by a complete restructuring of the education system, inter-alliances of disciplines, significant rise in the expenditure on education and also seeks to enhance social inclusion and gender parity. Its vision of Vasudhaiva Kutumbakam via intercultural sharing through internationalization of education is a push towards positioning India globally. At the same time, since the NEP-2020 is a huge shakeup of the education system the challenges for its successful implementation are manifold. A shift from 10+2+3 to 5+3+3+4 pattern poses an implementation challenge. An exaggerated dependence on rote learning is being sought to be replaced by a critical and practical approach through vocational learning and a theoretical base. This will be a huge responsibility towards the teachers and their training. The multidisciplinary and holistic approach in higher education shall be a long haul to develop since compartmentalization of higher education on the lines of rigid disciplines has been the core of our educational system. The hierarchy of disciplines adhered to by individuals and institutions shall be the biggest hurdle in training and implementation of the NEP-2020. The proposed regulatory, evaluative and accrediting structures shall call for new training, technological felicity and new mindset for all stakeholders. The proposition of autonomy to higher education institutions brings in responsibility of academics, accounting, evaluation and certification on individual colleges and universities with the onus of mobilizing their own resources. The school and college clusters call for alignment of neighbourhood schools and colleges for sharing of manpower and infrastructure. This calls for giving up identity in the larger interests of upgraded facilitation and shared knowledge. The proposition of cooperation between public and private educational entities and education-industry collaboration challenges the ideological moorings of the society.

1. NEP is going to be the policy for the next 20 years.
2. NEP as a policy is coming from a position of strength and confidence from aspirational India
3. Transformation is all inclusive as it helps us change and it is wholly backed by the Government

4. NEP does not intend to change the syllabus instead it hopes to inspire every Institution to become an agent of change and that every teacher should become a change agent
5. The policy hopes to empower people and it is time for people to take charge
6. The next step is a the need for a mechanism to implement the policy
7. A Task Force needs to be created to discuss the policy at the institution level and take the implementation of NEP forward in the institution
8. NEP is truly a policy of difference
9. We are living in the age of transition, and Education has its own importance in this era of transition it has become a basic component to achieve success
10. The world is looking at India – because it has a strength that no country has – it has a Youth Capital that is its greatest asset that can be of use not only for India but for the countries of the World
11. Developmental activities can be instituted only through good quality educational system and great educational policies.
12. In the last seven decades India has achieved a lot in the fields of IT, science and technology but it still leaves much to be desired in the field of education.
13. Not even one university has appeared in the top 100 universities of the world. It is a time to rethink
14. We have to strategize our actions and policies to ensure that we reach global requirements.
15. We are yet to find an answer to the question how far our educational system is relevant today? The NEP is one such meaningful attempt to bring about relevancy at all levels of education.

Conclusion: The New Education Policy (NEP) 2020 is a comprehensive framework aimed at transforming the education system in India. This policy provides for a comprehensive, sustainable, and reformative roadmap for a paradigm shift in the entire education system in the country to address the existing gaps and challenges and promote the holistic development of students. The main objective of conducting a National Seminar on NEP 2020 is to create awareness among educators and academicians about the key changes and provisions of the NEP 2020. It serves as a platform for participants to exchange ideas, know the pros and cons of the policy, and discuss innovative approaches and challenges for implementing the NEP in their respective

institutions. This policy guidelines in place and envisions a significant increase in government expenditure on education by the federal government and all state governments to achieve educational excellence and the resulting economic benefits. The federal government and states will work together to increase public education spending to 6% of GDP. This is essential for India's economic, social, cultural, intellectual, and technological development and growth. Yes. Universal access, learning opportunities, nutritional support, student safety and wellbeing, sufficient numbers of teachers and staff, teacher growth, and support for all important steps toward inclusive, high-quality education for vulnerable and socioeconomically poorer kids will receive financial support. The NEP-2020 is a thorough plan for enhancing education in India, emphasizing learners' all-around development and 21st century skills. The National Seminar on NEP-2020 offers an exceptional chance for education stakeholders to discuss the policy's different facets, share ideas, experiences, knowledge, and develop a roadmap for its successful implementation. It will help in understanding the key features of NEP-2020 and its implications for next generation academia, leading to education 4.0.

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A Study on Impact of Technology in Higher Education

By

Dr. Sandhya Khatavkar

Assistant Professor, Anekant Institute of Management Studies, Baramati

Dr. Smita Khatri

Assistant Professor, Anekant Institute of Management Studies, Baramati

ABSTRACT: *Technology is a gift of God. After the gift of life, it is perhaps the greatest of God's gifts. It is the mother of civilizations, of arts and of sciences. Technology has certainly changed the way we live. It has impacted different facets of life and redefined living. Undoubtedly, technology plays an important role in every sphere of life. Several manual tasks can be automated, thanks to technology. Also, many complex and critical processes can be carried out with ease and greater efficiency with the help of modern technology. Thanks to the application of technology, living has changed and it has changed for better. Technology has revolutionized the field of education. The importance of technology in schools cannot be ignored. In fact, with the onset of computers in education, it has become easier for teachers to impart knowledge and for students to acquire it. The use of technology has made the process of teaching and learning all the more enjoyable.*

Keywords: *Technology, Education, Learning Efficiency.*

Introduction: The era of 21st century is often regarded as an era of technology. Technology, today, plays a very important role in our life. It is seen as a basis of growth of an economy. An economy which is poor in technology can never grow in today's scenario. This is because technology makes our work much easier and less time consuming. The impact of technology can be felt in every possible field one such field is Education.

Modern technology in education: According to the latest insights as to how exactly modern students of today prefer to use technology and how does their learning get an impact if they use technology, it was revealed that the use of modern equipment technology and tools, the learning and interactivity of students increases. They also find it much more interactive, as well as full of interesting areas, when aided by technology. The transfer of knowledge becomes very easy and convenient, as well as effective. What this means is, that our minds now tend to work faster when assisted with the use of modern technology, be it any part of life, here we talk about education. The reliance and dependence of such an innovation, that simply makes life an easy, smooth journey is completely unavoidable these days even in schools, universities and colleges. Students today can make use of technology in the following ways:

1. **Internet connection and round the clock connectivity:** The internet has grown in importance by many folds, over the process of decade. Its importance in the education world can now never be undermined. Despite the chances of fraud and drawbacks, the use of the internet is like a blessing for students. Today, the internet is something that is present in almost everything we use. From television to gaming consoles, and our phones, the internet is literally everywhere. The use of the internet allows students to find amazing convenience, they can find various kinds of help, tutorials and other kinds of assisting material which could be used to academically improve and enhance their learning.
2. **Using projectors and visuals:** Visual images always have a strong appeal compared to words. Using projectors and visuals to aid in learning is another form of great technological use. Top institutions around the world, now rely on the use of amazing PowerPoint presentations and projections in order to keep the learning interactive and interesting. Technological use such as projectors within the schools and colleges can take the interaction and interest levels right up and also improve motivation. Students like to see appealing visuals and something that entices them to think rather than just reading words. The learning part also becomes pretty efficient when it comes to technology.
3. **Digital footprint in the education sector:** If we talk about digital and education, then the penetration of digital media within the education sector has now grown. This penetration has resulted in round the clock connectivity with students and different forums that are available for different kinds of assignments or help. As the power of digital increases, there are and there will be more applications that will assist students in development and learning.
4. **Online degrees with the use of technology:** Online degrees now have become a very common phenomenon. People wish to take up online courses for their learning and certifications. Top institutions offer amazing online programs with the use of various applications and the internet. This is a concept that

will continue to rise as it gets more support and awareness. The online degree scenario around the world is more famous among students who work and look for flexible studying programs.

5. **Importance of technology in education:** The role of technology in the field of education is four- fold: it is included as a part of the curriculum, as an instructional delivery system, as a means of aiding instructions and also as a tool to enhance the entire learning process. Thanks to technology; education has gone from passive and reactive to interactive and aggressive.

Education is essential in corporate and academic settings. In the former, education or training is used to help workers do things differently than they did before. In the latter; education is geared towards creating curiosity in the minds of students. In either case, the use of technology can help students understand and retain concepts better.

Factors affecting technology in education: I. Jung talks about the enormous challenge teachers are facing in our society due to the rapid expansion of knowledge. The modern technologies are demanding that teachers learn how to use these technologies in their teaching. Hence these new technologies increase the teachers' training needs. Gressard and Loyd (1985) asserted that teacher's attitudes toward computers are a key factor in the successful implementation of ICT in education. They pointed out that teachers do not always have positive attitudes towards computers and their poor attitudes may lead to a failure of the computer- based projects.

Also, the most commonly cited barriers are:

1. Lack of Time;
2. Lack of Access;
3. Lack of Resources;
4. Lack of Expertise;
5. Lack of Support.

Another barrier given by Butler and Sellbom (2002) and Chizmar & Williams (2001) is reliability. Reliability included hardware failures, incompatible software between home and school, poor or slow internet connectivity and out of date software which are available mostly at school while the students/educators are having more up-to-date software at home.

Impact of ICT on education: In educational context, ICT has the potential to increase access to education and improve its relevance and quality. Tinio (2002) asserted that ICT has a tremendous impact on education in terms of acquisition and absorption of knowledge to both teachers and students through the promotion of:

1. **Active learning:** ICT tools help for the calculation and analysis of information obtained for examination and also students' performance report are all being computerized and made easily available for inquiry. In contrast to memorization-based or rote learning, ICT promotes learner engagement as learners choose what to learn at their own pace and work on real life situations' problems.
2. **Collaborative and Cooperative learning:** ICT encourages interaction and cooperation among students, teachers regardless of distance which is between them. It also provides students the chance to work with people from different cultures and working together in groups, hence help students to enhance their communicative skills as well as their global awareness. Researchers have found that typically the use of ICT leads to more cooperation among learners within and beyond school and there exists a more interactive relationship between students and teachers (Grégoire et al., 1996). "Collaboration is a philosophy of interaction and personal lifestyle where individuals are responsible for their actions, including learning and respect the abilities and contributions of their peers." (Panitz, 1996).
3. **Creative Learning:** ICT promotes the manipulation of existing information and to create one's own knowledge to produce a tangible product or a given instructional purpose.
4. **Integrative learning:** ICT promotes an integrative approach to teaching and learning, by eliminating the synthetic separation between theory and practice unlike in the traditional classroom where emphasis encloses just a particular aspect.
5. **Evaluative learning:** Use of ICT for learning is student-centered and provides useful feedback through various interactive features. ICT allow students to discover and learn through new ways of teaching and learning which are sustained by constructivist theories of learning rather than students do memorization and rote learning.

Positive Impact

1. **Enhanced Teaching and Learning:** Technological developments like digital cameras, projectors, mind training software, computers, Power point presentations, 3D visualization tools; all these have become great sources for teachers to help students grasp a concept easily. It has to be understood that visual explanation of concepts makes learning fun and enjoyable for students. They're able to participate more in the classroom and even teachers get a chance to make their classes more interactive and interesting.
2. **Globalization:** When school in different parts of the state, students can "meet" their counterparts through video conferencing without leaving the classroom. Some sites, such as www.glovico.com are used to help students learn foreign languages online by pairing a group of students with a teacher from another country.

3. **No Geographical Limitations:** With the introduction of online degree programs there is hardly any need of being present physically in the classroom. Even several foreign universities have started online degree courses that student can join. Distance learning and online education have become very important part of the education system now a day.

Negative Impact

1. **Declining Writing Skills:** Due to the excessive usage of online chatting and shortcuts, the writing skills of today's young generation have declined quite tremendously. These days, children are relying more and more on digital communication that they have totally forgot about improving their writing skills. They don't know the spelling of different words, how to use grammar properly or how to do cursive writing.
2. **Increasing Incidents of Cheating:** Technological developments like graphical calculators, high tech watches, mini cameras and similar equipment have become great sources to cheat in exams. It is easier for students to write formulas and notes on graphing calculators, with least chances of being caught.
3. **Lack of Focus:** SMS or text messaging has become a favorite pastime of many students. Students are seen playing with their cell phone, iPhones day and night or driving and very often even between lectures. Being ever-connected to the online world has resulted in lack of focus and concentration in academics and to some extent, even in sports and extracurricular activities.

Advantages

1. It makes students more excited to learn.
2. Help students with busy schedules, freedom to work at home on their own time.
3. Train students to learn new technology skills they can use later in the work place.
4. Decrease paper and photocopying costs, promoting concept of "green revolution".

Disadvantages

1. Many experts and experienced people say that, due to such technology in education, students' imagination is affected, their thinking ability is reduced.
2. Sometime it's also time-consuming from teacher's point of view.
3. It is costly to install such technology.
4. There can be health issues too when used over limit.
5. Some students can't afford modern computer technologies.

Conclusion: Technology has a positive impact on education and at the same time may also pose negative effects. Teachers and students should take advantage of this in the good light and eliminate the drawbacks which are pulling back many of students as well as schools from achieving excellence. It is thus time for every country to introduce a more technologically equipped education sector in the future.

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MANAGEMENT PERSPECTIVES ON CHANGING SOCIO ECONOMIC ENVIRONMENT: VISION AND CHALLENGES FOR THE INDIAN WOMEN

By

Sachin S. Jadhav

Assistant Professor, Anekant Institute of Management Studies, Baramati

ABSTRACT: *This paper attempts to analyze the status of Women Empowerment in India and highlights the Issues and Challenges of Women Empowerment. Today the empowerment of women has become one of the most important concerns of 21st century. But practically women empowerment is still an illusion of reality. We observe in our day to day life how women become victimized by various social evils. Women Empowerment is the vital instrument to expand women's ability to have resources and to make strategic life choices. Empowerment of women is essentially the process of up liftmen of economic, social and political status of women, the traditionally underprivileged ones, in the society. It is the process of guarding them against all forms of violence. The study is based on purely from secondary sources. The study reveals that women of India are relatively disempowered and they enjoy somewhat lower status than that of men in spite of many efforts undertaken by Government. It is found that acceptance of unequal gender norms by women are still prevailing in the society. The study concludes by an observation that access to Education, Employment and Change in Social Structure are only the enabling factors to Women Empowerment.*

Keywords: *Women Empowerment, Social Structure.*

Introduction: Across the different India regions women have stood up to take important roles in the socio economic development of their societies. The contribution made by Indian women in the provision of both financial and social facilities is equal. Empowerment of women is a socio – political ideal envisioned in relation to the wider framework of women's rights .It is a process that leads women realize their fun potential their rights to have accesses to opportunities by their recourses and choice with the achieved only when advancement in the conditions of women is accompanied by their ability to influence the direction of social change gained through equal opportunities in economic social and political spheres of life. Increasing the number of women entrepreneurs involved in starting new business. In addition to their economic and income generating activities, women assume multi-faceted roles in society.i.e. As bread winner of family, unpaid family workers, service providers in the communities and mother \care taker of the family, In spite of their important contribution to socio economic development, women suffer from various constraints. Which inhabit them from fully realizing their potential for development? The Indian society believes that no matter how well a woman works .She can't be consider as being equal to a women. The historical background of Indian society reveals that in Vedic times a woman was given a high status. It is an old saying "Where women are honored gods reside there. She knew as

Arandhangini one half of husband's body". Women constitute almost 50% of the world's population but India has shown disproportionate sex ratio whereby female's population has been comparatively lower than males. As far as their social status is concerned, they are not treated as equal to men in all the places. In the Western societies, the women have got equal right and status with men in all walks of life. But gender disabilities and discriminations are found in India. Even today. The paradoxical situation has such that she was sometimes concerned as Goddess and at other times merely as slave. 'The global community must renew its attention to women's economic empowerment and increase investments in women...Increased women's labour force participation and earnings are associated with reduced poverty and faster growth; women will benefit from their economic empowerment, but so too will men, children and society as a whole...'. (World Bank's Gender Equality Action Plan 2007-10)

Research Objective:

1. To study role of women contribution of Social or Economic changes.
2. To study analyze the factors influencing the economic empowerment of women.

Research Methodology: An analytical method is used for conducting the study. The study is based on primary data collection consist of originally collective information for specific purpose at hand by interviewed people it is the first hand

information journals, books, periodicals, newspapers and websites. The data and information have been arranged logically in order to draw certain conclusions.

India’s vision of women’s empowerment: “It is impossible to think about the welfare of the world unless the condition of women is improved. It is impossible for a bird to fly on only one wing” - Swami Vivekananda.

The vision and mission of CARE India guide us towards our goal of overcoming poverty, and ensuring a life of dignity and security for the marginalized populations. We focus on women and girls to enable them to realize their rights, avail resources and opportunities, fight social injustice, develop leadership capabilities and build a better future for them.

Why Need of Women Empowerment? Reflecting into the “Vedas Purana” of Indian culture, women are being Worshipped such as “LAXMI MAA”, goddess of wealth; “SARSWATI MAA”, for wisdom; “DURGA MAA” for power. The status of women in India particularly in rural areas needs to address the issue of empowering women. About 66% of the female population in rural area is unutilized. This is mainly due to existing social customs. In agriculture and Animal care the women contribute 90% of the total workforce. Women constitute almost half of the population, perform nearly 2/3 of its work hours, receive 1/10th of the world’s income and own less than 1/ 100th of the world property. Among the world’s 900 million illiterate people, women outnumber men two to one. 70% of people living in poverty are women. Lower sex ratio i.e. 933, the existing studies show that the women are relatively less healthy than men though belong to same class. They constitute less than 1/7th of the administrators and managers in developing countries. Only 10% seats in World Parliament and 6% in National Cabinet are held by women.

Need for Women Empowerment: Women are deprived of:

1. Access to Education
2. Access to Employment
3. Freedom of Movement
4. Exposure to Media
5. Domestic Violence
6. Decision Making Power

Table No. 1: Decision Choices of Women

S#	NAME	%
1	Women decide themselves	22
2	Women decide jointly with their husband	71
3	Husband/father/Brothers & others decide for them	4
4	Any other family members decided	2

Source: Primary Survey

Ways to Empower Women:

1. Changes in women’s mobility and social interaction
2. Changes in women’s labor patterns
3. Changes in women’s access to and control over resources and
4. Changes in women’s control over Decision making
5. Providing education
6. Self-employment and Self-help group
7. Providing minimum needs like Nutrition, Health, Sanitation, Housing
8. Other than this society should change the mentality towards the word women
9. Encouraging women to develop in their fields they are good at and make a career

Government Schemes for Women Empowerment:

The Government programs for women development began as early as 1954 in India but the actual. Participation began only in 1974. At present, the Government of India has over 34 schemes for women operated by different department and ministries. Some of these are as follows;

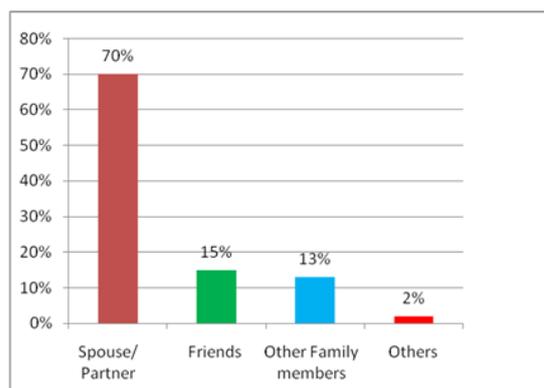
1. Rastria MahilaKosh (RMK) 1992- 1993
2. Mahila Samridhi Yojana (MSY) October, 1993.
3. India MahilaYojana (IMY) 1995.
4. Women Entrepreneur Development program given top priority in 1997-98.
5. Mahila Samakhya being implemented in about 9000 villages.
6. Swayasjdha
7. Swa Shakti Group.
8. Support to Training and Employment Program for Women (STEP).
9. Swalamban.
10. Crèches/ Day care centre for the children of working and ailing mother.
11. Hostels for working women.
12. Swadhar.
13. National Mission for Empowerment of Women.
14. Integrated Child Development Services (ICDS) (1975),
15. Rajiv Gandhi Scheme for Empowerment of Adolescence Girls (RGSEAG) (2010).
16. The Rajiv Gandhi National Crèche Scheme for Children of Working Mothers.
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19. Short Stay Homes.
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21. Scheme for Gender Budgeting (XI Plan).
22. Integrated Rural Development Program (IRDPA).
23. Training of Rural Youth for Self Employment (TRYSEM).
24. Prime Minister’s Rojgar Yojana (PMRY).

25. Women’s Development Corporation Scheme (WDCS).
26. Working Women’s Forum.
27. Indira Mahila Kendra.
28. Mahila Samiti Yojana.
29. Khadi and Village Industries Commission.
30. Indira Priyadarahini Yojana.
31. SBI’s SreeShaki Scheme.
32. SIDBI’s Mahila Udyam Nidhi Mahila Vikas Nidhi.
33. NGO’s Credit Schemes.
34. National Banks for Agriculture and Rural Development’s Schemes

Challenges: There are several challenges that are plaguing the issues of women’s right in India. Targeting these issues will directly benefit the empowerment of women in urban area:

1. **Education:** While the country has grown from leaps and bounds since independence where education is concerned. The gap between women and men is severe. While 82.14% of adult men are educated, only 65.46% of adult women are known to be literate in India. The gender bias is in higher education, specialized professional trainings which hit women very hard in employment and attaining top leadership in any field.
2. **Poverty:** Poverty is considered the greatest threat to peace in the world, and eradication of poverty should be a national goal as important as the eradication of illiteracy. Due to this, women are exploited as Domestic helps.
3. **Health and Safety:** The health and safety concerns of women are paramount for the wellbeing of a country and is an important factor in gauging the empowerment of women in a country. However there are Alarming concerns where maternal healthcare is concerned.
4. **Professional Inequality:** This inequality is practiced in employment sand promotions. Women face countless handicaps in male customized and dominated environs in Government Offices and Private Enterprises.
5. **Ask the women’s for the professional or family support:** Support for balance between work & non work activities given by family.
6. **Morality and Inequality:** Due to gender bias in health and nutrition there is unusually high mortality rate in women reducing their population further especially in Asia, Africa and China.

Chart 1 Support to Working / Professional Women



Source: Primary Survey

Table No: 2 Problems Faced by Women

S#	Name	%
1	Gender problem	82
2	Freedom	7
3	Financial Instability	8
4	Culture	3

Source: Primary Survey

Constitutional Provisions for Empowering Women in India:

1. Equality before law for all persons Article 14
2. Prohibition of discrimination on grounds of religion, race, caste, sex or place of birth Article 15(I). However, special provisions may be made by the state in favors of women and children Article 15(3)
3. Equality of opportunity for all citizens relating to employment or appointment to any office under the state Article 16
4. State policy to be directed to securing for men and women equally the right to an adequate means of livelihood Article 39(a);
5. Equal pay for equal work for both men and women Article 39(d)
6. Provisions to be made by the state for securing just and humane conditions of work and maternity relief Article 42.
7. Promotion of harmony by every citizen of India and renouncement of such practices which are derogatory to the dignity of women Article 51(e).
8. Reservation of not less than one third of total seats for women in direct election to local bodies, viz; Panchayats and Municipalities Articles 343(d) and 343(t).

Findings:

1. Globalization, Liberalization and other Socio-Economic forces have given some respite to a large proportion of the population. However, there are still quite a few areas where women empowerment in India is largely lacking.

2. There needs to be a sea –change in the mindset of the people in the country. Not just the women themselves, but the men have to wake up to wake up to a world that is moving towards equality and equity. It is better that this is embraced earlier than later for our own good.
3. There are several Government programs and NGOs in the Country, there is still a wide gap that exists between those under protection and those not.
4. Poverty and illiteracy add to these complications, The Empowerment of Women begins with a guarantee of their health and safety.
5. Empowerment of Women could only be achieved if their economic and social status is improved. This could be possible only by adopting definite social and economic policies with a view of total development of women and to make them realize that they have the potential to be strong human beings.

Conclusion: Indian women play an important role in initiating socio economic progress of the country. They are the hand that rocks the cradle rules the world women should be empowered so that they can lead to glory. Our women entrepreneurs, social welfare workers, scientist, politicians & economist are leading the way for a bright future. Women in urban & rural areas should be given access to good opportunities so that they can bring about to the growth of the country bring about positive social change & contribute to the growth of the country. Women play crucial role in initiating the advancement & growth of any society in nations across the world.

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IMPACT OF JOB ABSENTEEISM ON THE ORGANISATIONAL AND EMPLOYEES DEVELOPMENT

By

Dr. Nimisha. M

Assistant Professor, VLB Janakiammal College of Arts and Science, Coimbatore

ABSTRACT: Absenteeism is a universal problem and the extent of absenteeism may differ from industry place to place and occupation to occupation. Absenteeism may create a distance between employees on management. Absenteeism is defined as the failure of worker to report for work when he is scheduled to work. A worker is expected to work when the employer has work available for him and the worker is aware of it. The authorized is also treated as absence while presence even for a part of shift is treated as presence for whole shift. Employee absenteeism is the absence of an employee from work. It's the major problem faced by almost all employers today. Employee absenteeism is referred to herein as failure of employees to report for the work when they are scheduled to work.

Keywords: Job Absenteeism, Leave, Job rotation, Motivation.

Introduction: Employee absenteeism is habitual pattern of absence from a duty or obligation. Traditionally, Employee absenteeism has been viewed as an indicator of poor individual performance, as well as breach of implicit contract between employee and employer; it was seen as a management problem, and framed in economic or quasi-economic terms. More recent scholarship seeks to understand Employee absenteeism as an indicator of psychological, medical or social adjustments to work. High absenteeism in work place may be the indicator of poor morale but absence can also be caused by workplace hazards or sick building syndrome. Many employers use statistics such as the Bradford factor that do not distinguish between genuine illness and absence for inappropriate reasons. As a result, many employees feel obliged to come to work while ill, and transmit communicable disease to co-workers. This led to even greater absenteeism and reduced productivity among other workers who try to work while ill. Work forces often excuse absenteeism caused by medical reason if the worker supply a doctor's note or other documentation. Sometimes, people chose not to show up for work and do not call-in advance, which business may find to be unprofessional and inconsiderable. This is known as "no call, no show". According to Nelson and Quick (2008) people who are dissatisfied with their jobs are absent more frequently. They went on to say that the type of dissatisfaction that most often leads employees to miss work is dissatisfaction with the work itself.

Review of Literature

1. **C.K Gomathy (2022)** this study highlights the predominant roots of absenteeism inside the production division of a garment industry below numerous magnitudes, which have an effect on absenteeism like work surroundings,

organizational lifestyle, relation and co-operation, repayment and rewards, centers, task satisfactory and safety, and well-known elements.

2. **Paul M Muchinsky (2019)** Absenteeism is a serious workplace problem and an expensive occurrence for both employers and employees seemingly unpredictable in nature. A satisfactory level of attendance by employees at work is necessary to allow the achievement of objectives and targets by a department. Employee Absenteeism is the absence of an employee from work. It is a major problem faced by almost all employers today. Employees are absent from work and thus the work suffers.
3. **K.J Mullen (2017)** First, the baseline rate of absenteeism and pre-absenteeism for healthy workers is fairly low. Pre-absenteeism in the workplace tends to be more prevalent than absenteeism and could be more costly to the employer. Second, mental health conditions are particularly predictive of higher rates of both absenteeism and pre-absenteeism. Third, absenteeism and pre-absenteeism rates and patterns vary significantly across various health conditions and worker characteristics. And finally, benefit programs have a significant impact both on individuals' propensity to be absent, and on the duration of their absences.
4. **Steers and Rhodea (1978)** suggest in their model of absenteeism, that job satisfaction and pressure to attend work interact to determine attendance and motivation. Actual attendance will depend on both motivation and ability to attend: pressure to attend could come from the fear of losing their job. There are of course other influences on why people go absent. The

nature of their jobs, the opportunities they provide for satisfaction and involvement, are all key factors.

5. **Nicholson (1977)** in his model of attendance motivation believes that attendance is normal behaviour, and that to search for a cause of absence for the factors that disturb the regularity of attendance. Whether people will attend given a particular set of circumstance depends on a number of variables such as age, sex, gender, work conditions, group cohesion etc.

Statement of problem: Absenteeism has become a major problem in almost all the industrial sectors. Excessive absenteeism constitutes a considerable cost to the industry even when the absent employee receives no pay because of this organization of work, work schedules are upset and delayed, resulting in the management failure to meet delivery dates when sick pay is authorized. The cost of absenteeism mounds up more rapidly. It is therefore, desirable that measures are effectively implemented to minimize the cost of absenteeism as far as possible.

Research Objectives:

1. To find out various reason for employee absenteeism.
2. To find out the level of satisfaction of employee regarding the overall management.
3. To find out whether the absenteeism is more due to social and religious cause than ill health.
4. To find out whether the shift system has effect on absenteeism.
5. To find out whether absenteeism has impact on routine work or not.

Research Methodology:

Analysis and Interpretation

Table 1: The Effect of Absenteeism

Attributes	No. of Respondents	Percentage
Cause work stress	11	22.0%
Delayed performance	7	14.0%
Lead to over time	18	36.0%
Less turnover	6	12.0%
All the above	8	16.0%
Total	50	100%

Source: Primary Data

Interpretation: 18% of the employee's main problem is over time work and 7.0% of the employee's opinion about the effect of absenteeism is due to delayed performance.

1. **Area of study:** The focus of this study is to know the job absenteeism of employee and its impact on employees and the organization with special reference to steel manufacturing industries.
2. **Sample size:** The sample size of the study is 50.
3. **Research design:** The study is descriptive in nature. The study used to survey as the research design by taking sample of elements at various levels. The research adopted this type of research design to gather information from the respondents to evaluate the job absenteeism of an employee in the organization.
4. **Source of data:** For the study purpose both primary and secondary data are used. The primary data collected from the employees of the company. The secondary data collected from books, journals and magazines.
5. **Research instrument:** Questionnaire and direct interview are used to collect data.
6. **Tools for data analysis:** Simple Percentage Method

Limitations:

1. The present study on the employee absenteeism is confirmed to a single study unit. Hence the conclusions derived from the study may not be applicable to similar firms and to other areas.
2. The sample employees selected for the present day is 50, because of constraints in terms of limited time.
3. Time factor was one of the main limitations of the study.
4. The process of filling up of questionnaire has taken up so much time as most of the workers were not aware of the concepts and terms.

Table 2: Opinion about the Long Absence

Attributes	No. of Respondents	Percentage
Family problem	19	38.0%
Personal problem	20	40.0%
Religious problem	5	10.0%
Social obligations	0	0
None of the above	6	12.0%
Total	50	100%

Source: Primary Data

Interpretation: 20.0% of the employees are taking long leave due to personal problems like sickness, functions etc. And 19.0% of employees are taking leave due to family problems and none of the employees are taking long leave due to social obligations.

Table 3: The Factor to Reduce the Absenteeism

Attributes	No. of Respondents	Percentage
Increase in number of holidays	9	18.0%
Better working condition	4	8.0%
Providing non-monetary benefits	32	64.0%
Better performance appraisal	5	10.0%
Total	50	100%

Source: Primary Data

Interpretation: 32.0% of the employee’s opinion to reduce absenteeism is by providing non-monetary benefits by the employer and 4.0% of the employee’s opinion is to provide better working condition to the employees.

Table 4: Showing the Employee’s Opinion to Reduce Absenteeism

Attributes	No. of Respondents	Percentage
Adapting job rotation	21	42.0%
Job enrichment	15	30.0%
Co-ordination with co-workers	10	20.0%
Efficient superior	4	8.0%
Total	50	100%

Findings

1. 18% of the employee’s main problem is over time work.
2. 20.0% of the employees are taking long leave due to personal problems like sickness, functions etc.
3. 32.0% of the employee’s opinion to reduce absenteeism is by providing non-monetary benefits by the employer.
4. 21.0% of employee’s opinion to reduce absenteeism is to adopt job rotation.
5. 22.0% of the Employee’s opinion on the motivational factor to avoid taking leave is mainly due to lack of incentives and bonus on performance.

Suggestion

1. The best and simplest way to reduce absenteeism is providing counselling to those employees who take leave unnecessarily and making them aware of the problems of absenteeism and their importance at the workplace.
2. The rules and regulation relating to attendance must be explained to workers. In order to reduce work load, must appoint sufficient employees. Only them the existing employees can work better without any stress or strain and by this absenteeism can be reduced.
3. Giving employees incentives for reduced absenteeism is not the same as rewarding or giving employees bonuses for reduced absenteeism.
4. Job rotation should be adopted.
5. Motivational training should be given to the employees at regular period of time. Skilled and semi-skilled labours should be treated as same. But their benefits should be different.

Source: Primary Data

Interpretation: 21.0% of employee’s opinion to reduce absenteeism is to adopt job rotation and 4.0% of them suggest efficient supervision towards the organization.

Table 5: The Employee Opinion on the Motivational Factors to Avoid Taking Leave

Attributes	No. of Respondents	Percentage
Good employee relations	20	40.0%
Work environment	3	6.0%
Recognition of work	5	10.0%
Incentives and bonus on performance	22	44.0%
Total	50	100%

Source: Primary Data

Interpretation: 22.0% of the Employee’s opinion on the motivational factor to avoid taking leave is mainly due to lack of incentives and bonus on performance.

Conclusion: The management must first have a positive attitude towards absenteeism. Even though it possible to eliminate absenteeism completely. The provision of various facilities to reduce absenteeism bound to involve substantial financial commitment for the management. The major causes for absenteeism in the organization are the activities and policies of the organization. So absenteeism invisible but proves fatal for the industry. So reduction in absenteeism will helpful in improving the productivity. This study analysis the issue of employees absenteeism and explores in detail preventative and corrective actions. Absenteeism has a negative impact on a company’s employee morale. There are a number of programs that can be implemented individually or collectively to reduce employee absenteeism. Absenteeism is a serious and costly problem faced by companies throughout the world. This problem requires that all employees understand the consequences of such behaviour from a company’s standpoint as well as a personal standpoint.

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TECHNOLOGY TOOLS USED FOR LEARNING PURPOSE

By

Archana Khanderao Mane

P. A. H. Solapur University, Solapur Resource Centre, Solapur

Dr. V. S. Gavali

Librarian, Walchand College of Arts and Science, Solapur

ABSTRACT: *In the digital age, educators are increasingly using technology tools to enhance teaching and learning experiences. These tools, ranging from interactive whiteboards to educational apps and virtual learning platforms, bridge traditional methodologies with innovative approaches. Integrating technology in the classroom not only cultivates digital literacy but also raises collaborative and personalized learning environments. From games based educational apps that engage students to online resources that provide to diverse learning styles, technology tools empower educators to create interactive lessons, track student progress, and adapt teaching strategies in real-time. Embracing these tools not only prepares students for a tech-driven future but also enriches the educational journey with creativity and efficiency. Technology tools for teaching and learning encompass a diverse array of digital resources designed to enhance educational experiences. Education technology can automate processes, improve information access, enable sharing of knowledge and data, duplicate information between media forms, curate important knowledge, communicate ideas, visualize critical concepts, and more.*

Keywords: *Education, Digitalisation, Strategy, Technology.*

Introduction: The innovation works as a catalyst through which numerous changes happen within the learning approaches, teaching methodologies, investigate field, within the work environment and within the utilize of data and information. Making a difference to memorize using innovative devices instead of using ordinary procedures has ended up more well known within the 21st century in colleges and schools. Integration of technological tools will offer assistance instructors to the worldwide necessity to utilize technology-based educating and learning instruments rather than conventional instructing strategies.

Most researchers agree on the centrality of the utilize of mechanical instruments totally different instruction frameworks. In any case, current state-of-the-art delineates that there's no comprehensive study that gives an investigation of diverse innovative instruments e.g. computer-based, diversions based, versatile based, and interactive media innovations utilized in instruction. paper provides a comprehensive review of several of the most popular teaching methodologies (collaborative, active learning, problem-based, inductive teaching method) and technological tools i.e. computer-based (ICT, CAI, CBI), games based (serious games, web games, micro-games, videos games), mobile based (laptop, PDAs, tablets, mobile phones), online learning tools (flipped classroom, web MOOCs) and multimedia technologies (Videos, MCMs, MAMCM). We explore the theoretical literature available about the influence of technology and its effectiveness in the field of education. In teaching and learning process,

the use of technological tools increases interaction between teachers and students. To incorporate technology, educators and teachers must implement the right technological tools to make the environment more innovative for the students.

Importance of technology: Conventional classroom direction don't make to the mark regarding giving a quick learning climate, quicker assessments, and greater commitment. Conversely, computerized learning tools and innovation make up for this shortcoming. A portion of the efficiencies such innovations give are essentially unmatched by conventional learning techniques. With cell phones and other remote innovation gadgets becoming well known among the overall population, it just seems that schools and instructive organizations take advantage of them by placing innovation in the study hall. Without a doubt, the present innovation's flexibility and non-meddling person make learning more interesting to the future. Be that as it may, it could be an impressive strategy to oversee at first since conventional teachers are reluctant to remember contemporary innovation and devices for school, seeing them as an interruption instead of a smart learning help [1,2].

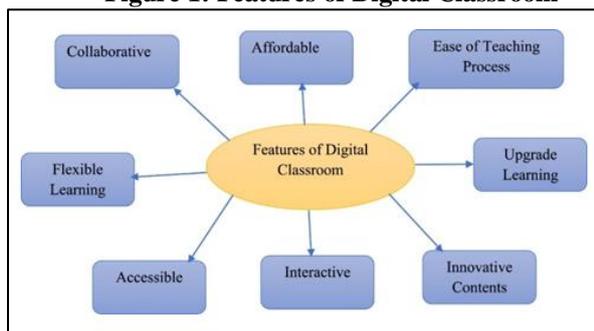
Advanced innovation in the classroom refers to different programming and gadgets intended to assist understudies with specific availability needs. The best method for lessening the quantity of monotonous, tedious obligations an educator embrace is to involve innovation in the classroom. By completely or partially automating day-to-day tasks like attendance and performance tracking,

educational technology applications can save a lot of time and effort [3].

The Coronavirus Pandemic has constrained the foundations to embrace the internet training mode to support the school system. Created nations were exceptional to manage this emergency. However, developing nations endeavored to meet this necessity. Advanced advancements have arisen as the deliverer of schooling in this crucial time [4,5,6,and 7].

The computerized classroom altogether centers on instructing through the utilization of innovation. Understudies utilize innovative or web associated contraptions like PCs, tablets, Chrome books, and so on. Rather than taking notes on what the instructor has educated, the vast majority of the educational program is conveyed to understudies online through a connecting with and intuitive stage. Notwithstanding its numerous features, schooling is in a general sense a sort of correspondence. New communication channels have emerged as a result of the internet, expanding the distribution and accessibility options for educational content. These media and virtual scenes act as learning facilitators [8].

Figure 1: Features of Digital Classroom



Source: Secondary Data

Digital learning encourages students to think outside the box and further their education by fostering creativity and a sense of accomplishment. It is commendable that all nations were able to adopt remote learning technologies by utilizing a combination of online, mobile, television, and radio platforms. These give simple admittance to data, simple maintenance of data, expanded capacity of data, and further developed show of data; schooling turned out to be more intelligent, more straightforward sharing of information and expanded energy in learning [9].

As indicated by Malek et al. (2014) [10], the utilization of ICT contains different viewpoints which are related straightforwardly with the essential point of the examination that portrays what the utilization of innovative devices will mean for the affirmed effectiveness and comfort. The goal of educators to utilize mechanical development is profoundly impacted by their perspectives on the proficiency of the framework as

well as the perceived comfort of purpose and chooses their genuine utilization of ICT.

Multimedia communication has close similarities to eye to eye interchanges. It is less confined than text and guarantees better figuring out (Pea, 1991). Media innovation works on theoretical substance, considers contrasts from people and takes into consideration coordination of assorted portrayal with an alternate point of view. The utilization of the PC based strategy as a connection point among understudies and what they are realizing with reasonable textual styles and configuration can be truly important. [11].

Advanced innovations have carried changes to the nature and extent of training. Adaptable and troublesome mechanical developments, like savvy gadgets, the Web of Things (IoT), man-made reasoning (computer based intelligence), expanded reality (AR) and augmented reality (VR), blockchain, and programming applications have opened up new open doors for propelling educating and learning. [12].

Apart from gaining knowledge and skills, studies also reported improvement in motivation and interest in mathematics and increased positive achievement emotions towards several subjects during interventions using educational games. It also reported a small but positive effect of digital health approaches in bullying and cyber-bullying interventions with K-12 students, demonstrating that technology-based approaches can help reduce bullying and related consequences by providing emotional support, empowerment, and change of attitude. In their meta-review study, AI technologies effectively strengthened students' attitudes towards learning.

The majority of the multimedia solutions deployed for teaching and learning target the solution to the pedagogical content of the subject of interest and the user audience of the solution while the success of the different multimedia tools that have been used on the various target groups and subjects can be attributed to the technologies and components embedded in their development [13].

Technology has a positive impact on education and at the same time may also pose negative effects. Teachers and students should take advantage of this in the good light and eliminate the drawbacks which are pulling back many of students as well as schools from achieving excellence. It is thus time for every country to introduce a more technologically equipped education sector in the future. The role of technology in the field of education is four-fold: it is included as a part of the curriculum, as an instructional delivery system, as a means of aiding instructions and also as a tool to enhance the entire learning process. Thanks to technology; education has gone from passive and reactive to interactive and aggressive. Education is essential in corporate and academic

settings. In the former, education or training is used to help workers do things differently than they did before. In the latter; education is geared towards creating curiosity in the minds of students. In either case, the use of technology can help students understand and retain concepts better [14].

Aside from acquiring information and abilities, concentrates on likewise detailed improvement in inspiration and interest in science and expanded positive accomplishment feelings towards a few subjects during mediations utilizing instructive games. It likewise revealed a little yet constructive outcome of computerized wellbeing approaches in harassing and cybercrimes mediations with K-12 understudies, showing that innovation based approaches can assist with lessening tormenting and related results by offering profound help, strengthening, and change of demeanor. Students' attitudes toward learning were effectively strengthened by AI technologies, according to their meta-review study. Most of the media arrangements sent for educating and learning objective the answer for the educational substance of the subject of interest and the client crowd of the arrangement while the outcome of the different sight and sound apparatuses that have been utilized on the different objective gatherings and subjects can be ascribed to the advancements and parts implanted in their turn of events. [13].

Innovation decidedly affects schooling and simultaneously may likewise present adverse consequences. Educators and understudies ought to exploit this in the great light and eliminate the disadvantages which are pulling back many of understudies as well as schools from accomplishing greatness. It is subsequently time for each country to present an all the more mechanically prepared schooling area later on. The role of innovation in the field of training is four-crease: it is incorporated as a piece of the educational plan, as an informative conveyance framework, for the purpose of helping directions and furthermore as a device to improve the whole growing experience. On account of innovation; instruction has gone from passive and receptive to intelligent and forceful. Training is fundamental in corporate and scholarly settings. In the previous, schooling or preparing is utilized to assist laborers with doing things another way than they did previously. In the last option; schooling is outfitted towards making interest in the personalities of understudies. Regardless, the utilization of innovation can help understudies comprehend and hold ideas better. [14]

Impacts of digital technologies on teachers' professional and teaching practices: Different examination studies have investigated the effect of ICT on educators' informative practices and understudy evaluation. In the review, it is found that the utilization of cell phones by understudies empowered educators to effectively convey content

(e.g., portable serious games), give platform, and work with simultaneous cooperative learning. Teachers were also given the opportunity to study and apply a variety of pedagogical practices as a result of the incorporation of digital games into teaching and learning activities.

In particular, students' learning outcomes and engagement were maximized by teachers who implemented instructional activities in three stages—pre-game, game, and post-game. For example, during the pre-game stage, educators zeroed in on addresses and interactivity preparing, at the game stage educators gave framework on happy, resolved specialized issues, and dealt with the homeroom exercises. During the post-game stage, educators coordinated exercises for interviewing to guarantee that the interactivity had without a doubt improved understudies' learning results.

Besides, ICT can increment effectiveness in example arranging and planning by offering opportunities for a more cooperative methodology among educators. The sharing of educational program plans and the examination of understudies' information prompted more clear objective settings and upgrades in answering to guardians. Furthermore, the utilization and use of advanced advancements in educating and learning were found to improve educators' computerized skill. According to well-documented studies, teachers' fundamental ICT skills improved when digital technologies were used in the classroom.

The best effect was tracked down on educators with enough involvement with coordinating ICTs in their instructing or potentially who had as of late partaken being developed courses for the academic utilization of advancements in educating. The arrangement of completely prepared sight and sound convenient PCs and the advancement of online educator networks emphatically affected instructors' certainty and ability in the utilization of ICTs.

Moreover, online appraisal by means of ICTs benefits guidance. Specifically, online evaluations support the digitalization of understudies' work and related coordinated factors, permit instructors to accumulate prompt criticism and rearrange to new goals, and backing the improvement of the specialized nature of tests by giving more exact outcomes. In addition, the capabilities of information and communication technologies (ICTs), such as interactive media and simulations, open up new possibilities for testing particular abilities, such as the capacity to work effectively in groups, problem-solving and problem-processing abilities, meta-cognitive abilities, creativity and communication abilities, and more. [15]

Conclusion: Schools can greatly benefit from fundamental improvements made possible by digital technologies. Be that as it may, interest in

ICT framework and expert advancement to further develop school training are yet to give productive outcomes. Computerized change is a mind boggling process that requires huge scope extraordinary changes that surmise computerized limit and readiness. To accomplish such changes, all entertainers inside the school's biological system need to share a typical vision with respect to the coordination of ICTs in training and work towards accomplishing this objective. Our literature review, which synthesized quantitative and qualitative data from a number of meta-analyses and review studies, provided useful insights into the impact of ICTs on various stakeholders in schools. It also demonstrated that the impact of digital technologies touches upon many different facets of school life that are frequently overlooked when the focus is on student achievement as the final outcome of education. Moreover, the idea of computerized advances is an idea in motion as advancements are not just unique among them calling for various purposes in the instructive practice however they likewise change through time. Moreover, we opened a gathering for conversation with respect to the variables that influence a school's computerized limit and change. We trust that our review will illuminate strategy, practice, and exploration and result in a change in perspective towards additional all-encompassing methodologies in effect and evaluation studies.

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Teacher Training and Development Systems in Indian Higher Education Institutions: A Priority under National Education Policy 2020

By

Dr. Abhishek Y. Dikshit

Associate Professor, Anekant Institute of Management Studies (AIMS), Baramati

Dr. Tanaji V. Chavan

Associate Professor, Anekant Institute of Management Studies (AIMS), Baramati

ABSTRACT: Globalisation, shifting demographic dynamics, technological disruption, and, more recently, occasional events such as the pandemic pose several difficulties to Higher Education Institutions (HEIs). Although the quality of higher education in India has improved over the years, it still falls short of worldwide norms. Only a handful Indian HEIs made the list of the world's best universities. Most colleges that score very well in worldwide university rankings seem to have used cutting-edge Teacher Training and Development (TTD). Several empirical studies have indicated that strong human resource management (HRM) techniques may boost organisational performance. To address the current problems, Indian HEIs' strategies must shift their emphasis, primarily toward developing a professional and empowered HRM. In a typical Indian HEI, HRM remains a pool of fragmented administrative duties delegated to various organisational units to carry out the directions previously established in the HEI charter. In this setting, HEIs in India must build strategic and professional TTD Systems that concentrate on the growth of the organisation, its staff, and its students all at the same time. The researcher aimed to discover effective HRM practices and policies utilising qualitative research methods and procedures in this research study, which is based on in-depth investigation of the major stakeholders of varied sets of HEIs in India. The researcher also conducted a comparative study of HEIs in the United States of America to increase the research output, better grasp the functioning of HR practises in foreign HEIs, and allow beneficial comparisons (USA). From July to October 2020, qualitative data was gathered using online interviews. The data was analysed using thematic methodologies by the researcher. According to the survey, public HEIs in India lack a specialised strategic and professional TTD organisation. It is in its early stages at government institutions and private HEIs backed by benefactors. The research also finds that TTD practices and policies have a beneficial effect on overall performance, and that HR rules and practises have a positive impact on faculty and staff work motivation. It was also shown that staff engagement might lead to better and greater student enrolment, better positions after graduation and progression to higher education, and consistent quality research outputs. The report also demonstrates that HEIs in the United States have professional, dedicated strategic TTD departments and use cutting-edge technology enhanced teaching tools. The resources deployed, students drawn, and organisational functional features all contribute to a HEI's quality. As a result, TTD plays an important role in determining the greatness of HEIs.

Keywords: Teacher Training and Development, Human Resource Management, Higher Education Institute, Technology Enhanced Teaching.

Introduction: With the National Education Policy 2020, the Indian higher education system is likely to transform [1]. Significant organisational and structural reforms in the higher education sector have been advocated by the policy, including a review of Teacher Training and Development (TTD) systems [2]. Human Resource Management (HRM) systems at Indian Higher Education Institutions (HEI) are seen as a traditional administrative role that handles normal administrative tasks that are split and distributed to different divisions [3]. HEIs in the United States, on the other hand, have created sophisticated and strong TTD systems [4]. This research clearly

shows that HRM is critical in any HEI and is a necessity for its overall growth and alignment with its objectives and goals. In every HEI, the HRM function must be enabled and play a strategic role. Employee morale and motivation are greatly improved by sound HRM policies and procedures [5]. Professional HRM improves both individual and organisational productivity and performance [6]. The researcher did this study in this context to investigate the practises and policies of HRM systems in Indian HEIs. The research also looked at how strong TTD practices and policies affect teachers and institutions. Researcher also looked at the impact of good TTD policies on developing

good teachers and researchers. HEIs in the United States were also investigated and researched to better understand the functioning of TTD practices at the international level HEIs and for comparison purposes.

Research gaps identified during literature review: There is a significant vacuum in the study and use of professional human resource management strategies in India's higher education sector [6], [7]. As a result, in labor-intensive institutions like HEIs, the efficient utilization of human resources becomes critical [8], [9]. The researcher's current study is crucial in determining if HEIs in India use professional TTD methods.

a) The current study literature on HRM in Indian HEIs does not concentrate on an examination of the effect of TTD on HRM systems [8], [9], [10];

b) Studies conducted in Indian Higher Education are general in nature, pertaining to human resource development in such institutions [11], [12], [13], [14]. The key explanation might be that TTD systems in HEIs in India are not prioritised in comparison to TTD systems in HEIs overseas and the corporate/industry sector.

c) There has been little study on the hard-core problems of the TTD Policies of the country's HEIs [15], [16].

Aims and Objectives of the Study: The current study sought to investigate current TTD practices and policies in existing HEIs in India, as well as how excellent TTD practices and policies are vital and helpful for HEI personnel in particular and the institution as a whole.

Table 1: Research Objectives and Research Questions

Sr. No	Objectives	Research Questions
1	To study TTD practices and policies in HEIs	1. What are the HRM practices and policies prevalent in HEIs? 2. Is there a dedicated TTD function unit in the HEIs under study? 3. What are the TTD challenges?
2	To understand the influence and relevance of TTD on the overall performance of HEIs	1. Is TTD supporting the performance of Higher Education Institutions?
3	To study the impact of good TTD policies and practices on job motivation of employees of the HEIs	1. Whether good TTD policies and practices have positively impacted job motivation and satisfaction of the employees, particularly faculty and staff members?
4	To study whether the enhanced motivation leads to better outcomes and quality higher student enrolments, better placements after graduation or progress to higher education and quality research and academic output consistently.	1. Is motivated faculty and staff leading to a) higher student enrolments b) better placements or higher education after graduation c) quality research and academic output in a consistent manner
5	To study TTD systems and policies in the US HEIs and identify the differences between the US and Indian TTD practices.	1. What TTD practices and policies are prevalent in the US HEIs? 2. Whether there are dedicated TTD function units in the HEIs under study? 3. What are the differences between the US and Indian TTD practices and policies?

Source: Primary Data

Research Methodology: To explore the practises and policies of TTD Systems at HEIs in India and the United States, the study used a qualitative approach using an exploratory research design [1]. The participants from the HEIs were chosen using the purposive sampling approach [2]. The study looked at twenty HEIs, including fourteen in India and six in the United States.

The study was conducted across HEIs in various parts of India, including Ahmedabad, Delhi, Kolkata, Mumbai, Pune, Koraput-Orissa, Tirupati, and others, while the study conducted in the United States included Boston-Massachusetts, Berkeley-California, Chicago-Illinois, Ithaca-New York, Maryland, and Nashville-Tennessee.

The population of all Higher Education Institutions in India and the faculty in the United States is made up of top stakeholders and HEI professors. As a result, the research sample included twenty HEIs,

fourteen of which were in India and six of which were in the United States. Twenty-six people were questioned. HEIs were chosen for participation in the research based on their interest, structure, and representativeness [3]. Purposive sampling was used to construct the selection basis of HEIs in India and the United States [4], with the goal of having a varied and geographically diversified sample pool [5]. The researcher used purposive sampling, in which people or groups that are well-informed and acquainted with the issue under investigation are chosen as the sample [6]. The researcher, an academic administrator and HRM specialist at a higher education institution, devised criteria for choosing highly competent academic administrators and professors with competence, experience, and understanding in the subject matter under consideration [7]. As a result, the research contacted the HEI's Head (Vice-

Chancellor/Director), Chief Academic Administrator (Dean), and Chief Administrative Officer (Registrar), as well as faculty members in a few situations. Participants from overseas HEIs (United States of America) were interviewed about their faculty members. The VC/Director, Dean, Faculty, and Registrar were chosen because they are major stakeholders in the HEI and are engaged in TTD policy decisions.

Twenty-six people took part in the research. A pilot research was undertaken prior to conducting a full-scale in-depth interview [8]. Because of the worldwide Covid-19 outbreak, the data was gathered via online interviews [9]. A semi-structured interview schedule was employed to gather data [10], and a theme analysis programme was used to analyse the data [11].

Table 2: Sample Size of the Higher Education Institutions in India and the US

Sr. No.	Category	Number of HEIs	Number of Participants
1	Central University (Public)	3	3
2	State University (Public)	3	3
3	State University (Private)	3	5
4	Institution of National Importance	3	4
5	Deemed University	2	4
6	Public and Private HEIs in US	6	7

Source: Primary Data

The researcher has obtained authorization from the Doctoral Studies Office, AIMS Baramati to gather data [12]. As a result, the participants were contacted by email and phone calls [13]. The researcher described the study's goal and waited for their answer. The interview schedule was also sent to them through email [14]. The participants were informed that their participation and comments would be kept private [15]. The majority of those addressed by the researcher consented to take part in the study [16]. Due to the global pandemic, the researcher was unable to meet the subjects in person, and the data was gathered via online interviews [1]. The researcher performed the online interviews at the participants' convenience [2]. Each participant described the goal of the research again at the start of the interview [3]. They were promised once again that their information would be utilised only for research purposes [4]. They were also advised that they might end the interview at any point or skip any questions that they did not feel suitable to answer [5].

The researcher would like to emphasize that, given the extremely qualitative nature of this research work, ethical concerns must take precedence over rigid anonymity [6]. As the interviews were videotaped utilizing the online Zoom programme, the researcher took many safeguards to guarantee the participants' confidentiality and anonymity [7]. After the interview, the participants were acknowledged [8]. Otter software was used to transcribe the interviews [9]. The researcher supplied safeguarding the complete recorded data to ensure confidentiality [10]. To ensure anonymity, the data was transcribed using fictitious names [11]. According to the terms of the agreement with the participants, strict secrecy has been assured [12].

Discussion

1. **Strategic TTD Model:** The majority of HEIs in India lack a competent and well-trained TTD functional unit. The existing HRM organization, known as the Establishment Section in the university hierarchy, is insufficient. The HRM unit's roles and responsibilities are dispersed over many departments, including the Vice Chancellor's office, the Registrar's office, establishment, administration, and other parts. The existing human resources are not properly trained in TTD systems. Faculty members manage the university's administrative activities in the absence of professional employees. These issues are most common in publicly supported HEIs, while institutions of national significance and private institutions are developing professional HRM frameworks. At the same time, identifying well-trained, professional human resources capable of dealing with higher education HRM difficulties is very difficult. The existing TTD staff is mostly educated in corporate settings, making it challenging for them to adjust to and perform in the higher education sector. Due to restrictions such as recruiting and selection, training and development, performance management, career advancement, and talent retention, the major TTD instruments are not performing properly. The HRM structure has not been updated. The majority of respondents advocated for a specialised professional TTD functional unit with a fully trained staff of specialists. The bulk of the HEIs investigated reported significant flaws in the present HRM system. The present duty of the Establishment Department is to perform normal administrative tasks such as recruiting and selection, promotion documents, termination and resignation, according to established rules

and regulations, and so on. In general, their position is confined to administration of such issues, with little room for TTD to play a strategic role. The majority of HEIs adhere to established systems. The majority of study participants stressed the relevance of strategic TTD and its proactive role in the effective operation of the HEI. The strategy must be related to the aims and objectives of the organisation.

2. **HRM Practices and their Impact on Employee and HEI Performance:** The majority of participants stressed the relevance of faculty and staff motivation at an academic institution. They were dissatisfied with the restricted range of motivating methods accessible to teachers and staff in HEIs. The important problem for HEIs is to keep their staff engaged, and in the absence of such tools, retaining strong human resources in HEIs becomes difficult. High-performing employees are more likely to join HEIs that provide greater pay and benefits. This is not to say that everyone abandons the HEI. They tend to stay because of numerous restraints, such as family obligations, and they typically remain unsatisfied and demotivated. Strong HR procedures and policies may improve faculty and staff motivation and work satisfaction, recruit good human resources, and deliver exceptional academic and non-academic results for the HEI. The majority of those polled agreed that high levels of staff motivation might contribute to better and higher student enrollments, better placements after graduation, steady advancement to higher education, and high-quality research output. The majority of respondents stressed that pleased and motivated instructors and staff inspire pupils. A system like this may make the campus climate incredibly active and pleasant. Enrollment, placement, and quality research would be dependent on HEI branding, which is dependent on great faculty. The retention of excellent faculty would be dependent on the HEI's facilities, which would be supported by a dynamic TTD.
3. **TTD Practices in the US HEIs:** The majority of participants were pleased with the state-of-the-art TTD systems at US HEIs. Each HEI has a dedicated professional TTD team, and HRM systems are aligned with the HEI's overall goals. TTD plays a strategic function, and its systems are adaptable and have developed in a proactive manner. The HRM unit effectively manages essential HRM tools like as recruiting and selection, training and development, performance management, career advancement, talent retention, and grievance management.

The Key Findings: In the current competitive global landscape, HEIs in India cannot afford to retain the status quo, according to the research analysis offered in this report. In HEIs, there is an urgent need to establish a specialised professional TTD department. The report proposes a Strategic TTD (STTD) paradigm to address this problem. In a competitive environment, such a professional department would help HEIs to address and handle global concerns. Professional TTD promotes academic productivity and is critical in integrating the HEI's strategy, general objectives, and purpose. The study's findings point to the need of implementing effective HRM instruments, such as a) recruiting and selection procedures; b) training and development; c) performance management; d) career advancement; e) talent retention; and f) a grievance redressal mechanism. The majority of participants advocated for a strategic and empowered TTD section to deal with rapidly modernising HEIs and present concerns. It is critical for HEIs to have proactive professional TTD practices and policies. The STTD function is critical to increasing the performance of HEIs and their teachers. The study's findings demonstrated that good TTD policies and practices had a favourable influence on the work motivation and satisfaction of HEI personnel, including professors and staff. The findings also demonstrated that excellent TTD policies help senior management, academic administrators, and supervisors, resulting in the greatest outcomes for the organisation. Solid TTD and promotion policies assist workers throughout their careers in an organisation. According to the survey, leadership is critical in executing and implementing excellent HRM policies, as well as encouraging staff. The findings show that engaged teachers and staff contribute to superior overall institutional performance, notably in recruiting quality students, better positions after graduation, good opportunities for further education, and consistent quality research and academic production. Furthermore, the HEI's brand is critical to the achievement of these three critical areas of higher education. The effect of the professors and personnel that the HEI hires. Student placements are partly determined by the content and how well it is delivered by faculty members. Prospective employers are also influenced by the integrity and dependability of the assessment method. TTD techniques vary noticeably between Indian and US HEIs. Evolved TTD techniques have been implemented by US HEIs, which are more flexible and efficient, whereas the same is still in its infancy in Indian HEIs, with a few exceptions. HRM systems are in line with the strategy and goals of US higher education institutions, notably in teaching and research. Indian HEIs cannot afford to maintain conventional HRM systems and must

instead work to develop proactive, committed, and efficient TTD systems. HRM systems at US HEIs might aid in understanding crucial parts of TTD, such as recruiting and selection procedures, training and development, performance management systems, career development, and key performer retention.

Policy Recommendations:

1. **The Strategic TTD Model:** The study findings indicate that the Indian higher education system demands a new and transparent organisational structure, notably the STTD functional unit. As a result, the research findings indicate that there is an urgent need to improve the HRM structure, practises, and policies in Indian HEIs. In India, HEIs must have distinct TTD departments. In the current competitive global context, HEIs in India cannot afford to preserve the status quo, according to the study findings. As a result, it is advised that a HEI establish a specialised strategic professional TTD department. This department must be a self-sufficient and proactive functional entity. It is advised that HEIs hire effective HRM specialists with academic administration experience. As Chief Human Resource Officer, a senior official may head such a department (CHRO). The CHRO may have a position at the highest levels of management.
2. **TTD Practices and their Impact on Employee and HEI Performance:** The research shows that implementing strong and adaptable HRM policies and processes is critical for keeping teachers engaged. It is appropriate to develop well-structured, adaptable, and efficient HRM practises and policies. Such rules might be developed in collaboration with the HEI's major stakeholders, including faculty members and academic administrators.
3. **TTD Practices in the US HEIs:** HRM systems and policies must be in sync with the HEI's overall strategy and goals. TTD systems must be goal-oriented and related to teaching, research, and worldwide outreach. HEIs must develop committed, flexible, and responsive TTD systems that vibrate with fresh, efficient, and transparent policies and strategies. For example, new transparent recruiting and talent hiring processes, proactive training and development plans, fair performance management procedures, efficient career development platforms, responsive grievance mechanisms, and a strong retention process are all examples. The compensation scheme might be based on performance.

Limitations: Because of the limited size of this qualitative research, the findings cannot be

extrapolated to the whole population. Because each HEI has its own limits and structure, the study's findings cannot be applied to all HEIs in India. Indeed, the research will help to improve understanding of TTD systems in higher education institutions. A few participants from US HEIs were also interviewed for comparison purposes and to better understand the functioning of TTD at Indian HEIs. Due of the global Covid-19 issue, the researcher was limited to gathering data via online interviews throughout the data collection period. The inability to conduct live interviews hampered data collecting for this investigation. However, the in-depth interviews with participants done through digital media should compensate for the modest rate of information loss.

Future Scope of Work: The current study's scope was fully holistic, taking into account both the Indian and US situations, in order to comprehend the operation of the TTD system in HEIs. There is a lot of potential for this study to go further, and some of the potential areas include:

1. To begin, a comparison of TTD in the education sector and HEI HRM will assist us in better understanding the subtleties of Industry versus Academia and identifying synergies and complementarities between the two.
2. Second, a prospective comparison of HEI TTD systems in India and China might be investigated. Given our comparable population sizes, the lessons from China will be useful. Web searches and English-language publications might be used to find suitable study material.
3. Third, another relevant field of study is a comparison of public vs. private TTD systems in Indian HEIs.
4. Fourth, a comparison examination with European University Systems, notably with Germany, which has specialised Institutes, universities, and polytechnics like India, would be advantageous.
5. Fifth, in the context of Indian HEIs, a larger sample size research might be conducted to better understand the appropriate model of TTD systems. A combination of qualitative and quantitative approaches might be used.

Such expansions to existing research, as shown in this paper, would enhance the results and provide significant substance to the literature.

Conclusion: Higher Education Institutions (HEIs) face a number of challenges due to globalization, changing demographics, technology advancements, and, more recently, sporadic occurrences like the pandemic. Even if Indian higher education has been better over time, it is still not up to par with international standards. The ranking of top universities in the world only included a small number of Indian HEIs. The majority of

universities that rank highly in the world's university rankings appear to have implemented state-of-the-art Teacher Training and Development (TTD). Robust human resource management (HRM) strategies have been shown in several empirical researches to potentially improve organizational performance. Indian HEIs' tactics need to change in order to tackle the current issues, with a primary focus on establishing a professional and empowered HRM. HRM is still a collection of dispersed administrative responsibilities assigned to different organizational divisions inside a typical Indian HEI in order to fulfill the directives originally stated in the HEI charter. In this context, higher education institutions in India need to develop professional and strategic TTD systems that prioritize the development of the institution, its personnel, and its students all at the same time. Based on a thorough assessment of the key players in a variety of sets of HEIs in India, the researcher's goal in this study was to identify effective HRM practices and policies using qualitative research methodologies and processes. In order to improve research output, gain a better understanding of how HR practices operate at foreign HEIs, and enable useful comparisons, the researcher also did a comparative study of HEIs in the United States of America (USA). Online interviews were used to collect qualitative data between July and October of 2020. The researcher employed thematic techniques to analyze the data. The poll indicates that there isn't a specialized, professional, and strategic TTD organization in India's public HEIs. At government agencies and privately funded HEIs, it is only getting started. The study also reveals that HR regulations and procedures have a favorable influence on faculty and staff job motivation and that TTD practices and policies have a positive impact on overall performance. Research has demonstrated that increased staff engagement may result in higher quality research outputs, better and more student enrolment, and better positions following graduation and advancement to higher education. The survey also shows that American HEIs employ state-of-the-art technology-enhanced teaching tools and have competent, devoted strategic TTD departments. A HEI's quality is influenced by its students, organizational functioning aspects, and used resources. TTD thus has a significant impact on judging the excellence of HEIs.

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Conference Sequel 2025

“Value Driven & Techno -Powered Governance in Science, Socioeconomic & Management”.

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We are happy to announce hereby the 14th National Conference Theme as “Value Driven & Techno - Powered Governance in Science, Socioeconomic & Management”.

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Scope and area to be covered:

Techno - Powered, Social, Economic, Environmental transforming education and educational institutions beyond recognition. Therefore, it is impossible to be ignored! The proposed National Conference shall explore what value is and why is it important for educators.

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The tentative Objectives of the conference are:

1. To discuss on various techno Powered, Socio-Eco, Environmental & Management possibilities that will shape the future governance.
2. To discuss the challenges in adaption to changing technology.

We invite with great anticipation your valuable research papers for the conference

S. Khatavkar

Dr. Sandhya V. Khatavkar

THANKING NOTE TO RESOURCE PERSONS / AUTHORS

we are highly indebted to all the eminent resource persons for sharing their insights.

We owe a debt of gratitude to each and every distinguished source for sharing their knowledge.

Please accept our heartfelt gratitude and congratulations on the successful publication of your valuable research article at our 13th National Conference entitled "Technology Nexus: Technology Enhanced Learning." Your literary work has undoubtedly sparked new thinking processes, and we trust that this small commencement from AIMS Baramati will pave the path for great education. With Warm Regards,



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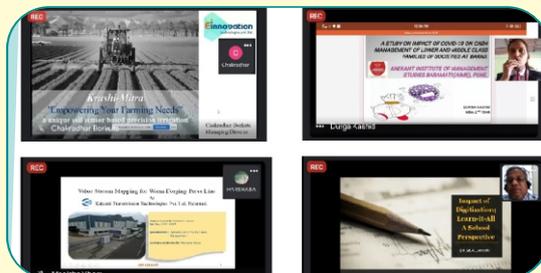
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